Appendix L
Identified Source Area Data Packages

Appendix L-1
Former Barnsdall Refinery

PRP Evaluation Summary

Former Barnsdall Refinery
Between 25th and 29th and Broadway and Mead Streets

Potential Source Area PRP and Work Plan Addendum Map ID - 10D
Contaminants of Concern - Petroleum Hydrocarbons, PCBs, Metals
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Former Barnsdall Refinery, Northeast of 25th and Broadway

Sludge Pit Contamination

The Former Barnsdall Refinery was located in the area between 25th and 29th streets, east of Broadway and west of Mead streets. The Former Barnsdall Refinery is a confirmed source area for petroleum hydrocarbon contamination, metals, and PCB contamination. The source of the petroleum contamination is from two different types of releases. Twelve apparent sludge pits have been identified from historical aerial photographs. The sludge pit locations are shown in the attached figure. Three of the most prominent former sludge pits were investigated during the RI. The investigation revealed that one of the pits had significant free product (Pit C). One pit (Pit B) appears to have been over-excavated with little residual evidence of petroleum hydrocarbon contamination from the former sludge pit. The last pit (Pit A) also appears to have been over-excavated but the material still has strong hydrocarbon odor and possible minor staining. Groundwater impacts from the investigated sludge pits appear to be minimal, despite evident soil impacts. Groundwater sample results appear to indicate that lead concentrations exceeding the EPA tap water drinking standard of 15 µg/L is present at Pit B. The tap water drinking standard has been used as a remediation goal by EPA. Additionally, arsenic also appears to be present above the current MCL (50 µg/L) and the future MCL (10 µg/L) at pits B and C. The soil and product in the sludge pits has been impacted by PCBs and metals (antimony, copper, lead, selenium, and zinc) as shown in the attached tables.

Additional Petroleum Hydrocarbon Contamination

Significant petroleum hydrocarbon contamination also appears to be present in the groundwater at the southeast portion of the former refinery property where the bulk of the refining operations were conducted. Free product was observed in monitoring well WND-16S and was evident during Geoprobe sampling at location GPA07-04. High concentrations of benzene (1,800 mg/L) were also observed in the shallow groundwater sample collected from location GPA07-04. The extent of petroleum hydrocarbon contamination not associated with the sludge pit locations has not been completely

delineated, but does not appear to extend significantly downgradient (south) of the former refinery.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is primarily to the south with a slight south-southeast flow in the southeastern portion of the facility reflected in the March 2001 sampling event.

Polk Directory Review and RCRA Information Summary

Name of Company: Barnsdall
Name and/or Contact Person:
Street Address of Company:
City, State and Zip Code:
Regarding the Following
Property:
Phone Number of Contact:
History: 1931 25th & Santa Fe Barnsdall Refineries Inc.
(607 Union National Bank) Barnsdall Oil Co.

1946 25th & Santa Fe – No Listing
(110 S. Broadway) Barnsdall Oil Co.

Name of Company:		Barnsdall
Name and/or Contact Person:		
Street Address of Company:		**2829 N. Emporia**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		2829 N. Emporia
Phone Number of Contact:		
History:	1951	No listing
	1961	No listing
	1965	No listing
	1970	No listing
	1975	No listing
	1980	No listing
	1984/5	No listing
	1990	No listing
	1995/6	No listing
	2000	Kansas Metals Operating scrap waste materials

RCRA Info:

Name of Company:		Barnsdall
Name and/or Contact Person:		
Street Address of Company:		**410 E. 25th North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		410 E. 25th North
Phone Number of Contact:		
History:	1951	No listing
	1961	No listing
	1965	No listing
	1970	No listing
	1975	No listing
	1980	No listing
	1984/5	No listing
	1990	Glickman Inc. scrap metal recycling
	1995/6	Glickman Inc. scrap metal recycling
	2000	No listing

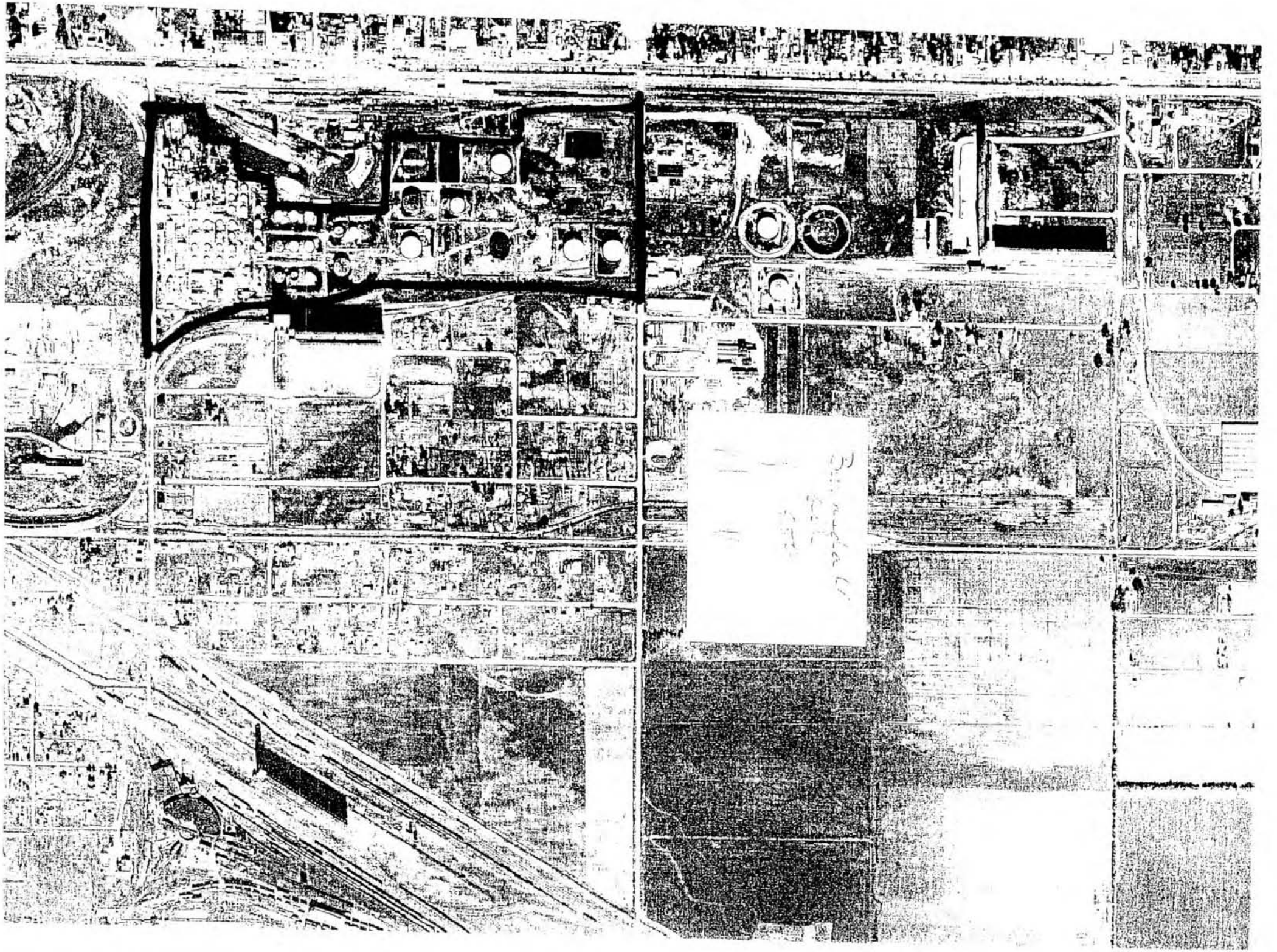
RCRA Info:

Name of Company:		Barnsdall
Name and/or Contact Person:		
Street Address of Company:		**309 E. 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		309 E. 29th North
Phone Number of Contact:		
History:	1951	No listing
	1961	No listing
	1965	No listing
	1970	No listing
	1975	No listing
	1980	No listing
	1984/5	No listing
	1990	No listing
	1995/6	No listing
	2000	No listing

RCRA Info:

Name of Company:		Barnsdall
Name and/or Contact Person:		
Street Address of Company:		**618 E. 25th Street N.**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"Stockyard Properties"
Phone Number of Contact:		
History:	1951	Bareco Oil Co.
	1961	No Listing
	1965	No Listing
	1970	No Listing
	1975	No Listing
	1980	No Listing
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:



No RCRA Information found at the time of review.

DEPARTMENT OF HEALTH AND ENVIRONMENT

Division of Environment

RECEIVED

OCT 14 1981

BUREAU OF ENVIRONMENTAL SANITATION

M E M O R A N D U M

October 12, 1981

TO: SUPERFUND SITES FILE

FROM: Dale T. Stuckey, Field Representative DTS

SUBJECT: Investigation of Oil Sludge Pits Associated with Past Refinery Operations in Wichita. Section 4, T27S, R1E.

Primarily from a few off-hand remarks made by Mike Carter of the Wichita Brass and Aluminum Foundry and his father, Emmett Carter, I learned of the existance of two past refinery operations in the general vicinity of 29th Street and Broadway in Wichita. One went by the name of Golden Rule Refinery and was located in the northeast corner of the 29th street and Broadway intersection. It apparently went out of business in the late 1930's, probably 1938 or 1939. The other refinery went by the name of Barnsdall Refinery and was bounded by 29th street on the north, 25th street on the south, Broadway and the railroad tracks on the west, and St. Francis street on the east. This refinery went out of business about 1955. There were some oil sludge pits associated with each site.

GOLDEN RULE REFINERY

The Golden Rule Refinery was situated where Wichita Brass and Aluminum Foundry is located now. It was run by an Elden or Elbert Rule. When he went out of business he sold the land to a Walt Stevens who in turn, in 1941, sold the land to Emmett Clark. That year Emmett started up his foundry operation. Both Mike and Emmett Carter remember there being a general dump area just west of their property and east of the railroad tracks back in the mid-1940's. Initially Mike thought he remembered it containing some oil sludge but later he stated he didn't really remember what was in the pit. He believed it was closed out around 1946. During the time when I first made contact with Mike while investigating his company's abandoned lacquer reclamation project with its associated backlog of solvent and paint waste drums, he informed me that directly underneath the area over which the drums were scattered was a sizeable oil sludge pit. But in later conversations with him and his father, I was told they didn't think that there was, in fact, any oil sludge buried under their property. It was their feeling that all the old waste material associated with the refinery and with the dump had been burned off. Mike did mention, however,

that if one did some digging around out by the old stills, one would be likely to run into some oily dirt. In scraping down through old layers of dried paint sludge in this area, he had himself encountered some.

Visible on the enclosed 1938 aerial photograph is a cluster of possible oil sludge pits around two tanks on the western edge of the Golden Rule Refinery. This area corresponds to the old salvage and lacquer reclamation area located at the Wichita Brass and Aluminum Foundry currently. Also visible on this photograph, just north of the aforementioned area, is what appears to be a long sausage-shaped pit. This property is presently owned by a Dolese Concrete Company. On September 23, 1981 I made a brief reconnaisance of this area along with Kent Rowe of the Wichita-Sedgwick County Department of Community Health. In a location corresponding with that of the sausage-shaped pit we found a large mound of concrete. We later spoke with an employee of Dolese, who though declining to give us his name, told us that the concrete had been poured back in 1953. In 1951 he remembered there being oil in a pit there. He said that it had about a one foot soil cover on top and was fairly deep. One of the company's trucks had somehow gotten into it and was buried. It can be seen from the enclosed 1950 aerial photograph that this pit was indeed still there in 1950, though the refinery operation itself had been completely dismantled and there was no sign of any of the other pits.

BARNSDALL REFINERY

A check of plat records in the Sedgwick County Clerk's office showed that Barnsdall Oil Company's property was transferred over to Bareco Oil Company on August 8, 1935. Whether this was just a name change or an actual change of ownership is not known. On April 11, 1955 Bareco Oil Company's property was transferred over to Industrial Development Inc.

Oil sludge pits associated with the old Barnsdell and/or Bareco Oil Refinery were more numerous and the investigation in regards to them more involved, than was the case for the Golden Rule refinery. Basically there were two major pits on their property and I attempted to trace the destiny of these as best I could.

* * *

The major pit at the northwest corner of the property was square in outline, appeared to have a surface area of about one acre, and first shows up on the 1950 aerial photograph. It also appears in the 1960 photograph but is absent in the 1968 series. On August 1, 1962 this northwest corner property was deeded from Industrial Development Inc. to Kansas Paint and Color, Inc. Kansas Paint and Color owned the land up until January 6, 1975 when they deeded it to Glickman, Inc. This plat of land is currently referred to as K.P.&C. addition. I had a brief phone conversation with the plant manager (he declined to give his name) of Kansas Paint and Color on September 23, 1981 in connection with this pit. He said that his company had hired a contractor to

clean it out around 1965. All the water was pumped out and dumped and the oil sludge was dredged out and hauled off to an adjacent tract of land south of there, spread out over the ground and buried. Some of this oil sludge was also hauled off and used to stabilize dusty county roads. He declined to give any more specifics on how the sludge was handled and the exact location of where it was buried.

In conversation with both Mike and Emmett Carter it was confirmed to me that there was indeed a large oil sludge pit just south of their property and on the other side of 29th street back in the 60's. They remembered it having caught fire in 1959 and that a fire truck from Boeing Aircraft had to be used to put it out. They were also under the impression that the oil sludge had been cleaned out in the mid-60's. Mike remembered seeing them come in with an auger to dig it out and he believed that they had excavated a series of trenches running east-west, in a location somewhat southeast of the original pit, into which the oil sludge was dumped, mixed with dirt and covered.

I also had a brief phone conversation on September 29 with Steve Potucek of the Wichita Planning Commission concerning this northwest pit. He told me that Kansas Paint and Color had originally bought the land with the intent of setting up a metals reclamation operation, and that $35,000 was shelled out to clean up the oil sludge pit.

* * *

The second major pit was located about 200 yards due south of the northwest pit, was also about one acre in size,and was rectangular in outline. Emmett Carter believes that all this oil sludge was dug out, spread over a wide area in the same general vicinity and buried. The pit shows up on the 1960, 1968 and 1974 aerial photographs. This tract of land was owned by Industrial Development, Inc. up until September 17, 1973 when Johnnie Darr deeded the land to Frank H. Ise. Johnnie Darr had apparently obtained the land as a result of Industrial Development, Inc. having failed to pay its taxes. On July 25, 1974 Frank H. Ise deeded the land to James Gardner (former city commissioner). On August 12, 1974 James Gardner deeded the land to Wichita Metals, Inc., a firm that operates a car crusher on the site. ~~I spoke~~ with Dean Kline of Kansas Metals, Inc. by phone of September 24. He informed me that when construction began on the car crusher in 1974, there were no pits on the property. Since the 1974 aerial photograph was dated March, 1974, it appears that this main pit and all smaller associated pits were cleaned out sometime between March and August 12, 1974 - a period of time when the land was owned by James Gardner. I spoke with Mr. Gardner by phone on September 29 in an effort to gather facts about any cleanup operations but he refused to divulge any information whatsoever. It was his feeling that any kind of publicity on this matter would shed negative light on all associated parties.

In the above paragraph I mentioned that there were some smaller pits in this area. The pits I am referring to can most clearly be seen in the 1960 aerial photograph. There were two, irregular in outline, between the north and south major pits, and there were two south of southern major

pit. The boomerang shaped pit at the southeast corner of the southern major pit is about where the car crusher is sitting now. Emmett and Mike Carter remember that a horse got mired down in some oil sludge close to this location sometime back in the '50's. The long pit running east-west and situated just southeast from the northern major pit, was sitting in close proximity to where a fence line runs now which encloses Kansas Metals property. On September 23 Kent Rowe and myself discovered what, appeared to be, an oil sludge pit with an upper coating of dirt at this same general location. The sludge was very thick and could be walked over while sinking in slowly. Several skeletons of dead animals were entrained on the surface. Enclosed are a series of Polaroid snapshots taken of the area. Most all of this material was sitting on land which is now owned by Mike Carter, though the eastern most extremity of the sludge was on land which is being leased from Mike Carter by Roofing Service Company. It is possible that the waste originated from the roofing company's operations, but it appeared to me to be more of a refinery waste product. I believed I could detect some refinery odor while probing around in the sludge. On September 28 I revisited this site and collected a sample of the sludge in a mason jar. It should be presently undergoing heavy metals analysis in our Topeka lab.

CONCLUSION

This pretty much concludes the information I have gathered on this subject to date. The problem which arises, is that, though it appears all the oil sludge was handled in a way in which microbial breakdown would be encouraged (i.e. - through mixing with dirt), my assessment is gathered second-hand and I have no hard facts to go on regarding the clean up operations. The people that would know the specifics, the plant manager at Kansas Paint and Color and James Gardner, have shown no willingness to make the information available to me. In my mind, the course that needs to be taken, is for a higher official than myself to attempt extracting information from these two sources and if this fails, for field work, in the form of augering or drilling, to commence on revealing the location of the sludge, its physical and chemical characteristics and any threat it may pose to the ground water. The water table in the area of concern is only 15 to 20 feet deep.

Likewise the possibility of buried oil sludge on the old Golden Rule Refinery property needs to be looked into. It is conceivable that the old sausage-shaped pit previously mentioned might still be in existance underneath tons of concrete.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: October 27, 1981
Time Received: 11:15 am
Date Completed: November 30, 1981

LLI Project No.: 81-7449

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Soil

Sample Identification	Analysis	Results
One Foot Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter
Six Inch Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter

The above soil samples were taken by Mr. Dale Stuckey (KDHE Employee) in late october 1980 at the location he determined to be the worst as far as leaking drums. The results of the EP Toxicity analysis indicate that no hazardous materials had leaked to the 6 inch nor to the 1 foot depth and were probably not ground water contaminants.

Comments:

Michael W Carter
President

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

Department of Health and Environment
Division of Environment

PHOTO MOUNTING SHEET

Name of Site: Grandville Hazardous Waste Site at Wichita Reduced Aluminum Foundry

Location: City Wichita County Sedgwick Legal

No. 1

Date: Aug. 18 1981 Time: 1000 A.M.

General Direction Faced: East

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at one of the areas in which wastes is actually coming out onto the ground.

No. 2

Date: Aug. 18 1981 Time: 1000 A.M.

General Direction Faced: West

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at a small portion of the dump site showing drums stacked high at the left and several drums scattered in the center.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: September 14, 1981
Time Received: 8:00 am
Date Completed: September 24, 1981

LLI Project No.: 81-7149

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Composite Waste Paint Sludge Collected September 10, 1981

Sample Identification	Analysis	Results
Sludge	Specific Gravity	1,658 g/ml
	Dissolved Sulfide	< 3 mg/liter
	Free Cyanide	51 mg/kg
	Total Cyanide	57 mg/kg
	Total Arsenic	4.4 mg/kg
	Total Barium	113 mg/kg
	Total Cadmium	22 mg/kg
	Total Chromium	600 mg/kg
	Total Lead	2,400 mg/kg 5/mg
	Total Mercury	0.09 mg/kg ok
	Total Selenium	< 1 mg/kg
	Total Silver	0.65 mg/kg
	EP Toxicity	
	Arsenic	< 0.25 mg/liter
	Barium	< 5.0 mg/liter
	Cadmium	0.16 mg/liter
	Chromium - Hexavalent	108 mg/liter
	Chromium	116 mg/liter 5 mg/liter
	Lead	< 0.25 mg/liter
	Mercury	< 0.01 mg/liter
	Selenium	< 0.05 mg/liter
	Silver	< 0.25 mg/liter

RECEIVED
AUG 27 1987
BUREAU OF ENVIRONMENTAL REMEDIATION

Comments:

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

STATE OF KANSAS
DIVISION OF ENVIRONMENT
TOPEKA, KANSAS

Job No. _____

Date Aug. 18, 1981

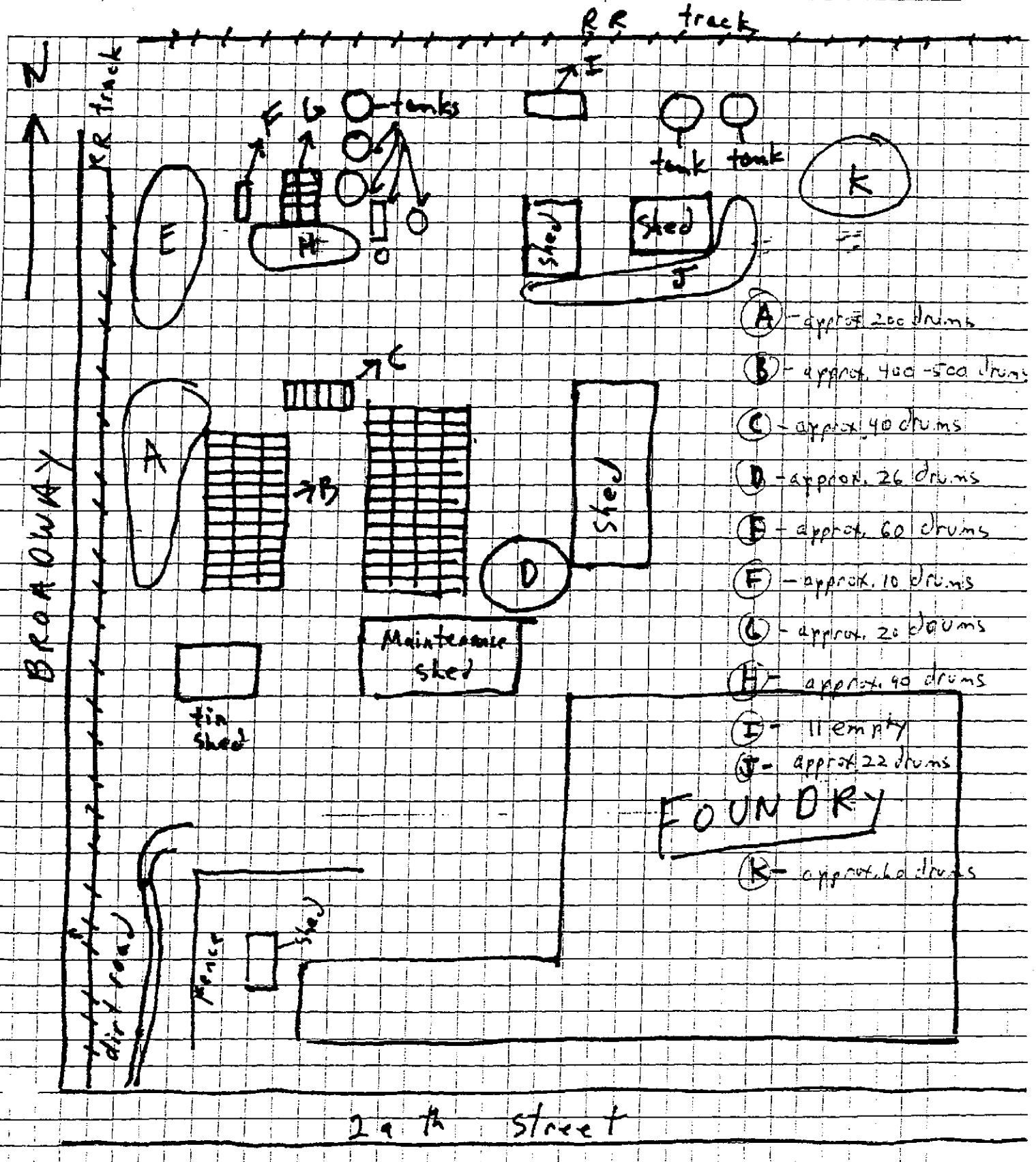
Sheet _____ of _____

Project _____

By Paul T. Stanberry

Subject Wichita Brass and Aluminum Foundry Complaint

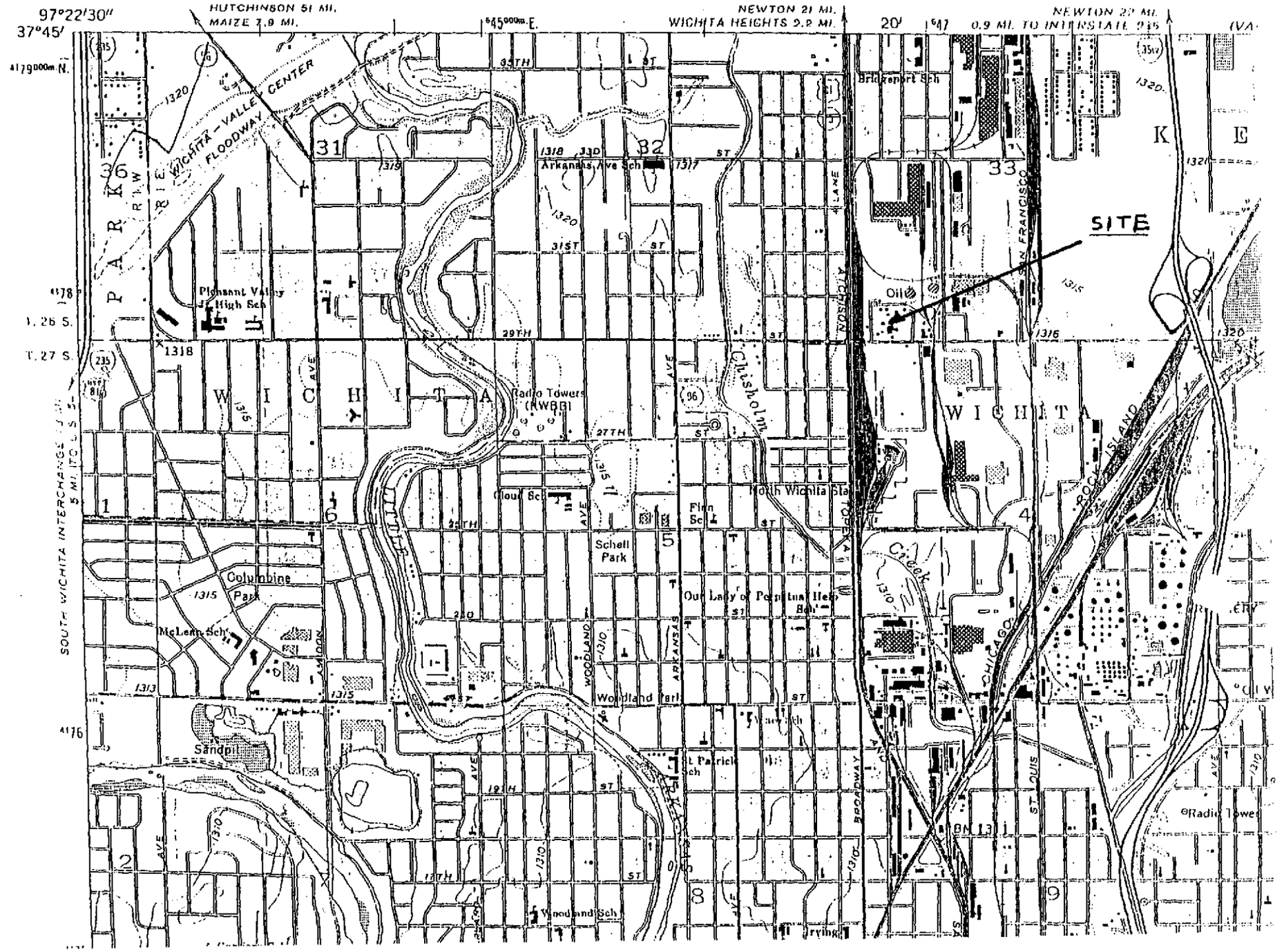
Ck'd. _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Wichita Brass + Aluminum Foundry, Wichita.

STATI



11.6
Wichita Brass + Alum

United States Department of the Interior

GEOLOGICAL SURVEY
Water Resources Division
1950 Constant Avenue - Campus West
Lawrence, Kansas 66046

May 20, 1986

RECEIVED
BUREAU OF
MAY 29 1986
WASTE
MANAGEMENT

Ms. Emily Roth
Bureau of Waste Management, Superfund Section
Kansas Department of Health and Environment
Forbes Field, Bldg. 321
Topeka, Kansas 66620

Dear Emily,

Please find enclosed the final site investigation package for Wichita Brass and Aluminum, the former Golden Rule refinery, and the former Barnsdall Refinery. Your review comments and requests of April 10, 1986, were considered and incorporated into the final reports. The final package includes the following:

1. Narrative reports for each site, including an Executive Summary for each report.

2. Complete laboratory analysis of samples collected during the fall of 1985.

3. EPA's Site Investigation forms for each site.

4. EPA's Hazard Ranking Score for the composite sites and documentation.

Thank you very much for your time and cooperation.

Sincerely,

Robert J. Hart

Robert J. Hart
Hydrologist

cc: Joseph Rosenshein, USGS
John Stamer, USGS
Jim Power, KDHE
Karl Birns, KDHE

INFORMATION REQUEST - ATTACHMENT B

1. MICHAEL W. CARTER, PRESIDENT
   WICHITA BRASS AND ALUMINUM FOUNDRY, INC.
   412 EAST 29TH STREET, NORTH
   P.O. BOX 4144
   WICHITA, KANSAS 67204-0144
   316 838-4286

2. MANUFACTURING AND PROCESSING ACTIVITIES

   No information is available on the activities of the Golden Rule Refinery.

   Wichita Brass and Aluminum Foundry, Inc. (SIC Code 3440) has operated continuously at this location since 1943, and has manufactured aluminum and magnesium alloy sand and permanent mold castings for Wichita's aircraft industry as well as other commercial customers. No chlorinated organic solvents have been used in this operation.

3. No hazardous wastes listed have been used at Wichita Brass and Aluminum Foundry, Inc.

   See attached manifests on previous clean-up activities (1981 & 1988)

4. A. See No. 3 above (manifests).
   B. Unknown.
   C. See attached manifests.
   D. No. 16 - SITE HISTORY.
   E. See attached manifests.
   F. See attached manifests.

5. No knowledge of spills, leaks or releases.

6. No such system has ever existed to our knowledge.

INFORMATION REQUEST - ATTACHMENT B

7. Enclosed please find copies of our Comprehensive General Liability insurance policies for:

   08-01-86 to 08-01-87
   08-01-87 to 08-01-88
   08-01-88 to 08-01-89

   These policies were acquired through Alpha Omega Insurance in Wichita, Kansas. All previous years' insurance back to approximately 1960, were acquired through the Harrison Insurance Agency in Wichita. That agency has gone out of business and copies of those policies are not available.

8. Tax Returns are enclosed for years 1983, 1984, 1985, 1986, 1987.

9. Financial Statements are enclosed for years 1984, 1985, 1986, 1987, 1988.

10. See No. 12 below.

11. Articles of Incorporation and Corporation By-Laws are enclosed.

12. MICHAEL W. CARTER, President, Director, 50% Shareholder
    VICTOR D. CARTER, Vice President, Director, 50% Shareholder
    JENNIFER J. CARTER, Secretary-Treasurer, Director
    VICKIE S. CARTER, Assistant Secretary-Treasurer, Director

    This is the entire corporate structure.

13. None to our knowledge.

14. None to our knowledge.

15. None to our knowledge.

INFORMATION REQUEST - ATTACHMENT B

16. SITE HISTORY - (NO KNOWLEDGE PRIOR TO GOLDEN RULE REFINERY)
Golden Rule oil refinery operated on this site until approximately 1943, when the east 200 feet frontage was purchased by Wichita Brass and Aluminum Foundry, which began operations there at that time (See attached letter of July 10, 1946). Numerous oil sludge pits were on the property and are still encountered when digging.

The west 287 feet of the property was bought from Golden Rule refinery by a Walt Stevens prior to 1946 and the open sludge ponds shown in aerial photographs were used as a landfill until approximately 1955. Mr. Stevens sold the property in the early 1960's to his son-in-law, Wilbur Durham, a Compton, California, doctor, who then sold the property to the above-mentioned foundry in approximately 1965.

The solvent recovery operation was operated by an unknown individual until it was purchased in approximately 1959 by Emmett L. Carter, who operated it until 1964 on a part time basis and then only sporadically until 1971 when it ceased operation. In 1981, the KDHE oversaw the clean-up operation associated with the removal of all waste solvents remaining as well as the associated sludges and drums at a cost in excess of $30,000. EPA toxicity tests were completed at that time, which indicated no contamination of soil at the 6-inch or the 12-inch depth (See attached Langston Lab report and manifests).

In 1988, the dismantling of the solvent recovery operation was completed in conjunction with the possible sale of this property by Wichita Brass and Aluminum Foundry, Inc. During this effort, three (3) tanks were found to have paint sludge in the bottom. The tanks were removed in compliance with local, state, and federal laws at a cost in excess of $40,000 (See attached manifests).

17. No knowledge of any.

INFORMATION REQUEST - ATTACHMENT B

18. No other records are available to the best of our knowledge.

19. No such area exists to our knowledge, except for the landfill operated by Walt Stevens prior to 1955 as stated in #16 - SITE HISTORY.

20. Wichita Brass and Aluminum Foundry, Inc. occupies the same property as the Golden Rule Oil Company. This is in the Chisholm Creek drainage and was subject to area-wide flooding three or four times per year during the 1930's, 1940's and 1950's. Such patterns of flooding could have redistributed surface materials and even have carried many materials away, such as hydrocarbon products and by-products.

    Aerial photographs of the area taken in 1938, 1950, 1960, 1963, 1968, 1974, and 1977, indicate our property as well as the property adjacent east, north and south, to be occupied by many open pits containing hydrocarbon by-products. Only God knows what may or may not have been disposed of over nearly forty years...or what may have been moved by flood waters to or from the 29th and Mead site. The 29th and Mead site was "out of town", in an industrial area, and we are sure that under those circumstances 20, 30, 40 or even 50 years ago, it was acceptable practice to dump almost anything into the area known as "The Tar Pits" (Reference John's Sludge Pond and Super Refined Oil Response Actions). Under the circumstances that prevailed many years ago, prior to the existance of RCRA, CERCLA, and the Superfund, it may not be surprising to find such a large area of varied contamination.

THE GOLDEN RULE OIL COMPANY

BLUE RIBBON GASOLINE AND KEROSENE

WICHITA, KANSAS

July 10, 1926

Wichita Brass and Aluminum,
Wichita,
Kansas

Attention of E. L. CARTER
and
R. L. MORLEY

Dear Sirs:

This letter will be a receipt to you for $2,050.00 paid by you today as balance due on land sold to you, except $2,000.00 which I am to carry by note and mortgage to be paid on or before one year at five per cent interest. It being understood that the requirements made by your attorney on abstract of title are not yet completed by me but are to be completed and turned to you when completed.

Very truly yours,

Elbert S. Rule

Elbert S. Rule

120 West First Street,

Wichita, 2, Kansas.

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

Joseph F. Harkins, Secretary

Forbes Field
Topeka, Kansas 66620
913-862-9360

August 19, 1981

Michael Carter
President
Wichita Brass and Aluminum Foundry, Inc.
412 E. 29th St. N
Box 4144
Wichita, KS 67204

Dear Mr. Carter:

As you became aware yesterday, there is a definite problem regarding the shut down lacquer thinner reclamation unit with its associated backlog of drums. Though most of these drums appeared empty at the time of my investigation, there was a substantial number which still contained free liquid, sludge, or dry residue. I can only assume, from what you told me and from the odor in the air, that some of these still contain solvent and/or paint sludge or residue. Under K.A.R. 28-29-39 solvents of the nature used as lacquer thinner have been designated as listed hazardous wastes while paint sludges may or may not be considered hazardous, depending on the concentration of heavy metals which are detected in the sludge or residue by virtue of a standard Extraction Procedure (EP toxicity) test.

It is important to understand that you have a real and immediate problem with these abandoned waste drums. They are in a very seriously deteriorated condition and it can be seen that several have corroded through and the contents leaked out onto the ground. I saw several that were in the actual process of leaking during the time of my visit. Though there is an associated fire risk with the remaining solvent, the most serious danger is one of groundwater contamination. Since the operation was shut down eight years ago probably most of the damage has already been done, however, that does not justify an attitude of letting the remaining sources of contamination run their course.

What our department needs to see is some action taken to alleviate the problem by Wednesday August 26, 1981. First and foremost, empty drums, that is those which contain less than a two-inch bottom layer of waste, need to be seperated from non-empty drums. The empty drums can be thrown off to one side and the non-empty drums can also be moved to a central location, unless it is apparent that movement will cause the drum to rupture. It is probable that a solvent recovery firm can be contracted to suck off any free solvent the waste paint solids however, will have to be analyzed to determine hazardousness. unless a reasonable assumption can be made that it is hazardous without testing. One important thing to remember is that under no condition must any of these drums, empty or otherwise, leave the site without our department's prior knowledge and approval.

The Reid Supply Company

911 E. Indianapolis
Wichita, Kansas 67211
267-1231
(AC 316)

850 Liberty
Kansas City, Missouri 64101
842-4440
(AC 816)

CONTRACT FOR PICK-UP AND RESALE OF SOLVENT

GENERATOR: Wichita Brass & Aluminum

412 E. 29th N. Wichita, Ks. 67219

GENERATOR EPA ID NO.: Emergency Number

Transporter and Recycling Facility: The Reid Supply Company

Transporter and Recycling Facility EPA NO.: KSD 007246846

This agreement made this 25th day of August, 19 81, between the GENERATOR above-named and The Reid Supply Company, Inc., an approved Transporter and Recycling Facility for hazardous wastes.

WHEREAS the GENERATOR has on hand certain quantities of hazardous materials and wastes and has requested that The Reid Supply Company pick-up said wastes and remove the same from the premises of GENERATOR indicated above, and

WHEREAS, The Reid Supply Company is presently involved in the business of transporting and recycling such hazardous wastes;

IT IS THEREFORE AGREED, for and in consideration of the promises hereafter made by both parties, that:

1. Reid Supply Company agrees to pick-up at the GENERATOR'S location set out above the following quantities of waste solvents for the price set out below:

Waste Solvent @ $1.50 /~~drum~~ gal. TOTAL minimum 2000 gal.

_____ @ _____ /drum TOTAL _____

Bulk Pick Up

2. The waste solvents so obtained from GENERATOR shall either be resold by Reid Supply Company to another recycling facility or recycled and reprocessed by Reid Supply Company at its own facilities.

3. GENERATOR ~~hereby agrees~~ may agree to repurchase from Reid Supply Company any recycled waste solvent generated by Reid Supply Company in its recycling operation in the quantities and at the prices set out below:

_____ @ _____ /drum TOTAL _____

_____ @ _____ /drum TOTAL _____

4. GENERATOR ~~hereby agrees~~ may agree to purchase from The Reid Supply Company reconditioned drums for storage and transportation of waste solvents, said drums conforming to DOT standards 17ESTC in the quantities and at the cost set out below:

Reid Yellow	@	$18.25 /drum	TOTAL	$18.25 per drum
	@	/drum	TOTAL	

5. GENERATOR ~~hereby agrees~~ may agree to purchase from Reid Supply Company at such future times as it may require, new or virgin solvents marketed by Reid Supply Company at such times and in such quantities as GENERATOR shall require in its daily business operation.

The price of said solvents shall be determined by Reid Supply Company and shall fluctuate from time to time depending on cost to Reid Supply Company and manufacturers price increases. Reid Supply Company hereby reserves the right to cancel and rescind this contract in the event that GENERATOR does not purchase from Reid Supply Company new or virgin solvents as herein provided.

6. GENERATOR hereby warrants to Reid Supply Company that all drums of waste solvent which will be made available to Reid Supply Company for pick-up and recycling shall conform to all applicable local, state, and federal requirements for the storage and identificati of hazardous wastes, and specifically that;

a. The waste solvents will be stored in DOT approved 17ESTC containers;

b. The drums containing hazardous waste solvents shall be properly labeled in accordance with all applicable laws.

7. It shall be the responsibility of GENERATOR to obtain and properly complete the required EPA hazardous waste manifest form (7-BLS-C). It is further specifically understood and agreed that Reid Supply Company shall be under no obligation whatsoever to pick-up hazardous waste solvents as provided herein unless GENERATOR shall have obtained a GENERATOR EPA number and have properly labeled all hazardous waste solvents offered to Reid Supply Company.

8. It is further understood and agreed that Reid Supply Company is not involved in the transportation, handling, reprocessing, or sale of any radioactive waste material and in this regard, should Reid Supply Company determine that any hazardous waste solvents ~~offered to Reid Supply Company contains~~ any radioactive material, either before or after pick-up from GENERATOR, Reid Supply Company reserves the right to return any such waste to GENERATOR, whereupon, GENERATOR shall be responsible for disposing of said waste and, in addition, shall reimburse Reid Supply Company for any costs incurred in the transportation or handling of said radioactive waste.

GENERATOR by:

FOR REID SUPPLY COMPANY, INC.
Gene E. Stamm, General Manager

NIES

SAVE THE LAND

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.

8808 North 127th Street East / P.O. Box 745
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-1

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐

EPA I.D. No. KSP 000000005

Business Name: WICHITA BRASS AND ALUMINUM FOUNDRY, INC.

Business Address: 412 E. 29th St. North

Pickup Address/Location: Same

Authorized Agent: Michael W. Carter Title: President

EMERGENCY TELEPHONE NUMBERS: (316) 838 – 4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:
Waste Receiving Site: NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. ☐☐☐☐☐☐

Site Location: 8808 No. 127th St East, Valley Center, Kans EPA I.D. No. KSD 070902952

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazard Class
100449	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

*Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions:

Date of Shipment: Dec 1 1

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Michael W. Carter
Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070902952

Hauler Name: KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Hauler License No. ☐☐☐☐

Business Address: 8808 N. 127th St. East Truck License No. ☐☐☐☐☐☐☐

Phone Number: (316) 744-1286 Date Received: December 3, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name: Hauler License No. ☐☐☐☐

Business Address: Truck License No. ☐☐☐☐☐☐☐

Phone Number: ( ) Date Received:

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site: Permit No. ☐☐☐☐☐☐☐

Site Location:

Phone Number: ( ) Date Received: Disposal Location

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site: RETURN TO GENERATOR Permit No. ☐☐☐☐☐☐☐

Site Location:

Phone Number: ( ) Date Received: Date Shipped to Final TSDF:

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

NIES

SAVE THE LAND

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 746
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-2

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐

EPA I.D. No. KSP000000005

Business Name WICHITA BRASS & ALUMINUM FOUNDRY, INC.

Business Address 417 E. 29th St. North

Pickup Address/Location SAME

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838 - 4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:

Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. ☐ K S 1 8 3

Site Location 8808 No. 127th St. East, Valley Center, Kansas EPA I.D. No. KSD 070902952

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazzard Class
100449	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions

Date of Shipment December 3, 1981

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Michael W. Carter
Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070902952

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC.

Hauler License No. ☐☐☐☐

Business Address 8808 No. 127th St. East Valley Center, Ks.

Truck License No. ☐☐☐☐☐☐☐

Phone Number (316) 744-2286 Date Received December 3, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Richard Morgan
Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name

Hauler License No. ☐☐☐☐

Business Address

Truck License No. ☐☐☐☐☐☐☐

Phone Number ( ) Date Received

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site

Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Disposal Location

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site RETURN TO GENERATOR SERVB

Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Date Shipped to Final TSDF

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

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NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 745
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-3

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐

EPA I.D. No. 000000005 KSP-

Business Name WICHITA BRASS AND ALUMINUM FOUNDRY, INC.

Business Address 412 East 29th Street, North

Pickup Address/Location Same

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838-4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:

Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. ☐ K S 1 9 9

Site Location 8808 No. 127th Street East, Valley Center, Kansas EPA I.D. No. KSD 07090295

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazzard Class
100449	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

**Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)*

Special Instructions

Date of Shipment December 3, 1981

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070502932

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Hauler License No. ☐☐☐☐

Business Address 8808 N. 127th Street, East Truck License No. ☐☐☐☐☐☐☐

Phone Number (316) 744-1286 Date Received December 3, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name Hauler License No. ☐☐☐☐

Business Address Truck License No. ☐☐☐☐☐☐☐

Phone Number ( ) Date Received

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site RETURN TO GENERATOR ABOVE Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Disposal Location

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Date Shipped to Final TSDF

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

4

H.R.I. WASTE SAMPLE ANALYSIS

HYDROCARBON RECYCLERS, INC.
2525 New York
Wichita, Kansas 67219
(316) 267-5742

Approx 8/5/88

Detailed Analysis X
Confirmation Analysis ___

Generator Wichita Brass & Aluminium Code # W-21 Date Received ___
Address 412 E. 29th N. P.O. Box ___ Phone # ___
City/State Wichita KS Zip Code 67219 Contact ___
Sample Labeled as Waste Paint Related Material Pickup Date ___
Manifest Document # ___

PHYSICAL/VISUAL ANALYSIS OF WASTE SAMPLE

Color ___ Phase: Unilayer ___ Bilayer ___ Multilayer ___
Odor ___ Water ___% Solvent ___% Solids ___%

RCRA HAZARDOUS WASTE DETERMINATION

Ignitability: Flashpoint ___ °F/°C
Corrosivity: pH ___
Reactivity: ___

EP Toxicity (ppm.)
Barium ___
Cadmium ___
Chromium ___
Lead ___

TCLP (ppm.)
Acetone ___
MEK ___
Toluene ___
Xylene ___

ANALYSIS PER DISPOSAL METHOD

KILN FUEL OR DISTILLATION

Gas Chromatograph: % Solvent

Methyl Ethyl Ketone	3.8
1,1,1 - Trichlorethane	0.2
Trichlorethylene	0.2
Methyl Isobutyl Ketone	1.1
Toluene	14.1
Butyl Acetate	1.1
Ethyl Benzene	1.3
Xylene	5.9
Styrene	9.1
Cyclohexanone	41.3
Isophorone	4.9
Butyl Cellosolve	1.3
C_6-C_{12} Alkyl Benzenes	1.7
C_7-C_{10} Aliphatics	14.0
Benzene	<0.1

Energy Content 13400 BTU/lb.
Halogen 1.5 % by weight
Halogen [Bielstein] ___ 1000 ppm.
pH 6 Specific Gravity 1.10
PCB's <50 ppm. Compatibility ___

INCINERATION OR HAZARDOUS WASTE LANDFILL

Organic Solvent Content (ppm.)
Acetone ___ MEK ___ Toluene ___ Xylene ___
Total Organic Solvent Content [sniffer] (ppm.) ___
Halogen [Bielstein] ___ 1000 ppm. Corrosivity: pH ___
Specific Gravity ___ Compatibility ___

WASTE WATER, COOLANTS, AND OIL

Flashpoint ___ °F/°C Corrosivity: pH ___ BS&W ___%
Total Organic Solvent Content [sniffer] (ppm.) ___
Halogen [Bielstein] ___ 1000 ppm. Specific Gravity ___
PCB (oil)(ppm.) ___ Compatibility ___
Total Heavy Metals (ppm.):
Barium ___ Chromium ___
Cadmium ___ Lead ___

Comments: Ash - 1%

Chemist: Steve Lovensheimer Date 8-15-88 Approval: Stephen M Keiter Date 8/30/88

RECOMMENDATION: Kiln Fuel X Distillation ___ Incineration ___ H. W. Landfill ___ Water/Oil ___

COPIES: Generator, Operator, Chemist, File (original) 1/88

U.S. POLLUTION CONTROL, INC.

HAZARDOUS WASTE PROFILE SHEET

5600

EXHIBIT A TO _____ Contract Dated _____

As prescribed by the Resource Conservation and Recovery Act (Public Law 98-580 Sec. 3004), a detailed chemical and physical analysis must be submitted before we can handle your waste stream. This information is necessary to help us evaluate whether we can safely and economically transport and dispose of your controlled industrial wastes in an environmentally sound manner. Be as complete as possible. If an area is not applicable, mark as such. Should a laboratory analysis be available, please attach it to this form. We can arrange analytical laboratory services, if needed, for an appropriate fee. All information we receive will be held in strictest confidence to protect your interests. **SAMPLE WILL NOT BE PROCESSED UNLESS ALL AREAS OF THIS SHEET ARE PROPERLY FILLED IN.**

Purchase Order No. _____ Sales Representative _____

I. Generator Information

( ) Check if small quantity Generator per CFR-40

Name of Company: WICHITA BRASS & ALUM

US EPA ID: KSD

Facility Address: 417 E. 29th, WICHITA, KS 67204

Invoicing Information: _____

Mailing Address: P.O. Box 4144

Technical Contact: MIKE CARTER — Title: PRES. — Phone (316) 838-4280

General Contact: _____ — Title: _____ — Phone ( )

II. Waste Stream General Information

Waste Name: WASTE PAINT RELATED MAT'L

ANTICIPATED VOLUME: 1000 gal per year ____ per month ____ per week ____ one time only X

Process Producing Waste: ABANDONED TANK

Color: DARK — Odor: MILD

III. Waste Properties

Physical State @ 25°C: ( ) Liquid ( ) Solid ( ) Powder (X) Sludge

Layers: (X) Single Phase ( ) Bi-layered ( ) Multi-layered

Free Liquids: ( ) Yes (X) No

pH: N/A — Type Acid: N/A — Density: N/A

Normality: N/A — Type: N/A — Caustic: N/A

(X) Organic ( ) Inorganic

Flash Point: <140 °F

Chemical Composition (X) % ( ) PPM (List all known)

	Range Lower	Range Upper
TOLUENE	(C)	(50)
XYLENE	(C)	(50)
	( )	( )
	( )	( )
	( )	( )
	( )	( )
	( )	( )

Metals-EP Tox Test — Mg/l or PPM

Arsenic (As)	( )	Lead (Pb)	* (UNK)	Nickel (Ni)	( )
Barium (Ba)	( )	Vanadium (V)	( )	Zinc (Zn)	* (UNK)
Cadmium (Cd)	( )	Selinium (Se)	( )	Thallium (Ti)	( )
Chromium (Cr)	* (UNK)	Silver (Ag)	( )	Cobalt (Co)	( )
Mercury (Hg)	( )	Copper (Cu)	( )		

Possible Component (include unit of measure): NONE

Cyanides _____ 2, 4, D _____ Dioxin _____

Sulfides _____ Phenolics _____ Organic Chlorides _____

IV. PCB Oil: Type NO Concentration % ____ % ppm ____ PCB Equip: Type ____ Concentration % ____ % ppm ____

PCB Solids: Type ____ Concentration % ____ % ppm ____ Has equipment been drained and flushed according to 40 CFR Part 761? ____

Attach information for dimensions, weight and nameplate capacity for all equipment.

V. Hazardous Characteristics (From CFR-40)

U.S. EPA Hazardous Code(s): D001

Is the waste: ( ) Pyrophoric ( ) Infectious ( ) Water reactive ( ) Radioactive ( ) Pathogenic ( ) Explosive ( ) Pesticides/Herbicides ( ) Biological ( ) Shock sensitive ( ) Etological

VI. Shipping Information (From CFR-49)

Proper DOT Shipping Name: WASTE PAINT RELATED MATERIAL

DOT Hazard Class: FLAMMABLE — UN/NA Number: NA 1263 — Reportable Quantity: RQ=100 #

Method of Shipment: ( ) Bulk Liquids ( ) Bulk Solids ( ) Drums ( ) Other

Special Handling and Safety Instructions: FROM NORTH TANK.

I certify and warrant that the above information, the information attached, and the waste stream as described is true and correct to the best of my knowledge and ability and not willful or deliberate omissions exist and that all known and/or suspected hazards have been disclosed, and a sample representative of the waste stream has been or is being sent to the proper facility. Further, I certify the samples have been collected using the appropriate EPA sampling guidelines and acknowledge that the current sample profile fee will be charged by U.S. Pollution Control, Inc. and be paid by generator.

[illegible] — [illegible] — 7/[illegible]

SALES ORDER

ORDER NUMBER 1817

C.S.I. mB

CONSERVATION SERVICES, INC.
2525 N. NEW YORK
WICHITA, KANSAS 67219
(316) 267-5742

DRUM DEL

DATE 9-27-88

SOLD TO

SHIP TO WICHITA BRASS & ALU
412 E 29th NORTH
WICHITA, KS

CUSTOMER NO.	P.O. NUMBER	TO BE SHIPPED	SHIP DATE	SHIP VIA	TERMS NET	1%	FOB WHSE	DEST	PREP	COL	SALE
	MIKE	9-27	9-27	1	X			X			S

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	CODE	UNIT	TAXABLE YES	TAXABLE NO	DESCRIPTION
	40	40	DS	EA		X	17-H STEEL DRM
	45	45	MISC 38	EA		X	DRUM GASKETS
							Returned 1 Drum Dammaged on Previous Delivery.
							Victor D. Carter

FILLED BY	DELIVERED BY	GROSS WEIGHT
	GR	

EMPTY'S RETURNED: JUGS ____ 15 GAL ____ 30 GAL ____ 55 GAL ____

PALLETS: SHIPPED ____ RETURNED ____

RECEIVED BY X _____

B Balance of item back ordered
C Shipment of item considered complete
D We do not stock this item
S To be shipped separately

AN EQUAL OPPORTUNITY EMPLOYER

DEPOSIT CONTAINERS MUST BE RETURNED IN RE-USEABLE CONDITION WITHIN 90 DAYS FOR DEPOSIT REFUND.

PACKING SHEET & CUSTOMER'S COPY

SALES ORDER

ORDER NUMBER 1767

CONSERVATION SERVICES, INC.

2525 N. NEW YORK
WICHITA, KANSAS 67219
(316) 267-5742

DRUM DEL

DATE 9-12-88

SOLD TO

SHIP TO WICHITA BRASS & ALUMINUM
412 E. 29th NORTH
WICHITA KS 67219

CUSTOMER NO.	P.O. NUMBER	TO BE SHIPPED	SHIP DATE	SHIP VIA	TERMS NET 1%	FOB WHSE DEST	PREP	COL	SALE
	MIKE CARTER	ASAP		USPCI					

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	CODE	UNIT	TAXABLE YES	TAXABLE NO	DESCRIPTION
	40		DS	EACH		X	17-H DRUMS

x Victor D. Parks

FILLED BY	DELIVERED BY	GROSS WEIGHT

EMPTIES RETURNED: JUGS ____ 15 GAL ____ 30 GAL ____ 55 GAL ____

PALLETS: SHIPPED ____ RETURNED ____

RECEIVED BY X ____

DE: B Balance of item back ordered
C Shipment of item considered complete
D We do-not stock this item
S To be shipped separately

AN EQUAL OPPORTUNITY EMPLOYER

DEPOSIT CONTAINERS MUST BE RETURNED IN RE-USEABLE CONDITION WITHIN 90 DAYS FOR DEPOSIT REFUND.

PACKING SHEET & CUSTOMER'S COPY

STATE OF KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT
Forbes Field
Topeka, Kansas 66620-0001
Phone (913) 296-1500

Mike Hayden, *Governor*

Stanley C. Grant, Ph.D., *Secretary*
Gary K. Hulett, Ph.D., *Under Secretary*

September 27, 1988

Mike Carter
Wichita Brass & Aluminum
Foundry, Inc.
P.O. Box 4144
Wichita, Kansas 67204

Re: EPA I.D. Number: KSP000000144
412 East 29th North
Wichita, Kansas 67219

Dear Mr. Carter:

This is a follow-up letter to the telephone request of September 26, 1988 for a temporary EPA I.D. Number.

You have been assigned the number KSP000000144 with the effective date of October 3, 1988 and the expiration date of November 2, 1988.

We understand the number assigned is for the purpose of disposal of approximately 150 barrels of paint sludge.

I have enclosed a blank notification form 8700-12. You should complete the form and return it to this department no later than ten (10) days from receipt of this letter.

You should submit a copy of all hazardous waste manifests to me after shipment is complete. If you have any questions, please feel free to call me at (913) 296-1607.

Sincerely,

John Paul Goetz, ~~P.E.,~~ Chief
Hazardous Waste Section
Bureau of Waste Management

./jpg.ltr
C Dale Stuckey

Please print or type with ELITE type (12 charact[illegible] per inch) in the unshaded areas only

STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT

Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law (*Section 3010 of the Resource Conservation and Recovery Act*).

For Official Use Only

Comments

Installation's EPA ID Number	Approved	Date Received (yr. mo. day)	County
KSP000000144 (T/A C 1)			

I. Name of Installation

WICHITA BRASS & ALUM FDRY INC

II. Installation Mailing Address

Street or P.O. Box: BOX 4144

City or Town	State	ZIP Code
WICHITA	KS	67204

III. Location of Installation

STREET ADDRESS OR LOCATION FROM KNOWN REFERENCE POINT: 412 E 29TH STREET NORTH

City or Town	State	ZIP Code
WICHITA	KS	67204

IV. Installation Contact

Name and Title (*last, first, and job title*)	Phone Number (*area code and number*)
CARTER MICHAEL PRES	316 838 4286

V. Ownership

A. Name of Installation's Legal Owner	B. Type of Ownership (*enter code*)
WICHITA BRASS & ALUM	P

VI. Type of Regulated Waste Activity (*Mark 'X' in the appropriate boxes. Refer to instructions.*)

A. Hazardous Waste Activity

- [X] 1a. Generator — NOTE: If generator, you must complete section X.E. on back side of form.
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5. Market or Burn Hazardous Waste Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer (or On site Burner) Who First Claims the Oil Meets the Specification

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VII. Waste Fuel Burning: Type of Combustion Device (*enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.*)

[ ] A. Utility Boiler [ ] B. Industrial Boiler [ ] C. Industrial Furnace

VIII. Mode of Transportation (*transporters only — enter 'X' in the appropriate box(es)*)

[ ] A. Air [ ] B. Rail [ ] C. Highway [ ] D. Water [ ] E. Other (*specify*)

IX. First or Subsequent Notification

rk 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent ification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

[X] A. First Notification [ ] B. Subsequent Notification (*complete item C*)

C. Installation's EPA ID Number: KSP000000144

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSP 000000144

Manifest Document No.: 00001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD 981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD 007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Material, Flammable Liquid NA 1263 RQ=100 lbs		40	DM	16,000 #	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

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BUREAU OF WASTE MANAGEMENT

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Michael W. Carter | Signature: Michael W. Carter | Month 10 Day 5 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month 10 Day 5 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Ronald K. Robinson | Signature: Ronald K. Robinson | Month 10 Day 5 Year 88

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. KSP 000000144

Manifest Document No. 00002

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100lbs		40	DM	16,000	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

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OCT 19 1988

BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: MICHAEL W CARTER | Signature: Michael W. Carter | Month Day Year: 10 06 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month Day Year: 10 6 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: David R Harris | Signature: David R Harris | Month Day Year: 10 06 88

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSP 000000144

Manifest Document No.: 00003

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

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P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	HM	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100 lbs.	40	DM	16,000#	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

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BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: MICHAEL W. CARTER | Signature: Michael W. Carter | Month 10 Day 06 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DOERMAN | Signature: Gary Doerman | Month 10 Day 6 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: RONALD K. ROBERTSON | Signature: Ronald K. Robertson | Month 10 Day 18 Year 88

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. 60646 (312) 478-0900

EPA Form 8700-22 (Rev. 9/86) Previous editions are obsolete.

Please print or type. (Form designed for use on elite (pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSP 000000144
Manifest Document No.: 00004
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204
4. Generator's Phone (316) 838-4286

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: USPCI
6. US EPA ID Number: OKD981514474

C. State Transporter's ID
D. Transporter's Phone

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219
10. US EPA ID Number: KSD007246846

G. State Facility's ID
H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100 lbs.		15	DM	6,000	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

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BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: MICHAEL W. CARTER
Signature: Michael W. Carter
Month Day Year: 10 06 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GARY DORMAN
Signature: Gary Dorman
Month Day Year: 10 6 88

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: David R Harris
Signature: David R Harris
Month Day Year: 10 7 88

SCAN SCREEN U.S.T. TANK INFORMATION ENTER Q-QUIT: _

ENTER INFORMATION CODE: _ ENTER SEQUENCE #: ___
(OPTIONS=T,C)

412 E 29th St N

ACILITY #: 42280 FACILITY NAME: WICHITA BRASS AND ALUMINUM FOUND

SEQ NO	TNK NO	EST YR	CAP. IN GAL	PETROLEUM	OUT OF SERVICE	STATUS OF TANK
001	A001	1978	001200	GASOLINE	REMOVED	PERM. OUT

Application for Certification and Release

MAY 05 1997
JMS 5/6/97

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, GLICKMAN, INC,

(insert legal name(s) of party seeking certificate)

ATTN: MILTON GLICKMAN
GLICKMAN, INC.
P.O. BOX 4309
WICHITA, KS 67204

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
309 E. 29TH ST. NORTH

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: OWNER

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: N/A

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: _____
(signature)

Name: MILTON GLICKMAN
(print or type)

P.O. BOX 4309

WICHITA, KS 67204
Address (print or type)

Date: May 2 — 1997

Subscribed and sworn to before me this 2nd day of MAY, 1997.

Lorella Schaup
Notary Public

My appointment expires: April 7, 2001

LORELLA SCHAUP NOTARY PUBLIC

NIC COB - 7-16-96

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for **Commercial/Industrial property** only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant GLICKMAN, INC. Date MAY , 1997

Business Phone 316-838-9381 Home Phone 316-636-2894

Legal Description LOT 1, K.P.&C. ADDITION, WICHITA, SEDGWICK COUNTY, KANSAS

Property Tax Key # B-13265

Street Address of Property 309 E. 29TH ST. NORTH

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER		DATES	TYPE OF BUSINESS/SITE USE
SEE ATTACHED	From:	To: Present	
EXHIBIT "A"	From:	To:	
	From:	To:	
	From:	To:	

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES	DATES		TYPE OF BUSINESS/SITE USE
AS ABOVE	From:	To: Present	
	From:	To:	
	From:	To:	
	From:	To:	

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☐Yes ☒No ☐Unknown BUT PROPERTY IS LOCATED WITHIN THE BOUNDARIES OF THE FORMER 29TH AND MEAD SUPERFUND SITE.
Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☐Yes ☒No ☐Unknown

(d) Has any type of environmental study been performed on this property? ☐Yes ☒No ☐Unknown
If yes, please identify and include a copy of the report.

(2) Disposal of Wastes.
(a) Are liquid or sludge wastes generated and/or stored on property? ☐Yes ☒No ☐Unknown

(b) What do the liquid wastes consist of?

(c) Has any type of characterization of these liquid wastes been conducted? ☐Yes ☐No ☐Unknown
If yes, include copy of results.

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☒No ☐Unknown

(b) Has the property even been owned by any entity that used hazardous substances on the site?
☒Yes ☐No ☐Unknown BARNSDALL REFINERY

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant. DO NOT KNOW OF ANY PRIOR RELEASES.

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☐Yes ☒No ☐Unknown

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☐No ☒Unknown CURRENT OWNER HAS NEVER HAD ANY SUBSTANCES TO DISPOSE OF FROM THIS SITE.
If yes, give name, phone number and contact person, for each transporter utilized.

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property? ☐Yes ☒No ☐Unknown If yes, include copy of results.

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☒No ☐Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☒No ☐Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored on the property?
☐Yes ☒No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.

(b) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☐Yes ☐No ☐Unknown

(c) If such reports were filed, do they meet federal, state and local requirements?
☐Yes ☐No ☐Unknown State the names of individuals familiar with the filings and the location of the files.

(5) Status of Water Pollution Control.
(a) Does the facility have any wastewater? ☐Yes ☒No ☐Unknown

How is it managed or treated at present? In past?

(b) Are there any pits, ponds, lagoons, tanks? ☐Yes ☒No ☐Unknown NOT AT THIS TIME.

If yes, indicate how and when the structures were used, and what compounds have been stored in them.

(c) Is the property connected to the City sewage treatment system? ☐Yes ☒No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☐No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☒No ☐Unknown
State the location of such records and the individuals familiar with them.

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☐Yes ☒No ☐Unknown
If yes, where?

6) Status of Compliance with Requirements Relating to Petroleum Products.
(a) Are any petroleum products stored at the facility? ☐Yes ☒No ☐Unknown
If yes, how much and where are they stored?

(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown NOT THAT OWNER IS AWARE OF.
Have they been registered with the Kansas Department of Health and Environment of other state, federal, or local agency?
☐Yes ☐No If registered, please attach a copy of the State Certificate.

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.

(d) Have the tanks been tested? ☐Yes ☐No ☐Unknown Results?

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property? ☐Yes ☒No ☐Unknown If yes, please describe. NOT UNDER THE CURRENT OWNERSHIP.

(f) Have any tanks presently or previously located at the property leaked or spilled?
☐Yes ☐No ☒Unknown If yes, please describe.

(7) Are there any water-wells on the property? ☐Yes ☒No If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☐Unknown If yes, please explain.

(a) If known, what was the water-well used for in the past?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(b) What is the water-well used for currently?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☐Unknown

(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results.

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes ☒No
If yes, list those corporate predecessors.

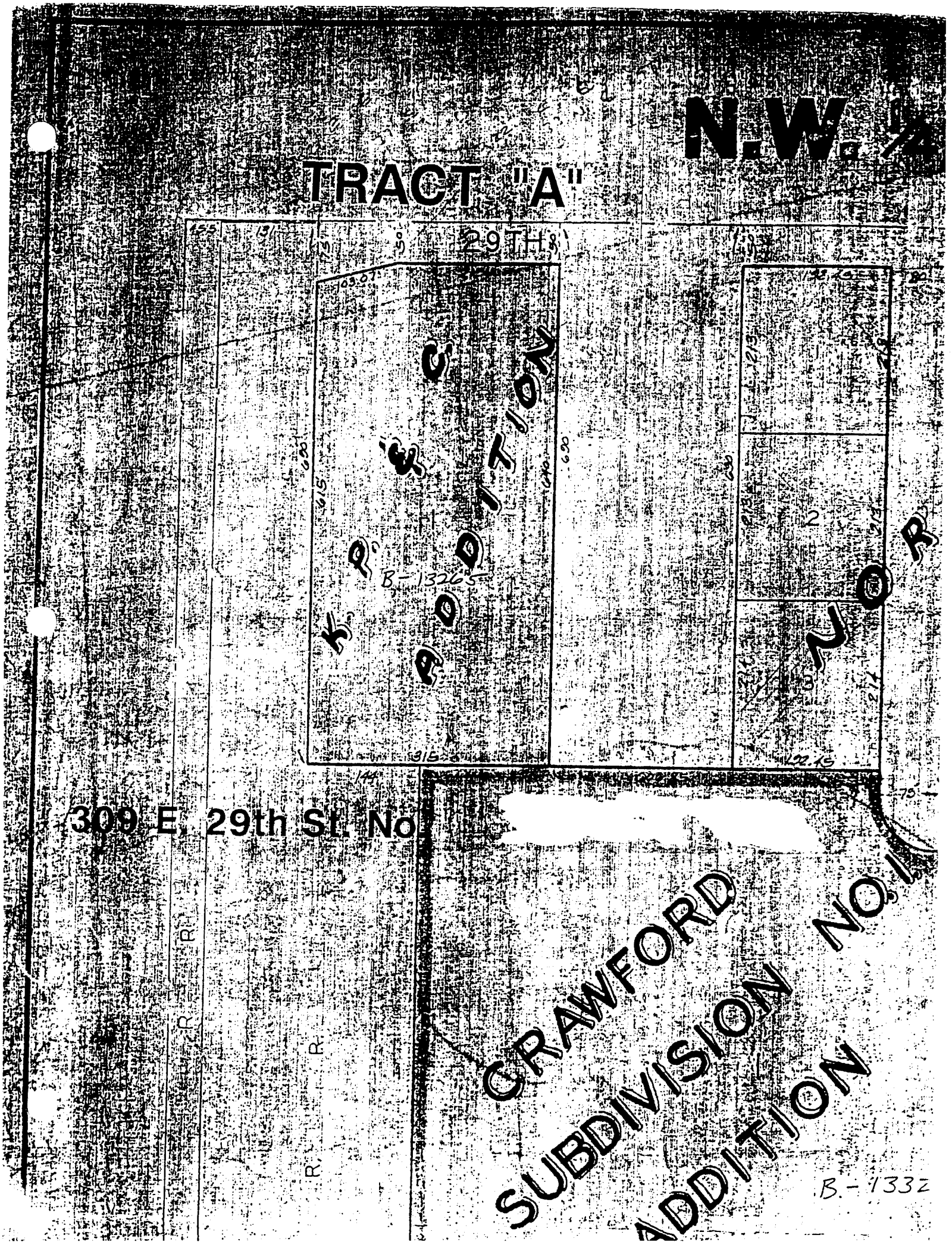
(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes ☒No
Is there a sale pending the Release for Environmental Conditions? ☐Yes ☒No
If yes, please indicate closing date _____.

Other comments:

PROPERTY WAS PURCHASED AS VACANT LAND FOR THE PURPOSE OF FUTURE EXPANSION OF, AND STORAGE FOR, GLICKMAN, INC.

Instrument	Grantee	Date Filed	Vol./Page
Deed	Glickman Inc.	5-30-96	1611-28
Deed	Glickman Inc.	1-9-96	1576-1375
Deed	Glickman Inc. William B. Glickman	4-23-81	473-904
Deed	* Milford S. Pepper	2-17-78	291-1078
Deed	Glickman Inc. William B. Glickman Scrap Traders Ltd.	1-6-75	127-1180
Deed	Kansas Paint & Color Co.	8-1-62	Bk. 1289-277
Deed	Industrial Development Co. Inc.	4-11-55	Bk. 974-33
Deed	Barnsdall Refg. Corp.	8-8-35	Bk. 464-587
Deed	Barnsdall Refineries Inc.	4-23-26	Bk. 384-198
Deed	Waite Phillips Co.	10-25-24	Bk. 372-476
Deed	Sterling Oil & Refg. Co.	10-25-24	Bk. 372-477
Deed	J. A. Corbett	1-4-17	Bk. 301-148

* PRINCIPAL OWNER OF SCRAP TRADERS LTD.


N.W. 1/4
TRACT "A"
29TH
CRAWFORD SUBDIVISION NO. 2
B-13265
2
3
309 E. 29th St. No
CRAWFORD SUBDIVISION NO. 2 ADDITION
B-1332

MAY 05 1997
JD 5/6/97

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, GLICKMAN, INC.

(insert legal name(s) of party seeking certificate)

ATTN: MILTON GLICKMAN
GLICKMAN, INC.
P.O BOX 4309
WICHITA, KS 67204
(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
410 E. 25TH ST. NORTH

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: OWNER

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: N/A

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: _____
(signature)

Name: MILTON GLICKMAN
(print or type)

P.O. BOX 4309

WICHITA, KS 67204
Address (print or type)

Date: May 2 — 1997

Subscribed and sworn to before me this 2nd day of MAY, 1997.

Lorella Schaff
Notary Public

My appointment expires:- APRIL 7, 2001

LORELLA SCHAFF NOTARY PUBLIC STATE OF KANSAS

COR 7-16-96

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for **Commercial/Industrial property** only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant GLICKMAN, INC. Date MAY , 1997

Business Phone 316-838-9381 Home Phone 316-636-2894

Legal Description SEE ATTACHED EXHIBIT "A"

Property Tax Key # SEE ATTACHED EXHIBIT "A"

Street Address of Property 410 E. 25TH ST. NORTH

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER	DATES	TYPE OF BUSINESS/SITE USE
SEE ATTACHED	From:____ To: Present	
EXHIBIT "B"	From:____ To:____	
	From:____ To:____	
	From:____ To:____	

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES	DATES	TYPE OF BUSINESS/SITE USE
AS ABOVE	From:____ To: Present	
	From:____ To:____	
	From:____ To:____	
	From:____ To:____	

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☐Yes ☒No ☐Unknown BUT PROPERTY IS LOCATED WITHIN THE BOUNDARIES OF THE FORMER 29TH AND MEAD SUPERFUND SITE.
Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☐Yes ☒No ☐Unknown

(d) Has any type of environmental study been performed on this property? ☐Yes ☒No ☐Unknown
If yes, please identify and include a copy of the report.

(2) Disposal of Wastes.
(a) Are liquid or sludge wastes generated and/or stored on property? ☐Yes ☐No ☐Unknown

(b) What do the liquid wastes consist of?

(c) Has any type of characterization of these liquid wastes been conducted? ☐Yes ☐No ☐Unknown
If yes, include copy of results.

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☒No ☐Unknown

(b) Has the property even been owned by any entity that used hazardous substances on the site?
☒Yes ☐No ☐Unknown BARNSDALL REFINERY

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant. DO NOT KNOW OF ANY PRIOR RELEASES.

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☒Yes ☐No ☐Unknown THERE IS ONE SMALL AREA OF WHAT APPEARS TO BE "TANK BOTTOMS". HAS BEEN THERE SINCE BARNSDALL OCCUPIED THE PROPERTY.

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☐No ☒Unknown CURRENT OWNER HAS NEVER HAD ANY SUBSTANCES TO DISPOSE OF FROM THIS SITE.

If yes, give name, phone number and contact person, for each transporter utilized.

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property? ☐Yes ☒No ☐Unknown If yes, include copy of results.

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☒No ☐Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☒No ☐Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored on the property?
☐Yes ☒No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.

(b) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☐Yes ☐No ☐Unknown

(c) If such reports were filed, do they meet federal, state and local requirements?
☐Yes ☐No ☐Unknown State the names of individuals familiar with the filings and the location of the files.

(5) Status of Water Pollution Control.
(a) Does the facility have any wastewater? ☐Yes ☒No ☐Unknown

How is it managed or treated at present? In past?

(b) Are there any pits, ponds, lagoons, tanks? ☒Yes ☐No ☐Unknown A SEPTIC SYSTEM AND THE "TANK BOTTOMS" AREA DESCRIBED IN 3(D) ABOVE.
If yes, indicate how and when the structures were used, and what compounds have been stored in them.

(c) Is the property connected to the City sewage treatment system? ☐Yes ☒No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☒No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☒No ☐Unknown
State the location of such records and the individuals familiar with them.

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☐Yes ☒No ☐Unknown
If yes, where?

6) Status of Compliance with Requirements Relating to Petroleum Products.
(a) Are any petroleum products stored at the facility? ☒Yes ☐No ☐Unknown
If yes, how much and where are they stored? APPROXIMATELY 300 GALLONS EACH OF DIESEL FUEL AND GASOLINE. BOTH PRODUCTS ARE STORED IN ABOVE-GROUND TANKS.

(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown

Have they been registered with the Kansas Department of Health and Environment of other state, federal, or local agency?
☐Yes ☐No If registered, please attach a copy of the State Certificate.

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.

(d) Have the tanks been tested? ☐Yes ☒No ☐Unknown Results?

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property? ☐Yes ☒No ☐Unknown If yes, please describe.

(f) Have any tanks presently or previously located at the property leaked or spilled?
☐Yes ☐No ☒Unknown If yes, please describe.

(7) Are there any water-wells on the property? ☐Yes ☒No If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☐Unknown If yes, please explain.

(a) If known, what was the water-well used for in the past?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(b) What is the water-well used for currently?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☐Unknown

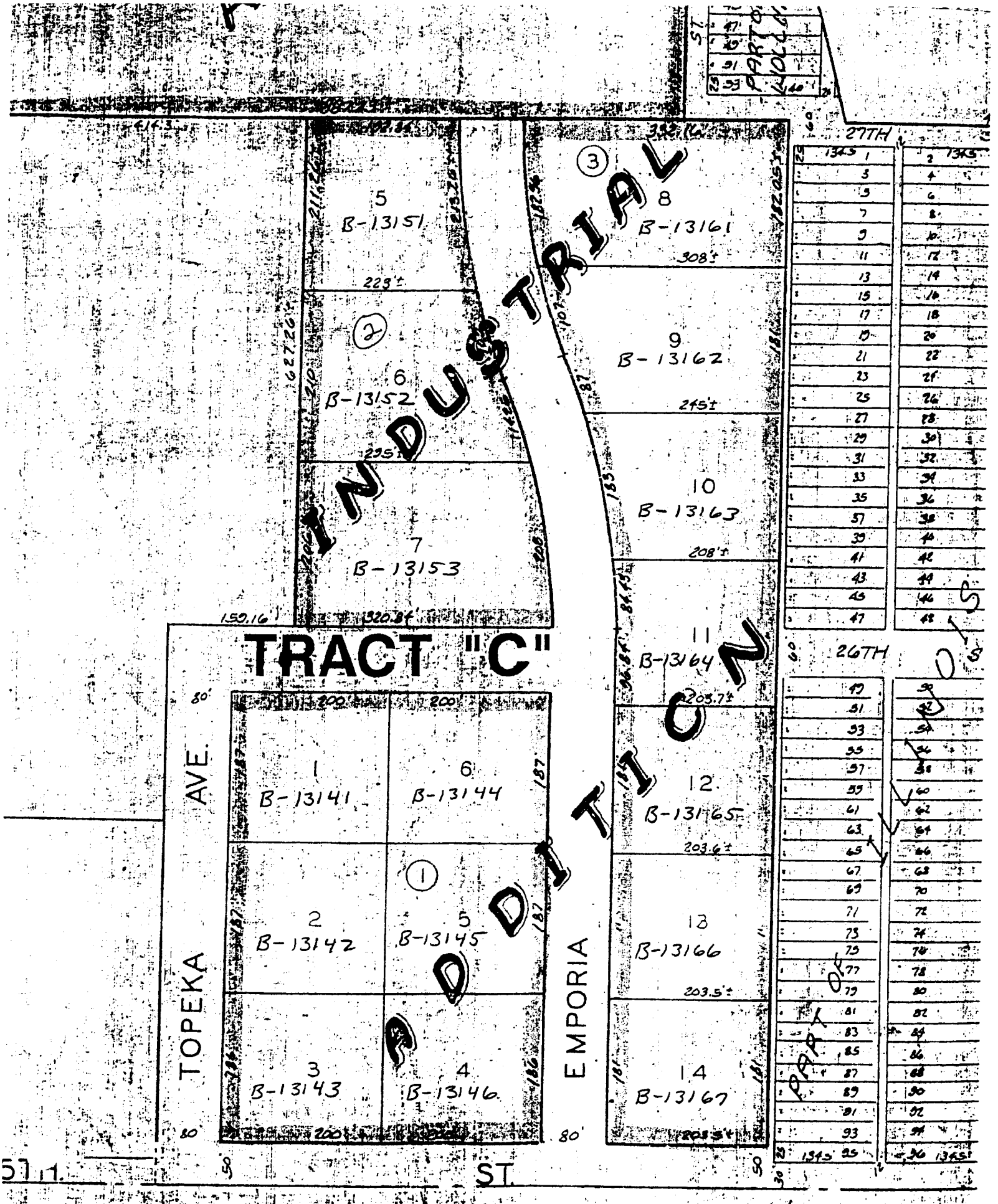
(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results.

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes ☒No
If yes, list those corporate predecessors.

(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes ☒No
Is there a sale pending the Release for Environmental Conditions? ☐Yes ☒No
If yes, please indicate closing date _____.

Other comments:

Instrument	Grantee	Date Filed	Vol./Page
Deed	Glickman, Inc.	8-9-74	112-670
Deed	James Gardner	7-25-74	110-688
Deed	Frank H. Ise	9-17-73	75-202
Deed	Industrial Development Co. Inc.	4-11-55	Bk. 974-33
Deed	Barnsdall Refg. Corp.	8-8-35	Bk. 464-587
Deed	Barnsdall Refineries Inc.	4-23-26	Bk. 384-198
Deed	Waite Phillips Co.	10-25-24	Bk. 372-476
Deed	Sterling Oil & Refg. Co.	10-25-24	Bk. 372-477
Deed	J. A. Corbett	1-4-17	Bk. 301-148



410 E. 25th St. No.

Page 4

Owner Prefix KMC 7/27/94

MAY 05 1997

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, KANSAS RECYCLING INDUSTRIES L.C.,

(insert legal name(s) of party seeking certificate)

ATTN: MILTON GLICKMAN
GLICKMAN, INC.
P.O. BOX 4309
WICHITA, KS 67204

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
2829 N. EMPORIA

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: OWNER

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: N/A

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: _____
(signature)

Name: MILTON GLICKMAN
(print or type)

P.O. BOX 4309

WICHITA, KS 67204
Address (print or type)

Date: May 2 — 1997

Subscribed and sworn to before me this 2nd day of MAY, 19 97.

_____
Notary Public

My appointment expires: April 7, 2001

LORELLA SCHARF
NOTARY PUBLIC
STATE OF KANSAS

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for **Commercial/Industrial property** only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant KANSAS RECYCLING INDUSTRIES L.C. Date MAY , 1997

Business Phone 316-838-9381 Home Phone 316-636-2894

Legal Description LOT 1, CRAWFORD SUB. NO. 1, WICHITA, SEDGWICK COUNTY, KANSAS,

Property Tax Key # B-13322

Street Address of Property 2829 N. EMPORIA

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER		DATES	TYPE OF BUSINESS/SITE USE
SEE ATTACHED	From:	To: Present	
EXHIBIT "A"	From:	To:	
	From:	To:	
	From:	To:	

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES		DATES	TYPE OF BUSINESS/SITE USE
AS ABOVE	From:	To: Present	
	From:	To:	
	From:	To:	
	From:	To:	

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☐Yes ☒No ☐Unknown BUT PROPERTY IS LOCATED WITHIN THE BOUNDARIES OF THE FORMER 29TH AND MEAD SUPERFUND SITE.
Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☐Yes ☒No ☐Unknown

(d) Has any type of environmental study been performed on this property? ☒Yes ☐No ☐Unknown
If yes, please identify and include a copy of the report.
SEE ATTACHED TERRACON ENVIRONMENTAL, INC REPORT

(2) Disposal of Wastes.

(a) Are liquid or sludge wastes generated and/or stored on property? ☐Yes ☒No ☐Unknown

(b) What do the liquid wastes consist of?

(c) Has any type of characterization of these liquid wastes been conducted? ☐Yes ☐No ☐Unknown
If yes, include copy of results.

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☒No ☐Unknown

(b) Has the property even been owned by any entity that used hazardous substances on the site?
☒Yes ☐No ☐Unknown BARNSDALL REFINERY

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant. OWNER DOES NOT KNOW OF ANY PRIOR RELEASES.

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☐Yes ☒No ☐Unknown

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☐No ☒Unknown CURRENT OWNER HAS NEVER HAD ANY SUBSTANCES TO DISPOSE OF FROM THIS SITE.
If yes, give name, phone number and contact person, for each transporter utilized.

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property? ☒Yes ☐No ☐Unknown If yes, include copy of results.

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☒No ☐Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☒No ☐Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored on the property?
☐Yes ☒No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.

(b) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☐Yes ☐No ☐Unknown

(c) If such reports were filed, do they meet federal, state and local requirements?
☐Yes ☐No ☐Unknown State the names of individuals familiar with the filings and the location of the files.

(5) Status of Water Pollution Control.

(a) Does the facility have any wastewater? ☒Yes ☐No ☐Unknown COOLING WATER IS CIRCULATED IN THE ELECTRIC ENGINE FOR THE SHREDDER.

How is it managed or treated at present? In past?

IT IS A CLOSED LOOP SYSTEM.

(b) Are there any pits, ponds, lagoons, tanks? ☒Yes ☐No ☐Unknown

If yes, indicate how and when the structures were used, and what compounds have been stored in them.

SMALL CONTAINMENT PIT FOR THE RE-CIRCULATING COOLING WATER.

(c) Is the property connected to the City sewage treatment system? ☒Yes ☐No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☒No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☒No ☐Unknown
State the location of such records and the individuals familiar with them.

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☒Yes ☐No ☐Unknown
If yes, where?
RE-CIRCULATING COOLING WATER IS OCCASIONALLY CLEANED OF EXCESS DIRT THAT HAS MADE IT'S WAY INTO THE SYSTEM.

6) Status of Compliance with Requirements Relating to Petroleum Products.

(a) Are any petroleum products stored at the facility? ☒Yes ☐No ☐Unknown
If yes, how much and where are they stored?

300 GALLONS OF DIESEL FUEL IS STORED IN ABOVE-GROUND TANKS.

(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown

Have they been registered with the Kansas Department of Health and Environment or other state, federal, or local agency?
☐Yes ☐No If registered, please attach a copy of the State Certificate.

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.

(d) Have the tanks been tested? ☐Yes ☒No ☐Unknown Results?

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property? ☐Yes ☒No ☐Unknown If yes, please describe.

(f) Have any tanks presently or previously located at the property leaked or spilled?
☐Yes ☒No ☐Unknown If yes, please describe.

(7) Are there any water-wells on the property? ☐Yes ☒No If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☐Unknown If yes, please explain.

(a) If known, what was the water-well used for in the past?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(b) What is the water-well used for currently?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☐Unknown

(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results.

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes ☒No
If yes, list those corporate predecessors.

(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes ☒No
Is there a sale pending the Release for Environmental Conditions? ☐Yes ☒No
If yes, please indicate closing date _____.

Other comments:

EXHIBIT "A"

CERTIFICATE

THE SECURITY ABSTRACT AND TITLE COMPANY, INC., hereby certifies that the attached Schedule "A" shows all the Deeds filed of record in the Office of the Register of Deeds in and for Sedgwick County, Kansas, covering the following described property, to-wit:

Lot 1, Crawford Subdivision No. 1, Wichita, Kansas,
Sedgwick County, Kansas,

from the 5th day of January, 1917 at 7:00 o'clock A.M. to this 9th day of April, 1997 at 7:00 o'clock A.M.

THE SECURITY ABSTRACT AND TITLE COMPANY, INC.

By Diana A. Janzen
Licensed Abstracter

Order No. 511759

Instrument	Grantee	Date Filed	Vol./Page
Deed	Kansas Recycling Industries L.C.	9-1-94	1472-1311
Deed	Kansas Recycling Industries	8-16-94	1468-1477
Deed	Wichita Metals Co.	8-12-74	112-794
Deed	James L. Gardner	7-25-74	110-688
Deed	Frank H. Ise	9-17-73	75-202
Deed	Industrial Development Co. Inc.	4-11-55	Bk. 974-33
Deed	Barnsdall Refg. Corp.	8-8-35	Bk. 464-587
Deed	Barnsdall Refineries Inc.	4-23-26	Bk. 384-198
Deed	Waite Phillips Co.	10-25-24	Bk. 372-476
Deed	Sterling Oil & Refg. Co.	10-25-24	Bk. 372-477
Deed	J. A. Corbett	1-4-17	Bk. 301-148

SEDGWICK COUNTY PROPERTY DATA LISTING

FAX TO: DON ARNOLD
OFFICE

PROPERTY ID: B -13322 PIN #: 122-04-0-22-01-002.00

OWNER: KANSAS METALS LC
PROPERTY 2829 N EMPORIA
ADDRESS: WICHITA KS
MAILING PO BOX 4309
ADDRESS: WICHITA KS 67204

TAX UNIT: 6787 WICHITA U-259-NIC

1996 MILL LEVY 112.682

1996 TAXES	BASE
GENERAL	5,248.28
SPECIALS	2,254.12
TOTAL	7,502.40

SPECIALS BREAKDOWN

CODE	CERT #	DESCRIPTION	1997 PAYMENT	1997 THRU PAYOUT	BEG YR	END YR
67-28	W L 37041	STORM SEWER	2,254.12	11,270.60	87	01

TOTAL PAYMENT
2,254.12 TOTAL SPECIALS DUE FOR 1997

PRINCIPAL	INTEREST
1,672.54	581.58

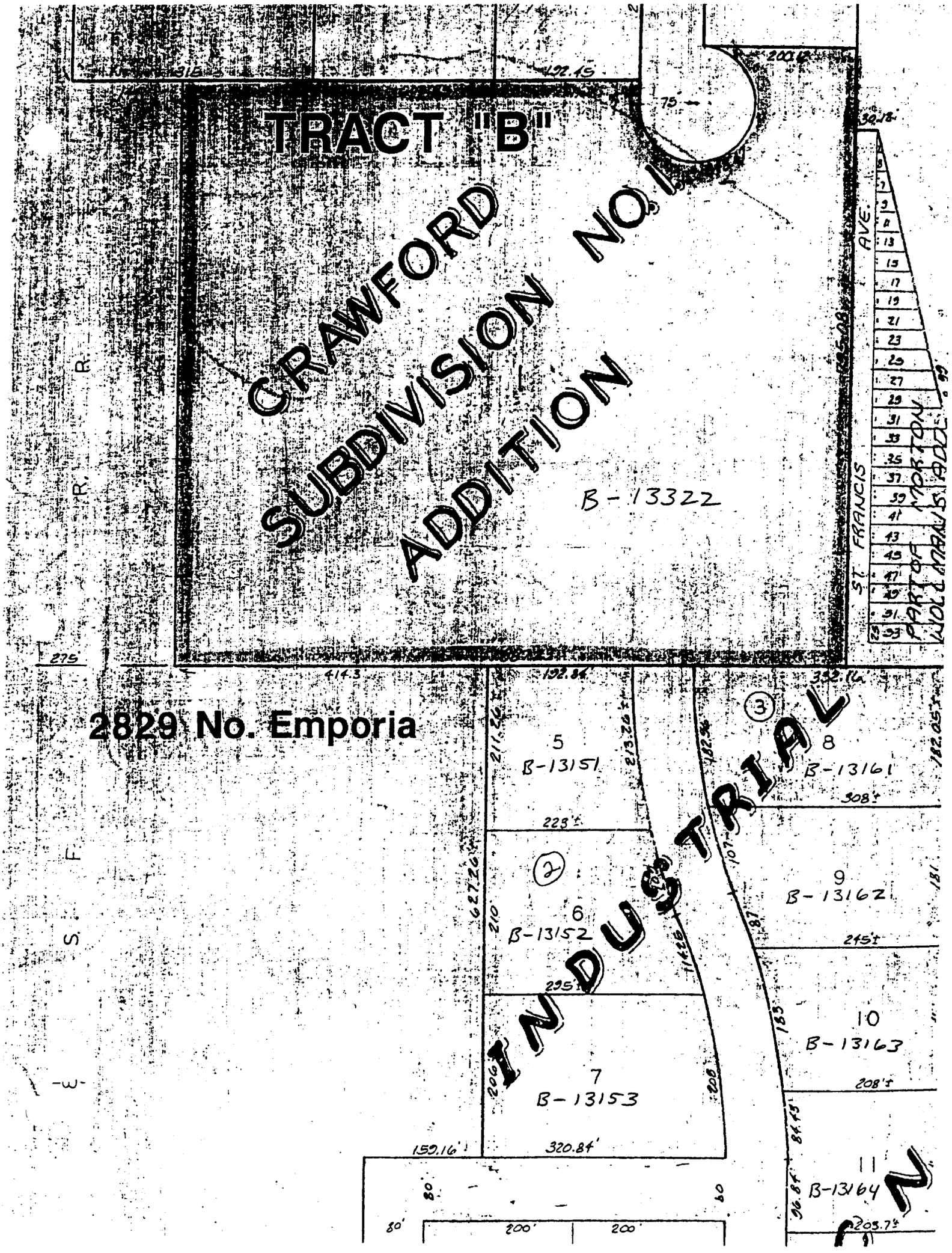
PENDING SPECIALS

	LAND	IMPROV	TOTAL
APPRAISED TOTAL:	157,990	28,310	186,300
ASSESSED TOTAL:	39,498	7,078	46,576
ASSESSED BREAKDOWN BY CLASS			
1. COMMERCIAL URBAN	39,498	7,078	46,576

ASSMNT YR: 1996
LAND USE: 486
MAIL DATE: 03/01/96
POST DATE: 06/16/96

CAMA INFORMATION	FRONT	DEPTH	YR BLT	SQFT
1. COMMERCIAL URBAN			1975	1,050

LEGAL DESCRIPTION
LOT 1 CRAWFORD SUB. NO. 1


TRACT "B"
CRAWFORD SUBDIVISION NO. 1
ADDITION
B-13322
ST FRANCIS AVE.
PART OF NORTON WOLF MANUS ADDN.
2829 No. Emporia
INDUSTRIAL
5
B-13151
6
B-13152
7
B-13153
8
B-13161
9
B-13162
10
B-13163
11
B-13164
275
414.3
192.84
332.16
223'±
295'±
320.84'
150.16'
308'±
245'±
208'±
203.7'±
80'
200'
200'
N

Excerpts from Report(s) Prepared by Others

NIC

11.6 Wichita Brass & Aluminum Foundry
Analytical Data

AD

DEPARTMENT OF HEALTH AND ENVIRONMENT

Division of Environment

RECEIVED

OCT 1981

BUREAU OF ENVIRONMENTAL SANITATION

M E M O R A N D U M

October 12, 1981

TO: SUPERFUND SITES FILE

FROM: Dale T. Stuckey, Field Representative DTS

SUBJECT: Investigation of Oil Sludge Pits Associated with Past Refinery Operations in Wichita. Section 4, T27S, R1E.

Primarily from a few off-hand remarks made by Mike Carter of the Wichita Brass and Aluminum Foundry and his father, Emmett Carter, I learned of the existance of two past refinery operations in the general vicinity of 29th Street and Broadway in Wichita. One went by the name of Golden Rule Refinery and was located in the northeast corner of the 29th street and Broadway intersection. It apparently went out of business in the late 1930's, probably 1938 or 1939. The other refinery went by the name of Barnsdall Refinery and was bounded by 29th street on the north, 25th street on the south, Broadway and the railroad tracks on the west, and St. Francis street on the east. This refinery went out of business about 1955. There were some oil sludge pits associated with each site.

GOLDEN RULE REFINERY

The Golden Rule Refinery was situated where Wichita Brass and Aluminum Foundry is located now. It was run by an Elden or Elbert Rule. When he went out of business he sold the land to a Walt Stevens who in turn, in 1941, sold the land to Emmett Clark. That year Emmett started up his foundry operation. Both Mike and Emmett Carter remember there being a general dump area just west of their property and east of the railroad tracks back in the mid-1940's. Initially Mike thought he remembered it containing some oil sludge but later he stated he didn't really remember what was in the pit. He believed it was closed out around 1946. During the time when I first made contact with Mike while investigating his company's abandoned lacquer reclamation project with its associated backlog of solvent and paint waste drums, he informed me that directly underneath the area over which the drums were scattered was a sizeable oil sludge pit. But in later conversations with him and his father, I was told they didn't think that there was, in fact, any oil sludge buried under their property. It was their feeling that all the old waste material associated with the refinery and with the dump had been burned off. Mike did mention, however,

that if one did some digging around out by the old stills, one would be likely to run into some oily dirt. In scraping down through old layers of dried paint sludge in this area, he had himself encountered some.

Visible on the enclosed 1938 aerial photograph is a cluster of possible oil sludge pits around two tanks on the western edge of the Golden Rule Refinery. This area corresponds to the old salvage and lacquer reclamation area located at the Wichita Brass and Aluminum Foundry currently. Also visible on this photograph, just north of the aforementioned area, is what appears to be a long sausage-shaped pit. This property is presently owned by a Dolese Concrete Company. On September 23, 1981 I made a brief reconnaisance of this area along with Kent Rowe of the Wichita-Sedgwick County Department of Community Health. In a location corresponding with that of the sausage-shaped pit we found a large mound of concrete. We later spoke with an employee of Dolese, who though declining to give us his name, told us that the concrete had been poured back in 1953. In 1951 he remembered there being oil in a pit there. He said that it had about a one foot soil cover on top and was fairly deep. One of the company's trucks had somehow gotten into it and was buried. It can be seen from the enclosed 1950 aerial photograph that this pit was indeed still there in 1950, though the refinery operation itself had been completely dismantled and there was no sign of any of the other pits.

BARNSDALL REFINERY

A check of plat records in the Sedgwick County Clerk's office showed that Barnsdall Oil Company's property was transferred over to Bareco Oil Company on August 8, 1935. Whether this was just a name change or an actual change of ownership is not known. On April 11, 1955 Bareco Oil Company's property was transferred over to Industrial Development Inc.

Oil sludge pits associated with the old Barnsdell and/or Bareco Oil Refinery were more numerous and the investigation in regards to them more involved, than was the case for the Golden Rule refinery. Basically there were two major pits on their property and I attempted to trace the destiny of these as best I could.

* * *

The major pit at the northwest corner of the property was square in outline, appeared to have a surface area of about one acre, and first shows up on the 1950 aerial photograph. It also appears in the 1960 photograph but is absent in the 1968 series. On August 1, 1962 this northwest corner property was deeded from Industrial Development Inc. to Kansas Paint and Color, Inc. Kansas Paint and Color owned the land up until January 6, 1975 when they deeded it to Glickman, Inc. This plat of land is currently referred to as K.P.&C. addition. I had a brief phone conversation with the plant manager (he declined to give his name) of Kansas Paint and Color on September 23, 1981 in connection with this pit. He said that his company had hired a contractor to

clean it out around 1965. All the water was pumped out and dumped and the oil sludge was dredged out and hauled off to an adjacent tract of land south of there, spread out over the ground and buried. Some of this oil sludge was also hauled off and used to stabilize dusty county roads. He declined to give any more specifics on how the sludge was handled and the exact location of where it was buried.

In conversation with both Mike and Emmett Carter it was confirmed to me that there was indeed a large oil sludge pit just south of their property and on the other side of 29th street back in the 60's. They remembered it having caught fire in 1959 and that a fire truck from Boeing Aircraft had to be used to put it out. They were also under the impression that the oil sludge had been cleaned out in the mid-60's. Mike remembered seeing them come in with an auger to dig it out and he believed that they had excavated a series of trenches running east-west, in a location somewhat southeast of the original pit, into which the oil sludge was dumped, mixed with dirt and covered.

I also had a brief phone conversation on September 29 with Steve Potucek of the Wichita Planning Commission concerning this northwest pit. He told me that Kansas Paint and Color had originally bought the land with the intent of setting up a metals reclamation operation, and that $35,000 was shelled out to clean up the oil sludge pit.

* * *

The second major pit was located about 200 yards due south of the northwest pit, was also about one acre in size,and was rectangular in outline. Emmett Carter believes that all this oil sludge was dug out, spread over a wide area in the same general vicinity and buried. The pit shows up on the 1960, 1968 and 1974 aerial photographs. This tract of land was owned by Industrial Development, Inc. up until September 17, 1973 when Johnnie Darr deeded the land to Frank H. Ise. Johnnie Darr had apparently obtained the land as a result of Industrial Development, Inc. having failed to pay its taxes. On July 25, 1974 Frank H. Ise deeded the land to James Gardner (former city commissioner). On August 12, 1974 James Gardner deeded the land to Wichita Metals, Inc., a firm that operates a car crusher on the site. ~~I spoke~~ with Dean Kline of Kansas Metals, Inc. by phone of September 24. He informed me that when construction began on the car crusher in 1974, there were no pits on the property. Since the 1974 aerial photograph was dated March, 1974, it appears that this main pit and all smaller associated pits were cleaned out sometime between March and August 12, 1974 - a period of time when the land was owned by James Gardner. I spoke with Mr. Gardner by phone on September 29 in an effort to gather facts about any cleanup operations but he refused to divulge any information whatsoever. It was his feeling that any kind of publicity on this matter would shed negative light on all associated parties.

In the above paragraph I mentioned that there were some smaller pits in this area. The pits I am referring to can most clearly be seen in the 1960 aerial photograph. There were two, irregular in outline, between the north and south major pits, and there were two south of southern major

pit. The boomerang shaped pit at the southeast corner of the southern major pit is about where the car crusher is sitting now. Emmett and Mike Carter remember that a horse got mired down in some oil sludge close to this location sometime back in the '50's. The long pit running east-west and situated just southeast from the northern major pit, was sitting in close proximity to where a fence line runs now which encloses Kansas Metals property. On September 23 Kent Rowe and myself discovered what, appeared to be, an oil sludge pit with an upper coating of dirt at this same general location. The sludge was very thick and could be walked over while sinking in slowly. Several skeletons of dead animals were entrained on the surface. Enclosed are a series of Polaroid snapshots taken of the area. Most all of this material was sitting on land which is now owned by Mike Carter, though the eastern most extremity of the sludge was on land which is being leased from Mike Carter by Roofing Service Company. It is possible that the waste originated from the roofing company's operations, but it appeared to me to be more of a refinery waste product. I believed I could detect some refinery odor while probing around in the sludge. On September 28 I revisited this site and collected a sample of the sludge in a mason jar. It should be presently undergoing heavy metals analysis in our Topeka lab.

CONCLUSION

This pretty much concludes the information I have gathered on this subject to date. The problem which arises, is that, though it appears all the oil sludge was handled in a way in which microbial breakdown would be encouraged (i.e. - through mixing with dirt), my assessment is gathered second-hand and I have no hard facts to go on regarding the clean up operations. The people that would know the specifics, the plant manager at Kansas Paint and Color and James Gardner, have shown no willingness to make the information available to me. In my mind, the course that needs to be taken, is for a higher official than myself to attempt extracting information from these two sources and if this fails, for field work, in the form of augering or drilling, to commence on revealing the location of the sludge, its physical and chemical characteristics and any threat it may pose to the ground water. The water table in the area of concern is only 15 to 20 feet deep.

Likewise the possibility of buried oil sludge on the old Golden Rule Refinery property needs to be looked into. It is conceivable that the old sausage-shaped pit previously mentioned might still be in existance underneath tons of concrete.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: October 27, 1981
Time Received: 11:15 am
Date Completed: November 30, 1981

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter

LLI Project No.: 81-7449
P. O. No.:

Sample Description: Soil

Sample Identification	Analysis	Results
One Foot Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter
Six Inch Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter

The above soil samples were taken by Mr. Dale Stuckey (KDHE Employee) in late october 195 at the location he determined to be the worst as far as leaking drums. The results of the EP Toxicity analysis indicate that no hazardous materials had leaked to the 6 inch nor to the 1 foot depth and were probably not ground water contaminants.

Comments:

Michael W Carter
President

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

Department of Health and Environment
Division of Environment

PHOTO MOUNTING SHEET

Name of Site: Uncontrolled Hazardous Waste Site at Wichita Brass and Aluminum Foundry

Location: City Wichita County Sedgwick Legal

No. 1

Date: Aug. 18, 1981 Time: ~~9:30~~ 10:00 A.M.

General Direction Faced: East

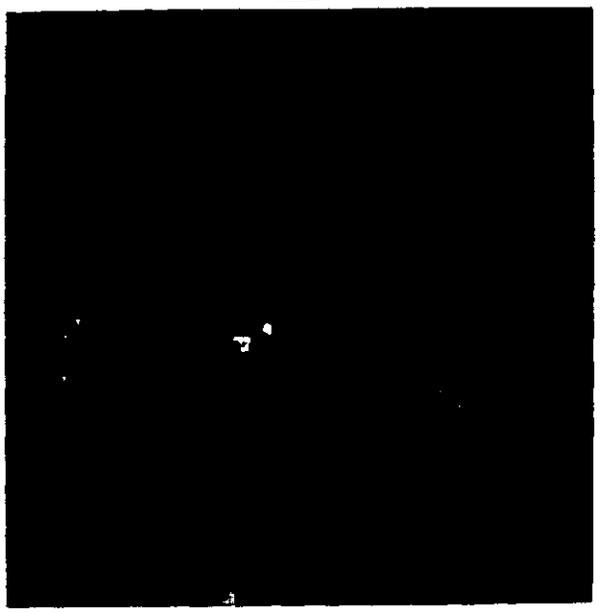
Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at one of the drums in which wastes is actually oozing out onto the ground.

Dale Stucker

No. 2



Date: Aug. 18, 1981 Time: 10:00 A.M

General Direction Faced: West

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at a small portion of the dump site showing drums stacked high at the left and several drums scattered in the center.

Dale Stucker

STATE OF KANSAS
DIVISION OF ENVIRONMENT
TOPEKA, KANSAS

Job No. _____

Date Aug. 18, 1981

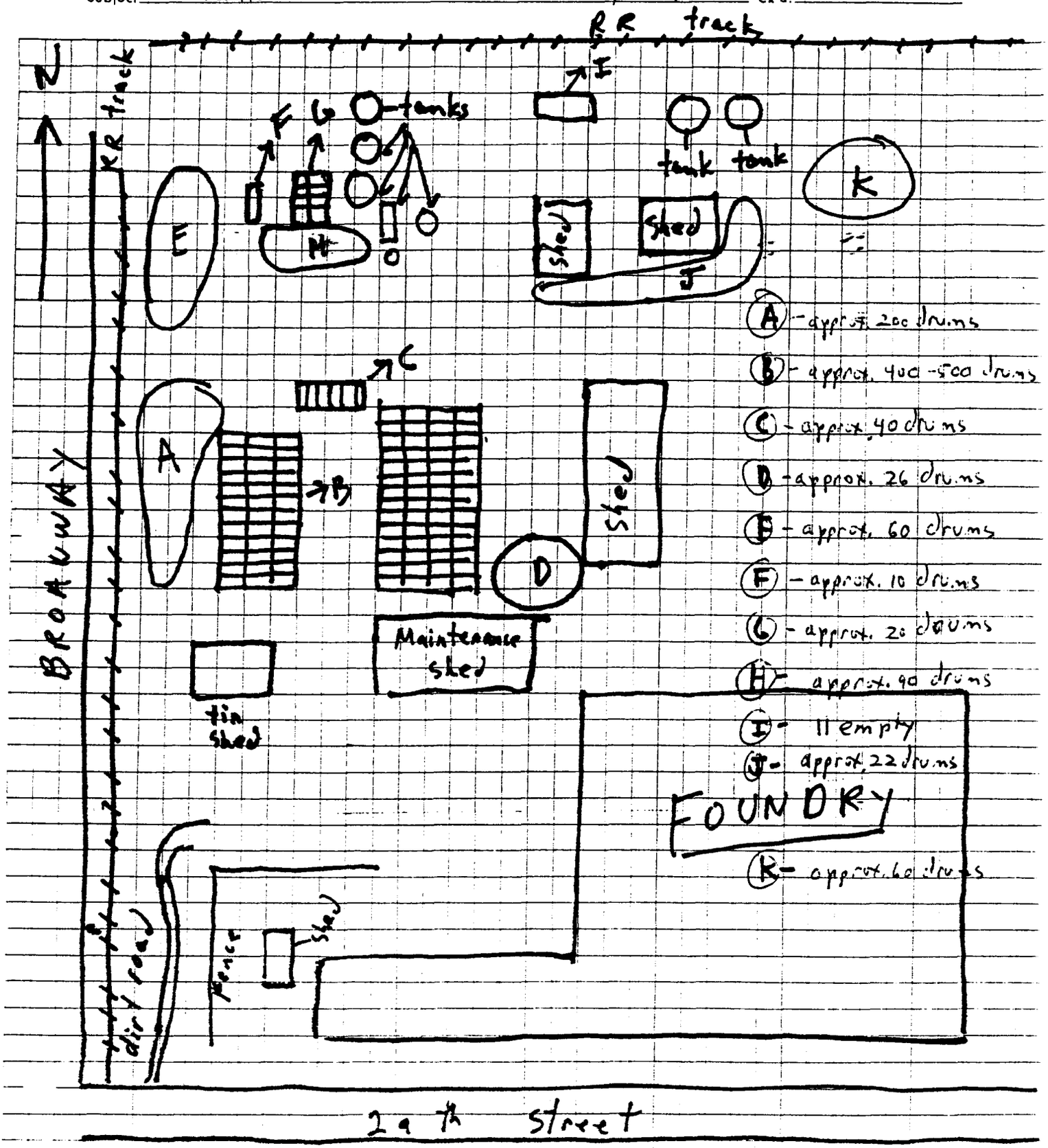
Sheet _____ of _____

Project _____

By Paul T. Stanley

Subject Wichita Brass and Aluminum Foundry Complaint

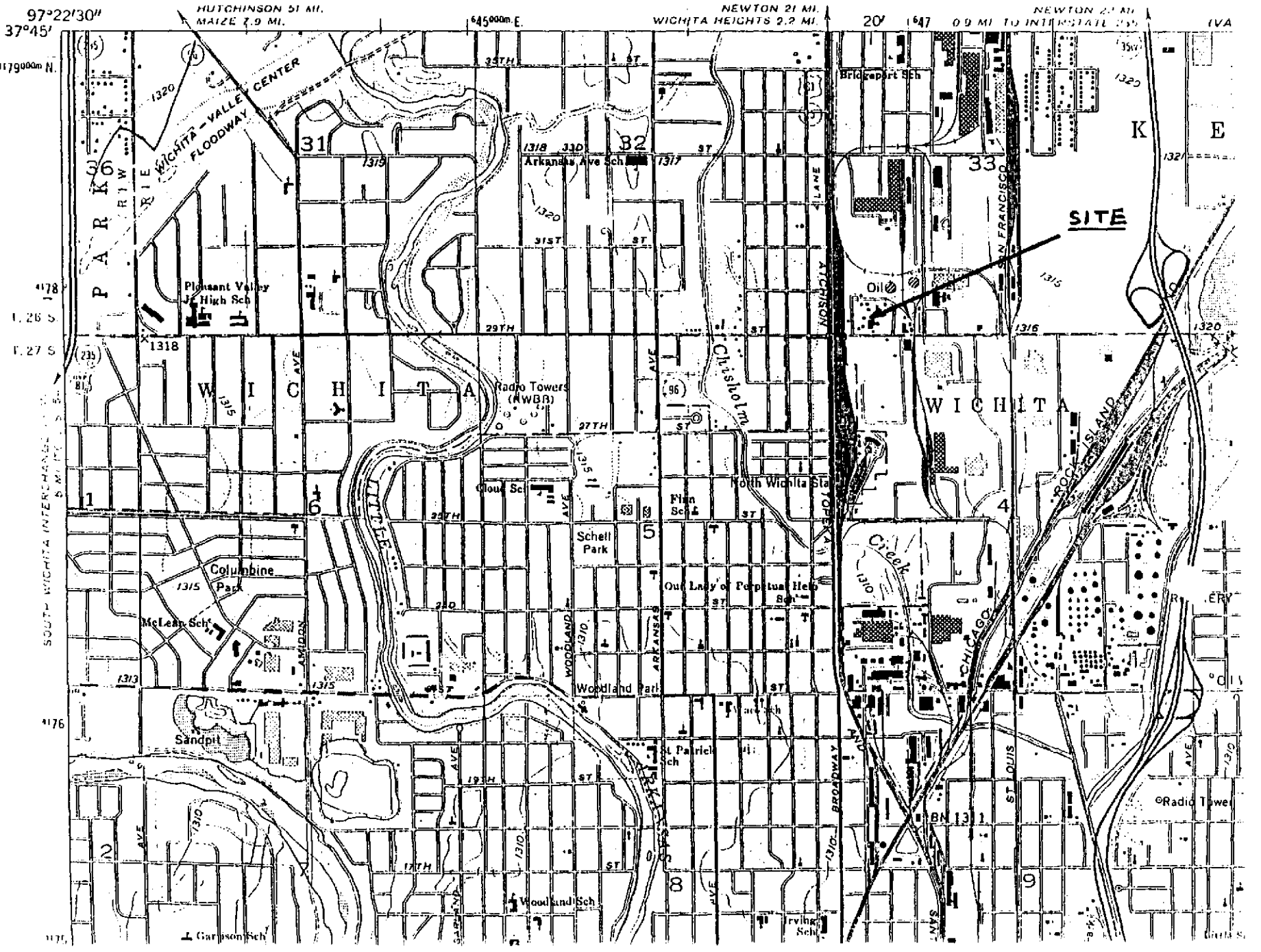
Ck'd. _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Wichita Brass + Aluminum Foundry, Wichita.

STATE



LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: September 14, 1981
Time Received: 8:00 am
Date Completed: September 24, 1981

LLI Project No.: 81-7149

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Composite Waste Paint Sludge Collected September 10, 1981

Sample Identification	Analysis	Results
Sludge	Specific Gravity	1,658 g/ml
	Dissolved Sulfide	< 3 mg/liter
	Free Cyanide	51 mg/kg
	Total Cyanide	57 mg/kg
	Total Arsenic	4.4 mg/kg
	Total Barium	113 mg/kg
	Total Cadmium	22 mg/kg
	Total Chromium	600 mg/kg
	Total Lead	2,400 mg/kg 5/mg
	Total Mercury	0.09 mg/kg
	Total Selenium	< 1 mg/kg
	Total Silver	0.65 mg/kg
	EP Toxicity	
	Arsenic	< 0.25 mg/liter
	Barium	< 5.0 mg/liter
	Cadmium	0.16 mg/liter
	Chromium - Hexavalent	108 mg/liter
	Chromium	116 mg/liter 5 mg/liter
	Lead	< 0.25 mg/liter
	Mercury	< 0.01 mg/liter
	Selenium	< 0.05 mg/liter
	Silver	< 0.25 mg/liter

RECEIVED
AUG 27 1987
BUREAU OF ENVIRONMENTAL REMEDIATION

Comments:

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

GROUNDWATER TECHNOLOGY

Groundwater Technology, Inc.
1950 South Florence, Wichita, KS 67209 USA
Tel: (316) 943-3444 Fax: (316) 943-1321

Volumes I – V

VOLUME I

PRELIMINARY RESULTS FROM INVESTIGATION OF THE 29TH AND MEAD AREA

Project No. 040020138

August 27, 1991
Revised: June 12, 1992
Revised: June 13, 1996

Prepared For:

Wichita North Industrial District

Prepared By:

Fluor Daniel GTI
1950 S. Florence
Wichita, Kansas 67209

GROUNDWATER TECHNOLOGY

VOLUME I
PRELIMINARY RESULTS FROM INVESTIGATION

29TH AND MEAD SITE
WICHITA, KANSAS

WICHITA NORTH INDUSTRIAL DISTRICT

Includes:
Appendixes A and B

4.1 2.3 Soil BNA Analysis

Soil samples collected from the 0 to 3 foot horizon in each background boring was submitted to GTEL for BNA analysis by EPA Method 8270. No BNA compounds were detected above practical quantitation limits.

4.1.2.4 Soil Metals Analysis

Three soil samples from each background soil boring were analyzed for metals by GTEL. The metals detected were arsenic, barium, chromium, lead, and iron. **Table 9** presents the results of the metals analysis.

Concentrations of arsenic in samples ranged from non-detectable to 3.2 mg/kg. The highest concentration of arsenic was detected in the 9 to 12 foot sample at B5-BG-1 (see **Figure 5**). Barium concentrations ranged from 32 mg/kg to 130 mg/kg. The highest barium concentration was detected in the 3 to 9 foot sample at B5-BG-1. Chromium concentrations ranged from 1 mg/kg to 10 mg/kg. The highest concentration of chromium was from the 3 to 9 foot interval at B5-BG-1. Lead was detected ranging from 3 mg/kg to 37 mg/kg. The highest lead concentration was detected from the 0 to 3 foot interval of A1-BG-2. Iron concentrations in the samples ranged from 2,600 mg/kg to 14,000 mg/kg. The highest iron concentration was detected in the 3 to 9 foot interval of B5-BG-1. No sample contained any metal that exceeded USGS average or native soil concentration ranges. USGS averages and native soil concentrations for metals are shown in **Table 9.**

4.1.3 BORINGS AT REFINERY PITS

4.1.3.1 Soil VOC Analysis - PID Screening

VOC concentrations, as measured with a PID in soil samples collected from four borings at refinery pits, ranged from non-detectable to 3.2 ppm. The highest concentration was from the 0 to 5 foot interval of pit boring B3-PB-2. PID soil screening results are presented in **Table 10**.

4.1.3.2 Soil VOC Analysis - Laboratory

Concentrations of VOCs in the soil samples from borings at refinery pits submitted to GTEL for analysis by EPA Method 8010/8020 were non-detectable.

4.1.3.3 Soil BNA Analysis

Soil samples from the borings at refinery pits were submitted to GTEL for analysis of BNAs by EPA Method 8270. Bis(2-ethylhexyl)phthalate was detected in B3-PB-4 at 360 μg/kg. No other BNA compounds were detected in the borings above practical quantitation limits.

4.1.3.4 Soil Metals Analysis

The metals detected in the soil samples from the borings at refinery pits were antimony, arsenic, barium, chromium, iron, lead, mercury, silver and cadmium. **Table 11** presents the results of the metals analysis.

Concentrations of antimony in the borings at the refinery pits ranged from non-detectable to 7.8 mg/kg The highest concentration of antimony was detected in the sample from B3-PB-2. Concentrations of arsenic ranged from 0.68 mg/kg to 22 mg/kg. The highest concentration of arsenic was detected in the sample from B4-PB-1. Barium concentrations ranged from 58 mg/kg to 810 mg/kg. The highest concentration of barium was detected in the sample from B4-PB-1. Chromium concentrations ranged from non-detectable to 37 mg/kg in the sample from B4-PB-1. Iron concentrations ranged from 11,000 mg/kg to 49,000 mg/kg. The highest concentration of iron was detected in the sample from B4-PB-1. Lead concentrations ranged from non-detectable to 950 mg/kg in the sample from B3-PB-4. Mercury concentrations were non-detectable except for the samples from B4-PB-1 at 0.22 mg/kg and B3-PB-2 at 0.87 mg/kg. Silver concentrations were non-detectable except for the sample from B4-PB-1 at 3.5 mg/kg. Cadmium concentrations were non-detectable except for the sample from B4-PB-1 at 6.2 mg/kg. Concentrations for all quantified metals in B4-PB-1 except iron exceeds the maximum reported concentration in background borings. Matrix spike QA/QC results for sample B4-PB-1 were outside of control limits for the metals chromium, lead, selenium and silver. Matrix spike results outside of control limits indicate that the sample matrix for sample B4-PB-1 has characteristics, such as heterogeneity, that effect the analytical method and, therefore, the results. Percent recoveries for the metals chromium and lead were above the maximum control limit which suggest that the portion of the sample used for the matrix spike actually contained higher concentrations than the portion of the sample used as the analytical sample. The percent recovery was 73.4 which is just below the minimum control limit of 75. Laboratory duplicate QA/QC results for sample B4-PB-1 were outside of control limits for barium, chromium, lead, mercury, and silver. Pursuant to EPA data validation guidelines this data is qualified as "estimated". The purpose of the pit boring samples was to evaluate potential contamination in the pit areas. The qualitative goal to determine if metals exist above maximum background concentrations in B4-PB-1 was met. Concentrations of arsenic, barium, iron, lead, and mercury exceed USGS average and maximum background concentrations in B4-PB-1. Chromium concentrations in B4-PB-1 exceed maximum background concentrations. Iron concentrations in B4-PB-1 exceed USGS average concentrations. Lead and mercury concentrations in B3-PB-2 and lead in B3-PB-4 exceed maximum background concentrations and USGS average concentrations.

Antimony and chromium concentrations in B3-PB-2 exceed maximum background concentrations. USGS averages and native soil concentrations for metals in soil are shown in **Table 11**.

4.1.3.5 Groundwater VOC Analysis

Groundwater samples were collected from each pit boring and submitted to GTEL for analysis of VOCs by EPA Method 8010/8020. **Table 12** presents a summary of the laboratory results. Chlorinated VOCs were detected in groundwater from B4-PB-1 and B3-PB-2. Petroleum VOCs were detected in groundwater from B4-PB-1, B3-PB-2, and B3-PB-4. VOCs were not detected in groundwater from B4-PB-3.

Chlorinated VOCs detected in the samples from B4-PB-1 were vinyl chloride at 6.8 µg/l; chloroethane at 0.6 µg/l; 1,1-DCA at 1.0 µg/l; Trans-1,2-DCE at 0.2 µg/l; and 1,2-DCA at 0.2 µg/l. The sample from B3-PB-2 contained Trans-1,2-DCE at 3.3 µg/l and TCE at 3.2 µg/l. The vinyl chloride concentration in the sample from B4-PB-1 exceeds the Kansas Action Level (KAL) of 2 µg/l.

Petroleum compounds detected in the sample from B4-PB-1 were benzene at 7.3 µg/l, toluene at 0.4 µg/l, ethylbenzene at 5.0 µg/l, and total xylenes at 0.7 µg/l. The sample from B3-PB-2 contained benzene at 0.9 µg/l, toluene at 1.3 µg/l, ethylbenzene at 4.1 µg/l, and total xylenes at 2.1 µg/l. The sample from B3-PB-4 contained toluene at 0.6 µg/l and total xylenes at 2.6 µg/l. The benzene concentration in the sample from B4-PB-1 exceeds the KAL of 5 µg/l.

4.1.3.6 Groundwater BNA Analysis

Groundwater samples were collected from the borings at refinery pits and submitted to GTEL for analysis of BNAs by EPA Method 8270. Samples from B4-PB-1 and B4-PB-3 did not contain BNAs above practical quantitation limits. Bis(2-Ethylhexyl)phthalate was detected in the sample from B3-PB-2 at 19.4 µg/l and the sample from B3-PB-4 at 12 µg/l.

4.1.3.7 Groundwater Metals Analysis

Dissolved metals detected in filtered groundwater samples collected from the borings include arsenic, barium, lead, antimony, and iron. The laboratory analytical results for groundwater samples from the borings at refinery pits are summarized presented in **Table 13**.

Concentrations of arsenic in the groundwater samples ranged from non-detectable in B4-PB-1 and B4-PB-3 to 0.027 mg/l in B3-PB-2. Barium concentrations in samples ranged from 0.12 mg/l to 1.4 mg/l. The highest concentration of barium was detected in groundwater sample from B4-PB-1. Concentrations of lead in groundwater samples ranged from non-detectable in B3-PB-2 and B3-PB-4 to 0.006 mg/l in B4-PB-1 and B4-PB-3. Antimony was non-detectable in groundwater

samples except in the sample from B4-PB-3 at 0.01 mg/l. Iron concentrations in groundwater samples ranged from 0.10 mg/l to 34 mg/l. The highest concentration of iron was detected in the groundwater sample from B4-PB-1. The concentrations of barium and iron exceed the KALs in the groundwater sample from B4-PB-1. The KAL for iron was also exceeded in the samples from B3-PB-2 and B3-PB-4. The reported iron and barium concentrations are within the range of natural conditions for groundwater in this part of Kansas.

4.1.4 SURFACE SOIL SAMPLES

4.1.4.1 Soil Metals Analysis

Seven surface soil samples were collected and submitted to GTEL for analysis of antimony, iron, and RCRA metals. Results are summarized in **Table 14**. Metals detected in the surface soil samples were arsenic, barium, cadmium, chromium, lead, selenium, silver, and iron.

Arsenic concentrations in surface soil samples ranged from non-detectable at B4-SS-1a to 3.7 mg/kg at A5-SS-2a, which exceeds the background maximum. Barium concentrations in samples ranged from 39 mg/kg at B4-SS-1a to 160 mg/kg at B3-SS-7a, which exceeds the background maximum. Cadmium concentrations in samples ranged from non-detectable at B5-SS-3a to 6 mg/kg in B4-SS-1a. Chromium concentrations in samples ranged from 9 mg/kg at A5-SS-2a to 69 mg/kg at B4-SS-1a (all but the low value exceed the background maximum). Lead concentrations in samples ranged from 63 mg/kg, which exceeds the background maximum, at B5-SS-3a to 300 mg/kg at B3-SS-5a. Selenium concentrations in samples ranged from non-detectable to 2.8 mg/kg at B4-SS-1a. Silver was only detected in samples at B5-SS-3a and B3-SS-5a at 1 mg/kg. Iron concentrations in the surface soil samples ranged from 3700 mg/kg to 20000 mg/kg. The highest concentration of iron was detected at B3-SS-7a. Lead and selenium concentrations exceeded both the USGS average and native soil concentration ranges (see **Table 14**).

4.1.4.2 Soil PNA Analysis

Soil was collected at each surface soil location and submitted to GTEL for analysis of PNAs by EPA Method 8310. **Table 15** presents the results of the PNA analysis

PNAs detected in the surface soil samples include the petroleum and coal constituents acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)fluoranthene, benzo(k)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, and indeno(1,2,3-cd)pyrene. Concentrations of total PNAs (per EPA Method 8310) in soil samples ranged from 165 ug/Kg to 19,170 μg/kg. The highest concentration of total PNAs was detected in the sample at B3-SS-7a.

TABLE 10
RESULTS OF PID ANALYSIS OF
PIT BORING SOIL SAMPLES
WNID - 29TH AND MEAD RI/FS

Boring #	Depth (ft.)	PID Reading (ppm)*
B4-PB-1	0 - 5 5 - 10	0.6 ND
B3-PB-2	0 - 5 5 - 10	3.2 0.6
B4-PB-3	0 - 5 5 - 10	ND ND
B3-PB-4	0 - 5 5 - 10	ND ND

*PID = HNU model 101 Photoionization detector with a hand held probe containing a 10.2 eV lamp, pump, ionization chamber, and aluminum sampling tube. The unit was calibrated using HNU Span Gas (#101-350) for a direct reading of benzene in ppm vol/vol from 0-20, 0-200, and 0-2000 with the span position at 9.8.

ppm = Parts per million

ND = Below detection limits

TABLE 11
RESULTS OF METALS ANALYSIS
FOR PIT BORING SOIL SAMPLES*
WNID - 29TH AND MEAD RI/FS
Concentrations in mg/Kg (ppm)

	B4-PB-1	B3-PB-2	B4-PB-3	B3-PB-4	USGS Average[1]	Native Soil Concentrations[2]	Background	
							Mean	Maximum
Antimony	<6.4	7.8	<6.5	<6.4	NA	0.6-10	ND	ND
Arsenic	22	0.68	2.1	1.9	7.0	10 - 40	1.5	3.2
Barium	810	73	58	100	670	100 - 3500	77	130
Chromium	37 N	14	<1.0	9.9	56	5-3000	5.2	10
Iron	49000	11000	14000	12000	26000	7000-55000	7900	140000
Lead	810 N	62	<11	950	20	20 - 200	13	37
Mercury	0.22	0.87	<0.13	<0.18	0.065	0.01-0.08	ND	ND
Silver	3.5 N	<1.2	<1.1	<1.1	NA	0.1 - 5.0	ND	ND
Cadmium	6.2	<0.58	<0.54	<0.53	NA	0/.01 - 7.0	ND	ND

* All samples collected at a depth of 0 - 5 feet.
N = Control limits for recovery in the matrix spike were not met. (Value reported as an estimate.)
NA = Not Available
ND = Not Detected

Note: Only those metals detected are listed above.

[1] Shacklette and Boerngen, 1984

[2] Dragun, 1988

C:\WNID\TABLES2.xlm

GROUNDWATER TECHNOLOGY

TABLE 12
RESULTS OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES FROM PIT BORINGS BY EPA METHOD 8010/8020
WNID - 29TH AND MEAD RI/FS
Concentrations in μg/L (ppb)

	PQL	B4-PB-1	B3-PB-2	B4-PB-3	B3-PB-4	KAL
Vinyl Chloride	0.3	6.8	ND	ND	ND	2
Chloroethane	0.3	0.6	ND	ND	ND	37
1,1-Dichloroethane	0.2	1.0	ND	ND	ND	5
Trans-1,2-Dichloroethene	0.2	0.2	3.3	ND	ND	70
1,2-Dichloroethane	0.2	0.2	ND	ND	ND	5
Trichloroethene	0.2	ND	3.2	ND	ND	5
Benzene	0.2	7.3	0.9	ND	ND	5
Toluene	0.2	0.4	1.3	ND	0.6	2000
Ethylbenzene	0.2	5.0	4.1	ND	ND	680
Total Xylenes	0.2	0.7	2.1	ND	2.6	440

PQL = Practical quantitation limit
ug/L = micrograms per liter
ppb = Parts per billion
ND = Below practical quantitation limit
KAL = Kansas Action Level

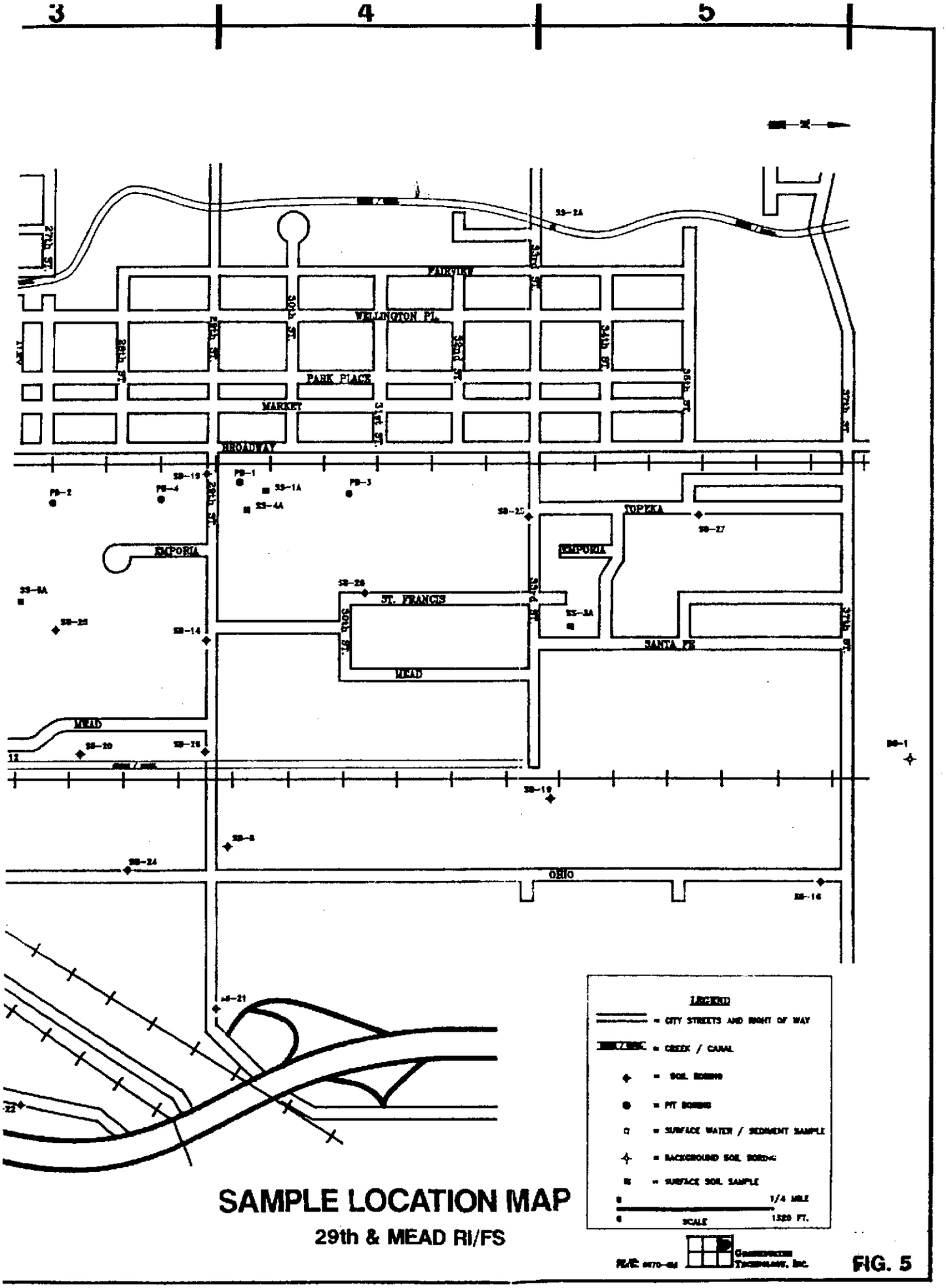
Note: Only those compounds detected are listed above

TABLE 13
RESULTS OF METALS ANALYSIS FOR
GROUNDWATER SAMPLES FROM PIT BORINGS
WNID - 29TH AND MEAD RI/FS
Concentrations in mg/L (ppm)

	PQL	B4-PB-1	B3-PB-2	B4-PB-3	B3-PB-4	KAL
Arsenic	0.005	ND	0.027	ND	0.022	0.05
Barium	0.01	1.4	0.99	0.12	0.44	1
Lead	0.005	0.006	ND	0.006	ND	0.05
Antimony	0.01	ND	ND	0.01	ND	0.143
Iron	0.01	34	14	0.10	1.5	0.3

PQL = Practical quantitation limit
ppm = Parts per million
mg/L = milligrams per liter
ND = Below practical quantitation limit
KAL = Kansas Action Level

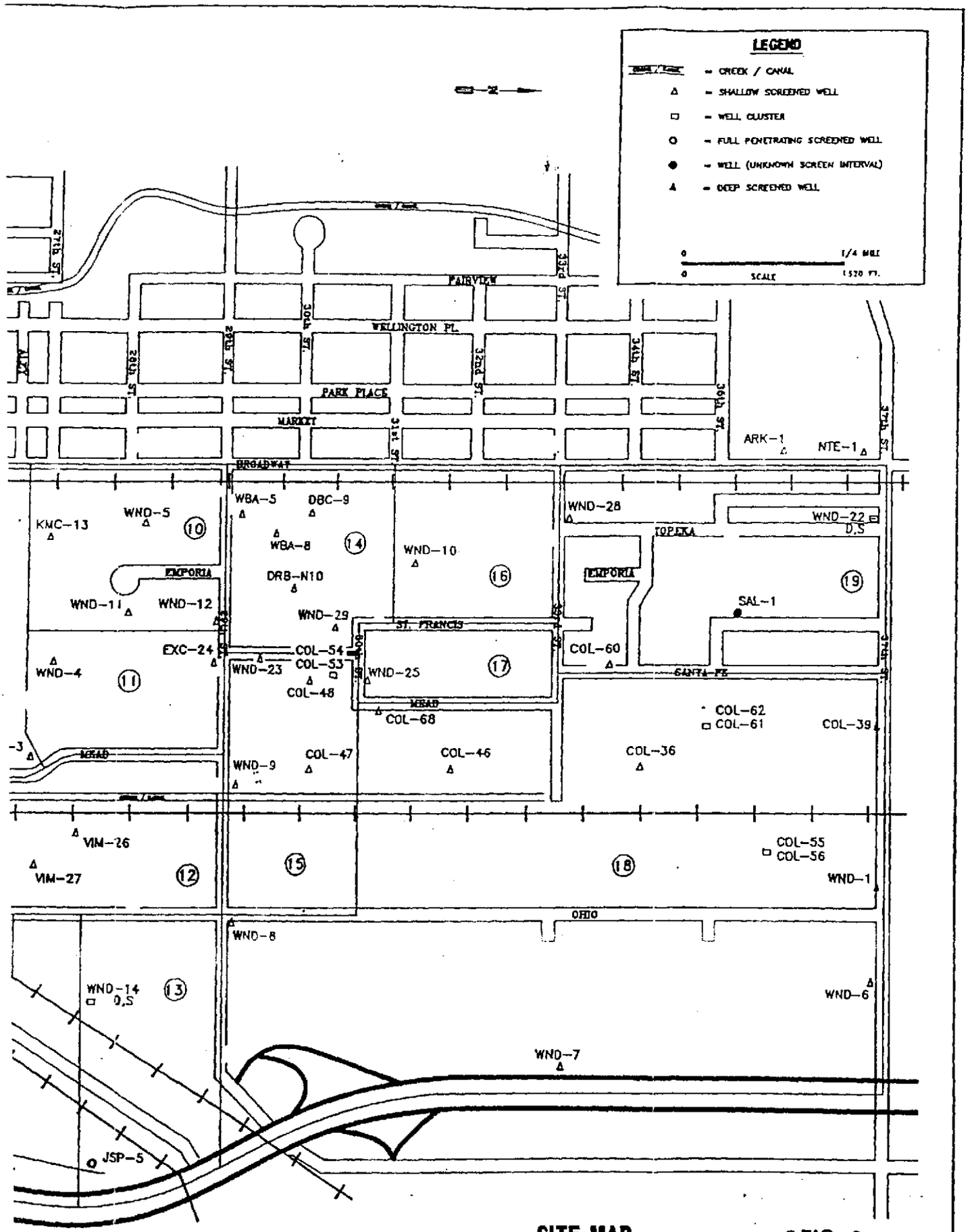
Note: Only those metals detected are listed above.



SAMPLE LOCATION MAP

29th & MEAD RI/FS

FIG. 5



SITE MAP

FIG. 8

8/7/91

29th AND MEAD RI/FS

042209670

File No. 9670-SM

Chromalloy Technology, Inc.

GROUNDWATER TECHNOLOGY®

Groundwater Technology, Inc
1950 South Florence, Wichita, KS 67209 US.
Tel: (316) 943-3444 Fax: (316) 943-132

VOLUME V

PRELIMINARY RESULTS FROM INVESTIGATION OF THE 29TH AND MEAD AREA

Prepared For:

Wichita North Industrial District

Prepared By:

Fluor Daniel GTI
1950 S. Florence
Wichita, Kansas 67209

APPENDIX I

TELEPHONE LOGS

GROUNDWATER TECHNOLOGY

Groundwater Technology
TELEPHONE MEMO LOGS
WNID, 1990

Mark Thompson:

OCTOBER 8, 1990

RE: Barnsdahl, Golden Rule Refining
CONTACT: Mike Carter

- Golden Rule was located on WBA property

- Barnsdahl was located across the street

- No remediation at either refinery

- August - Solvent reclamation on NW corner of property in 1981; thinner was pumped out of barrels, 12,000 gallons; who barrels on top of ground.

- Summer of 1989, 135 barrels of paint sludge stored in tanks at WBA was transported by USPCI to Fredonia to be burned.

  No samples were taken on drums; visible signs of leaking were reported by USGS in 1985. Mr. Carter denies leakage.

- Oil sludge pits were covered at GR&R, Golden Rule, and Barnsdahl; before 1950 on Golden Rule; and in approximately 1965 on Barnsdahl. Pits further south covered in 1975 (land farmed). Sludge was redeposited in five smaller spots and covered up in 1965, to reclaim land where tank existed.

- From 1944 - 1946, the WBA property was leased then bought in 1946. WBA acquired rest of property in 1965.

- Golden Rule Refinery closed around 1940; Barnsdahl operated until approximately 1950

- A former solvent reclamation facility was located on the property. Mr. Carter didn't know where tanks were located above ground. He thought there was one big tank above ground; 4 - 10,000 gallon; one, smaller; only three had sludge.

OCTOBER 8, 1990

CONTACT: Paul Sheffert, Dolese

- Dolese property was acquired in 1949 from prior owner which was not refinery.
- Over a number of years, a pit on the property was filled with returned concrete by Dolese. Dates uncertain; filled to above ground level.

OCTOBER 8, 1990

CONTACT: Don Allen, Ferroloy

- Property was refinery, Barnsdahl.
- Acquired site November 18, 1968
- SunRay merged refinery with Barnsdahl, June 23, 1950; Bareco 1935 - 1958, marketing
- 1950 aerial photos showed tank, but tank had been removed by 1965.
- Everything dismantled by 1968
- Evidence of one pit located near Kansas Metals, south and west of Ferroloy One big pit was broken into smaller pits.
- Property Ownership:

June 2, 1917	-	Sterling Oil & Refinery
October 24, 1924	-	Walte Phillips Oil Company
April 1, 1926	-	Barnsdahl Refineries Inc.
August 5, 1935	-	Barnsdahl Oil Company
March 31, 1955	-	Bareco to Ind. Develop. Company
November 18, 1968	-	Ind. Develop. Company

OCTOBER 8, 1990

RE: Universal Oil
CONTACT: Kyle Parker, KDHE

- There is a report of a UST removal
- Aerial photos taken in 1960 show both pits still present on Barnsdahl.
  1960; L shaped pit, east of present southern pit
  1968; northern pit gone
  1974, March; southern pit still there (Kansas Metals)
  1977; southern pit gone

OCTOBER 8, 1990

CONTACT: Mike Carter, WBA

- WBA is located on property formerly occupied by the Golden Rule Refinery. Mr. Carter thought that the refinery had closed around 1940. WBA leased a portion of their current property from 1944 to 1946, which was then purchased in 1946. The remainder of the WBA property was purchased in 1965.
- Sludge pits were covered prior to 1960
- Pit on WBA was still evident in 1951 photo, but had been removed before the 1960 photo
- August 1981 - Under direction of the State, approximately 12,000 gallons of spent solvents were pumped from storage tanks and barrels by Reid Supply Company. Mr. Carter wasn't sure of final destination for solvents. There were four 10,000 gallon above ground storage tanks and one smaller tank of unknown size. Only three of the larger tanks contained spent solvent that was removed.
- Sludge from tanks was removed in 1987 and put in barrels.

- Summer 1989 - 135 barrels of paint sludge was removed by USPCI and taken to USPCI disposal facility in Fredonia

- Mr. Carter reported that no sampling occurred when the drums were removed. Visible signs of leakage was reported by USGS. Mr. Carter said there was no leakage.

- Dolese pit was blasted, resulting in rubble; some hauled for riprap

OCTOBER 9, 1990

CONTACT: Paul Sheffert, Dolese

- A pit from the former Golden Rule Refinery was located on the property. Mr. Sheffert didn't know if it contained sludge or if it was dry.

OCTOBER 10, 1990

CONTACT: Dean Kline, Kansas Metals

- The Kansas Metals property (comprising 13 acres) is located on site of former Barnsdahl Refinery

- A former pit was located on Kansas Metals property, covered when they bought property in 1974.

- Has book of instructions for excavating.

- The pit was excavated under direction of city of Wichita, for flood control, in 1974.

- Sludge was removed from the pit and a portion was hauled to an unknown site. The remainder was landfarmed in an area south of the pit.

OCTOBER 10, 1990

CONTACT: Mike Carter, WBA

- Tanks were removed to Novick Iron & Metal
- Pit on the west was being filled when Mr. Carter was young (prior to 1950).
- Approximately 1,300 drums

NOVEMBER 5, 1990

CONTACT: Joe Laing, City Manager

- Mr. Laing wasn't aware of any further activity on City property other than Johns' Sludge Pond

NOVEMBER 5, 1990

RE: City of Wichita Property
CONTACT: Karl Kennedy, City Attorney

- The City of Wichita started acquiring property in mid 1960s south of 29th and north of
  25th.
- Spot maintenance (removal) of trash dumpings was only remedial activities conducted by the City.
- Additional property between 33rd and 37th streets was acquired in the mid 1970s.

Groundwater Technology Contact Record

Date: 4-24-92 Time: 10:50 Copies To:

Caller: Mrs Osborn Project Name: WNED

Received By: Mike Everhart Project No.: 421-0-6896-630201

Boeing 526-7200

Comments:

Re: Information on former sludge pits KS actually (Barnsdahl Ref) Conversation will be back Monday

8:45 4-29-92

Mike stated that at that time he did not think that KDHE had any over sight in filling the sludge pits. He new nothing on specifics of site or who ever saw work. He stated that pits in area were gradually filled in by property owners and he knew that KS metal pits were last to be completed.

FOLLOW-UP:

Page _____ of _____

Groundwater Technology Contact Record

Date: 5-14-92 Time: 9:20 Copies To:

Caller: ~~Tubby Knebler~~ Phil Osborn Project Name: WNED

Received By: Tubby Knebler Project No.: 04220-6896-630207

Knebler Const. 775-2205

Comments:

Re: Excavation of Sludge Ponds at Kansas Metals.
Removal + Distribution of Materials.

Law Co General contractor.
Knebler subcontractor.
nothing landfill off to his knowledge
he remembers some agency on site and
assumes it was City.
Material was spread onsite following
instruction of the Law Co. within KS.

FOLLOW-UP:

Page ____ of ____

SPECIFICATIONS

SCRAP IRON PREPARATION FACILITY

WICHITA, KANSAS

THE LAW COMPANY, INC

LAW/KINGDON, P.A. ARCHITECTS & ENGINEEF

(316) 265 8584 · 313 S. MARKET P.O. BOX 1139 WICHITA, KANSAS 672

D. GRADING ----------

1 SITE ENGINEERING WORK shall be done by this Subcontractor as necessary to stake to vertical elevations and horizontal controls shown on Drawings for grades, slopes, ridges, levels, cut, and fills. Stake and flag site, paving areas, and building corners.

2 ROUGH GRADING:

(a) ROUGH GRADING, CUTTING AND FILLING shall bring areas within site to proper subgrade levels to allow for placement of paving, and slabs, of thickness as shown or specified, including base course materials.

(b) EXCAVATION OF SLUDGE PONDS: Remove sludge from areas designated on the Drawings. Distribute materials on site and/or remove from site as directed by General Contractor and Soils Engineer.

3 DRAINAGE:

(a) NATURAL DRAINAGE: Site shall be maintained to drain naturally and to prevent ponding of water.

4 PROOF ROLLING: After stripping the site, areas underlying proposed paving and building floor slabs that require fill, shall be heavily proof rolled. Any soft, spongy, or otherwise objectionable soils found, shall be removed and replaced with approved fill, compacted and tested, as directed by General Contractor and/or Soils Engineer.

5 PLOWING OR SCARIFICATION: After site has been approved for commencement of fill operations, areas subject to fill shall first be plowed or scarified to a minimum depth of 6". Fills shall not be allowed on existing hard, dry, sparsely compacted surfaces without scarifying to insure a thorough bond between new fill and original surface.

6 PLACING FILL AND COMPACTION: Place fill in horizontal layers 6" to 8" in thickness. Compact each layer thoroughly.

(a) MOISTURE CONTROL: Water content of material to receive compaction shall be uniform throughout each layer of the material. Allowable ranges of moisture content shall be determined by Soil Test Inspector. Subcontractor may be directed to add necessary moisture to material, or manipulate and aerate to reduce excessive moisture.

(b) PROTECTION: Fill materials placed shall be protected from freezing. No materials shall be placed on top of frozen materials.

GTI 29M, ADD 1996

GROUNDWATER TECHNOLOGY

Groundwater Technology, Inc.
1950 South Florence, Wichita, KS 67209 USA
Tel: (316) 943-3444 Fax: (316) 943-1321

ADDENDUM I
PRELIMINARY RESULTS FROM THE INVESTIGATION OF
AREA 3 IN THE
29TH AND MEAD SITE
WICHITA, KANSAS

Project No. 040020138

September 1, 1992
Revised: June 13, 1996

Prepared For:

Wichita North Industrial District

Prepared By:

Fluor Daniel GTI, Inc.
1950 S. Florence
Wichita, Kansas 67209

APPENDIX C

BOREHOLE LOGS

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GROUNDWATER TECHNOLOGY

Well No. PB-1

DRILLING LOG

Project WNID Owner WIC

Location WICHITA BRASS & ALUM Project Number 042209670-03

Date Drilled 7/13/90 Total Depth 20' Diameter 7.25"

Surface Elevation _____ Water depth (init.) _____ 24-hrs. _____

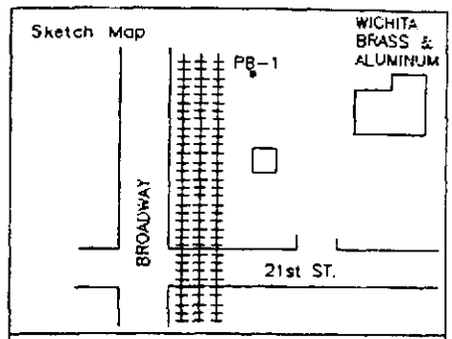
TEMPORARY
Screen: Dia. 2" Length 10' Slot Size 0.01

Casing: Dia. 2" Length 10' Type PVC

Drilling Company GROUNDWATER TECH. Drilling Method HOLLOW STEM

Driller G Kurtz Log by P Osborn Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	PID/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Light brown, dry, clayey, medium to fine grained SAND.
					Reddish brown, moist, rust and silty fill with broken glass.
5					Gray, moist to wet, medium stiff, plastic, fine grained sandy CLAY with slight oil odor.
10					Brown, wet, silty, fine grained SAND with some thin clay lenses.
15					Gray, saturated, silty, fine grained SAND with a trace of medium SAND. Oil odor.
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

Well No. PB-2

DRILLING LOG

Project WNID

Owner

Location KANSAS METALS

Project Number 042209670-03

Date Drilled 7/13/90

Total Depth 20'

Diameter 7.25"

Surface Elevation

Water depth (init.)

24-hrs.

TEMPORARY
Screen: Dia. 2"

Length 10'

Slot Size 0.01

Casing: Dia. 2"

Length 10'

Type PVC

Drilling Company GROUNDWATER TECH.

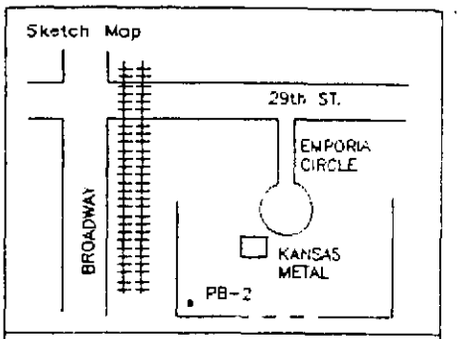
Drilling Method HOLLOW STEM

Driller G. Kurtz

Log by P Osborn

Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	PID/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Dark brown/reddish brown, moist, stiff, plastic fine grained sandy CLAY, with petroleum odor.
5					Dark brown, oily, moist, medium stiff, plastic, fine grained sandy CLAY.
					Brown, moist, clayey, fine grained SAND.
10					Brown, moist to wet, silty, fine grained SAND.
15					Brown, saturated, medium to fine grained SAND.
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

Well No. PB-3

DRILLING LOG

Project WNID

Owner

Location DOLESE

Project Number 042209670-03

Date Drilled 7/13/90

Total Depth 20'

Diameter 7.25"

Surface Elevation

Water depth (init.)

24-hrs.

TEMPORARY
Screen: Dia. 2"

Length 10'

Slot Size 0.01

Casing: Dia. 2"

Length 10'

Type PVC

Drilling Company GROUNDWATER TECH.

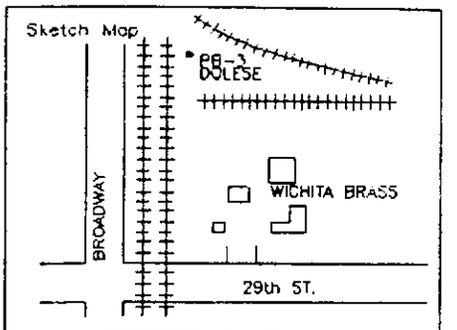
Drilling Method HOLLOW STEM

Driller G. Kurtz

Log by P. Osborn

Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	PID/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Crushed limestone fill
					Dark brown, moist, medium stiff, slightly plastic, fine sandy CLAY.
					Brown, same as above.
5					Light brown, moist, silty, fine grained SAND with a trace of medium grained SAND.
10					
					Light brown, saturated, medium to fine grained SAND with a trace of coarse SAND.
15					
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

Well No. PB-4

DRILLING LOG

Project WNID

Owner

Location

Project Number 042209670-03

Date Drilled 7/13/90

Total Depth 20'

Diameter 7.25"

Surface Elevation

Water depth (init.)

24-hrs.

TEMPORARY
Screen: Dia. 2"

Length 10'

Slot Size 0.01

Casing: Dia. 2"

Length 10'

Type PVC

Drilling Company GROUNDWATER TECH.

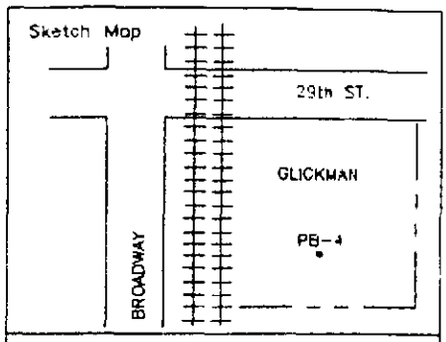
Drilling Method HOLLOW STEM

Driller G Kurtz

Log by P Osborn

Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	PID/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Dark brown, dry to moist, stiff, nonplastic, fine sandy CLAY.
					Brown, moist, medium stiff, slightly plastic, fine grained sandy CLAY.
5					Light brown, moist to wet, silty fine grained SAND with a trace of medium grained SAND.
10					
					Light gray, saturated, silty, medium to fine grained SAND with a slight petroleum odor.
15					
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

PHASE 2 ENVIRONMENTAL SITE ASSESSMENT

Kansas Metals Company
2829 North Emporia
Wichita, Kansas

Project No. 52945006
June 17, 1994

Terracon Environmental, Inc.
Wichita, Kansas

Terracon

Form 101—1-87

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PHASE 2 ENVIRONMENTAL SITE ASSESSMENT

Kansas Metals Company
2829 North Emporia
Wichita, Kansas

Project No. 52945006
June 17, 1994

1.0 INTRODUCTION

Terracon Environmental, Inc. (Terracon) previously performed a limited Phase 1 Environmental Assessment (ESA) at the above-referenced site, as outlined in our Report of February 2, 1994. Based upon the results of the limited Phase 1 ESA, the clients requested performance of a limited Phase 2 ESA to develop information concerning the current environmental status of the subject site. The purpose of the limited Phase 2 ESA is related to the potential purchase of the subject site by Glickman, Inc.

This report summarizes the activities performed and the results obtained as part of the limited Phase 2 ESA. The services provided were performed in accordance with our Change Orders dated February 14, 1994 and March 22, 1994 (Appendix A). An Environmental Compliance Review (ECR) was performed concurrently with this Phase 2 ESA. The results of the ECR will be submitted under separate transmittal.

1.1 Site Identification and Location

The subject site is located at 2829 North Emporia in Wichita, Kansas. The site, which consists of approximately 17 acres, occupies Lot 4, Block 2, and Lots 4 through 7, Block 3 of the North Industrial Addition, and is located in the northwest quarter of Section 4, Township 27 south, Range 1 East. Figure 1 is a Site Vicinity Map showing the approximate location of the subject site relative to surrounding landmarks. Figure 2 is a site diagram.

1.2 Site History

During the period 1917 to 1955, portions of Barnsdall Oil Refinery occupied the subject site. Review of readily available Sanborn Maps (dated 1935 and 1950) and aerial photographs (dated 1960, 1968, and 1974) indicated the presence of several ASTs and possible sludge ponds on the future Kansas Metals property. Figure 2 indicates the approximate location of those features with respect to the current Kansas Metals site.

This information is privileged and confidential under the attorney-client privilege and the attorney work-product doctrine and may not be disclosed without the written permission of counsel for Glickman, Inc.

From 1955 to 1965, the subject site was owned by Industrial Development Company. From 1965 to 1975, the subject site was owned by Frank H. Ise. However, information regarding property utilization is not available for either entity.

The subject site has been occupied by Kansas Metals Company, a metal shredding and recycling facility since 1975. In 1990, two 1,000-gallon underground storage tanks (USTs), previously used for the storage of gasoline and diesel were removed. A 500-gallon aboveground storage tank (AST) was subsequently used for the storage of diesel.

For further details regarding the site history and potential contaminant sources, refer to our Phase 1 ESA report dated February 2, 1994 and our ECR report dated May 11, 1994.

2.0 FIELD INVESTIGATION

To evaluate the site soils and ground water, four soil borings were performed and two surface soil samples collected from the locations indicated on Figure 2. The sample locations were selected to evaluate potential environmental impact primarily from current activities.

The sampling was performed at the following potential sources of contamination identified by the Phase 1 ESA and the ECR.

BH-1: near the north perimeter fence in an area where tarry material has flowed onto the Kansas Metals property from off-site, generally in an upgradient position at the site.

BH-2: in an area near the shredder where trommel fines have previously been placed as road-bed material.

BH-3: in a portion of the yard used to received crushed cars and other feedstock, generally downgradient from the shredder operator.

BH-4: at the confluence of two drainage ditches which would carry run-off from the entire Kansas Metals site, as well as adjacent property, generally downgradient of the site.

SS-1: at a gate along the west perimeter of the property, where surface run-off enters the Kansas Metals site from the adjacent railroad.

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SS-2: the soils below the transformer on the north side of the electrical substation building.

2.1 Field Investigation Scope

To develop the information required, Terracon performed the following investigative activities:

- Performed four soil borings (BH-1 through BH-4) on-site to total depths of approximately 15 to 17 feet below ground surface using hollow stem augers.
- Collected disturbed soil samples using hollow stem augers and split spoons from each boring at 2.5-foot intervals to a depth of 10 feet and at 5-foot intervals thereafter. The soil samples obtained were containerized and subjected to field headspace vapor analysis.
- Installed temporary PVC well casing and screen in each of the soil borings to facilitate collection of borehole water samples.
- Collected a borehole water sample from each of the soil borings and submitted the water samples obtained (total of four samples) to a Kansas Department of Health and Environment (KDHE) certified laboratory for chemical analysis.
- Removed the temporary PVC well casing and screen and plugged the borings from boring cave-in level to ground surface, using bentonite chips.
- Collected a surface soil sample in the vicinity of the southwest gate (SS-1) and from the vicinity of the electrical transformer (SS-2).
- Submitted for laboratory chemical analysis the surface soil sample from each boring (BH-1 through BH-4), the surface soil samples from SS-1 and SS-2, all other soil samples from BH-2, and one other select soil sample from BH-1, BH-3, and BH-4.

Details regarding field procedures are outlined in the following sections.

2.2 Soil Borings

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2.2.1 Field Supervision

Field activities were supervised by a Terracon environmental scientist experienced in performance of similar evaluations and assessments. The environmental scientist logged the subsurface materials, performed field headspace vapor analyses on discrete soil samples, collected soil and ground water samples for laboratory chemical analyses, and monitored the work space for health and safety purposes.

2.2.2 Drilling Procedures

The soil borings were performed using a CME-75 auger drilling rig. Each of the soil borings was extended to total depths on the order of 17 feet below ground surface using 4.25-inch hollow stem augers (HSA). During performance of the soil borings, discrete soil samples were obtained. Section 2.2.3 below outlines soil sampling procedures.

To facilitate collection of ground water samples, temporary PVC well casing and screens were installed through the HSA. The HSAs were subsequently removed, allowing natural sands to collapse around the well screen. Following collection of ground water samples, the temporary well casing and screen were removed and the borings backfilled using bentonite chips. Section 2.3 below describes ground water sampling procedures.

2.2.3 Soil Sampling

During performance of the soil borings, discrete soil samples were obtained using split-barrel sampling procedures in general accordance with ASTM Method D-1586. From ground surface to a depth of 10 feet, discrete soil samples were obtained at 2.5-foot intervals. From approximately 10 feet below ground surface, discrete soil samples were obtained at 5-foot intervals. Disturbed auger cuttings were also observed between sample intervals to evaluate lithology.

Surface soil samples SS-1 and SS-2 were obtained using hand sampling procedures.

Representative portions of the discrete soil samples obtained were subjected to field headspace vapor analyses. Field headspace vapor analyses provides an indication of the combined concentration of detectable organic vapors present relative to a calibration gas. A Thermo-Environmental Model 580B organic vapor meter (OVM) with a 10.0 eV photoionization detector (PID) was used for the headspace analyses. The PID was calibrated

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prior to start of field work, in general accordance with the manufacturer's instructions, using 250 parts per million (ppm) isobutylene calibration gas.

The field headspace vapor analyses consisted of filling glass quart containers approximately half-full with representative portions of the soil samples. Aluminum foil was placed over the top of the containers and the containers sealed with a lid. The sample headspace was then allowed to stabilize at ambient conditions for a minimum of 15 minutes.

Following stabilization of the samples (as described above), the probe of the OVM was inserted through the aluminum foil into the headspace of the glass container. The relative concentration of volatile organic vapors (VOCs) in the headspace of the sample container was measured by the OVM and the PID readings recorded. The PID readings are presented in the boring logs in Appendix B and discussed in Section 3.2.

2.3 Ground Water Sampling

Following completion of the soil borings, the temporary wells were developed using dedicated disposable polyethylene hand bailers. Prior to development, the water levels were measured in each of the temporary wells and the well development volume was calculated. Well development consisted of removing approximately 5 well casing volumes of water with a hand bailer. Following development, ground water samples were collected using disposable polyethylene hand bailers. Section 2.5 below outlines sample handling procedures and laboratory chemical analysis.

2.4 Decontamination Procedures

To reduce the potential for cross-contamination, the drill rig and downhole drilling/sampling equipment were decontaminated prior to site entry. In addition, prior to performance of each soil boring, downhole drilling and sampling equipment were decontaminated. Downhole drilling/sampling equipment was decontaminated on-site, as needed, between soil boring locations. Decontamination procedures consisted of a high-pressure, hot-water detergent (Alconox) wash followed by a potable water rinse. Decontamination procedures were performed in general accordance with ASTM Method D-5088.

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2.5 Laboratory Chemical Analysis

Soil and ground water samples obtained for laboratory chemical analysis were placed in appropriately preserved containers, labeled, and placed in coolers to maintain the samples at approximately 4° C. Most samples were sent to Continental Analytical Services (CAS), a KDHE certified laboratory, using chain-of-custody procedures. As requested due to time constraints, some soil samples were also sent to Pace, Inc. for total metals analysis. Pace, Inc. is also a KDHE certified laboratory.

Laboratory chemical analysis of the soil sample displaying the highest PID reading from each boring (total of four samples), and surface sample SS-1, included the following:

- Priority Pollutant Volatile Organic Compounds (VOCs) plus xylene per USEPA Methodology 8010/8020.
- Polynuclear Aromatic Hydrocarbons (PAH) per USEPA Methodology 8270.
- Total Purgeable Hydrocarbons (TPH as gasoline) per KDHE approved Methodology OA-1.
- Semi-volatile Petroleum Hydrocarbons (TPH as diesel) per KDHE approved Methodology OA-2.
- 8 RCRA trace elements.

Laboratory chemical analysis for PCBs and TCLP metals was performed on the surface sample from BH-2. Laboratory chemical analysis for total metals (8 RCRA) was also performed on all six soil samples obtained from BH-2, and on the surface soil sample from each of the four soil borings, and on one other select sample from BH-1, BH-3, and BH-4. Laboratory chemical analysis of surface sample SS-2 was limited to PCB in soil per USEPA Methodology 8080.

Laboratory chemical analysis of the ground water samples obtained (total of four samples) was limited to Priority Pollutant VOCs plus xylene, TPH by OA-1, TPH by OA-2, PAH, and trace elements (total and select soluble) per the above-referenced methodologies. The analytical results are discussed in Section 3.3.

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The results of the chemical analyses performed are summarized in Table 1 through Table 4.

3.0 PHASE 2 RESULTS

3.1 Site Geology and Hydrogeology

The subject site is located in the Arkansas River Lowlands of the Great Plains Physiographic Province[1]. The site is relatively level, with regional surface drainage generally to the south. A drainage ditch near the east periphery of the site drains generally to the south.

The site stratigraphy encountered in soil borings BH-1 through BH-4 is depicted on the boring logs included in Appendix B. As indicated therein, the subsurface native materials generally consisted of dark brown to yellow brown cohesive materials to depths of the order of 7 to 12 feet below ground surface. These materials generally consisted of fat clay, underlain by alluvial sediments which extended to the base of the borings at approximately 17 feet below ground surface. These alluvial sediments generally consisted of silty sand and fine to coarse sand.

Apparent trommel fines were encountered to a depth of about 3 feet at BH-2, underlain by clay fill material to a depth of 6 feet. At BH-3, fat clay fill material with dark coloration and odor was encountered to a depth of 7 feet. The odors continued in BH-3 to total depth. At BH-4, dark colorations and odors were observed to a depth of about 2.5 feet. Odors were also observed in BH-4 below a depth of 10 feet.

Ground water was encountered at a depth on the order of 10 to 15 feet below ground surface. Based upon published information, the direction of regional ground water flow is generally to the south. However, fluctuations in ground water depth and flow direction should be anticipated due to seasonal changes in hydrologic conditions, pumpage from nearby water wells, and/or other conditions not apparent at the time of this investigation. To determine local ground water flow direction, installation of a minimum of three permanent monitor wells would be required.

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[1] *Merriam, Daniel F, 1963, "The Geologic History of Kansas", Kansas Geologic Survey, Bulletin 162, pp. 164-165.*

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3.2 Field Screening Results

The results of the field headspace vapor analyses performed on the soil samples obtained are presented on the boring logs included in Appendix B. As indicated therein, VOCs, as measured with the PID, ranged from non-detect to 438 ppm (parts per million). At soil boring BH-2, detectable concentrations of organic vapors were not detected to a depth of 15 feet. At BH-3, detected PID readings increased to a maximum concentration of 59 PPM at a depth of 7.5 to 9.5 feet below ground surface and then decreased with depth. At BH-1 and BH-4, PID concentrations were highest below 10 feet.

3.3 Analytical Results

The results of laboratory chemical analysis performed on soil and ground water samples are presented in Appendix C. The results of laboratory chemical analyses performed on selected soil samples are summarized in Tables 1 through 3. The results of laboratory chemical analysis performed on ground water samples are summarized in Table 4. Sections 3.3.1 and 3.3.2 below include a discussion of the laboratory chemical analysis performed.

3.3.1 Soil Results

Results of analyses for VOCs, PAH, TPH by OA-1, TPH by OA-2, and PCBs are summarized in Table 1. VOCs were not reported at concentrations in excess of the laboratory detection levels in any of the samples selected for laboratory chemical analysis. However, the detection level for the sample analyzed from BH-4 (10 to 12 feet) was higher than normal due to matrix interferences.

With the exception of naphthalene, PAHs were not detected in the soil samples analyzed from BH-1 through BH-4. At BH-4 (10 to 12 feet), naphthalene was detected at a concentration of 2.8 milligrams per kilogram (mg/kg). However, in surface sample SS-1, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, chrysene, flouranthene, phenanthrene and pyrene were detected at concentrations ranging from 0.8 mg/kg to 2.8 mg/kg. Terracon's experience has indicated the KDHE develop Maximum Contaminant Levels (MCLs) for PAH on a site-specific basis. The measured levels of PAH are below the MCLs established by the KDHE on a project which Terracon was involved on in the Wichita area.

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TPH by OA-1 was not reported in the soil samples obtained from BH-1, BH-2, and SS-1. However, TPH by OA-1 was reported at concentrations of 560 μg/kg and 1,300 μg/kg, in the soil sample analyzed from BH-3 (7.5 to 9.5 feet) and BH-4 (10 to 12 feet), respectively. TPH by OA-2 were reported at varying concentrations in each of the soil samples selected for laboratory chemical analysis. Concentrations ranged from 7 mg/kg (BH-1, 5 to 7 feet) to 4,200 mg/kg (BH-2, 0 to 0.5 feet).

The Maximum Contaminant Level (MCL) established by the Kansas Department of Health and Environment (KDHE) for TPH in soil is 100,000 μg/kg, or 100 mg/kg. Based upon this criteria, the MCL has been exceeded in the samples obtained from BH-2, BH-3, BH-4, and SS-1.

The surface soil samples from BH-2 and SS-2 were submitted for laboratory chemical analysis of PCBs. As shown in Table 1, PCBs were detected at concentrations of 8.8 and 8.3 mg/kg, respectively, below the lowest cleanup standard of 10 mg/kg established by TSCA regulations.

Laboratory chemical analyses for metals are summarized in Table 2. The results of the analyses are compared to the published common range of trace elements in Kansas natural soils[2]. As indicated therein, arsenic, barium, cadmium,chromium, lead, mercury, and silver were reported at elevated concentrations. The highest concentrations of metals were typically observed in the surface soil samples. As indicated by the analyses of BH-2 soil samples, metals concentrations typically decrease with depth.

The KDHE typically establishes Maximum Contaminant Levels for total metals in soils on a site-specific basis. Based on Terracon's experience, the surface sample at BH-2 likely exceeds Kansas MCLs. Soils with metals concentrations exceeding TCLP criteria are defined as a RCRA characteristic hazardous waste and require removal form the site. However, the TCLP metals concentrations measured in the surface sample at BH-2 do not exceed RCRA criteria.

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[2] *Dragun, James, and Andrew Chiasson, 1991. Elements in North American Soils, Hazardous Materials Control Research Institute, Greenbelt, MD.*

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3.3.2 Ground Water Results

The results of chemical analyses performed on ground water samples are included in Appendix C and summarized in Table 4 for comparison with the Kansas Notification Level (KNL), Kansas Action Level (KAL), and the EPA Maximum Contaminant Level (MCL). Laboratory chemical analysis included Priority Pollutant Volatiles plus xylene, TPH, PAHs, SPH, and select total/soluble trace elements.

In the ground water sample obtained from BH-1, BH-2 and BH-3, benzene was reported at concentrations in excess of the KAL of 5 μg/l. Vinyl chloride was detected at a concentration of 17 μg/l, which is in excess of the KAL of 2 μg/l, in the ground water sample obtained from BH-3. At BH-4, xylene was reported at a concentration of 670 μg/l, which is in excess of the KAL for xylene, but below the EPA MCL. In addition, phenanthrene, a PAH, was detected at a concentration of 7.8 μg/l in the ground water sample obtained from BH-4. The KAL for phenanthrene is 0.029 μg/l.

In the ground water sample obtained from BH-3, the volatile organic compounds cis-1,2-dichloroethylene, and xylene were detected at concentrations in excess of their respective KNLs of 7 μg/L and 44 μg/L. Naphthalene was detected at concentrations in excess of its KNL of 14.3 μg/l in all of the ground water samples obtained. Ethylbenzene and toluene were also detected at concentrations below their respective KNLs in ground water samples obtained from BH-3 and BH-4. At BH-2, toluene and xylene were reported at concentrations below their KNLS of 200 μg/l and 44 μg/l, respectively.

Laboratory chemical analyses for TPH by OA-1 and TPH by OA-2 are also summarized in Table 4. As indicated therein, TPH by OA-1 was detected at concentrations ranging from 210 μg/l (BH-2) to 27,000 μg/l (BH-4) in the ground water samples obtained. In addition, TPH by OA-2 was detected at concentrations of 1,900 μg/l, 250 μg/l and 7,800 μg/l respectively, in the ground water samples obtained from BH-2, BH-3, and BH-4.

Laboratory chemical analyses of total trace elements was limited to mercury, selenium, and silver, whereas, chemical analysis of soluble trace elements included arsenic, barium, cadmium chromium and lead. At BH-2, total silver was detected at a concentration of 0.01 mg/l, which is below the KAL of 0.05 mg/l. Soluble barium was detected at concentrations ranging from 1.4 mg/l (BH-4) to 1.8 mg/l (BH-2), in the ground water samples obtained from BH-2 through BH-4. These concentrations are in excess of the KAL of 1 mg/l for barium, but below the MCL of 2 mg/l. In addition, soluble lead was detected in the water samples obtained from BH-2 through BH-4, but at concentrations below the KAL. The client

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should be aware that the chemical analyses were performed on borehole water samples. Analysis of ground water samples obtained from properly installed and developed monitor wells may indicate different (typically reduced) concentrations.

Due to matrix interference, the detection levels for priority pollutant volatiles in ground water samples obtained from BH-1 and BH-4 were higher than normal. Therefore, the potential exists that additional constituents may be present at concentrations in excess of the respective KALs and MCLs.

4.0 SUMMARY AND CONCLUSIONS

Based on the limited number of soil borings performed, several areas of concern were identified by the Phase 2 ESA, as summarized below:

1. Petroleum hydrocarbon contamination occurs in the surface soils at levels well in excess of Kansas MCLs. The petroleum hydrocarbons detected were primarily heavy compounds, but also include some lighter compounds. Only two surface soil samples were analyzed for TPH, thus data regarding the extent of the surface contamination is limited. However, based on the stains observed during the ECR visual survey, it is possible that the petroleum contamination is extensive. The former refinery, crushed cars, or shredder operations, or former USTs are possible sources of the petroleum contaminants encountered in the soils). However, the crushed cars or shredder operations are more likely sources of those contaminants encountered at or very near the surface.

2. Petroleum hydrocarbon contamination in the ground water occurs at relatively high concentrations. The contamination includes both heavy and light fractions, although the light fraction dominates. The analytical laboratory indicated these compounds appear to be a highly weathered gasoline. There are no established KAL or MCL for TPH in ground water. However, benzene exceeded the KAL in three of the borings performed. The source of the petroleum hydrocarbons is not apparent based on the limited data. The highest concentrations occur at the north perimeter (BH-1) and the southeast corner (BH-4). Possible sources include the former refinery ASTs, the former Kansas Metals USTs, the current AST, and current facility operations. However, the data obtained suggests the former refinery is the most likely source of much of the contamination encountered.

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3. Chlorinated volatile organic compounds, vinyl chloride and cis-1,2-dichloroethylene were detected in the ground water (only) at BH-3. Although both compounds are degradation products of trichloroethylene (TCE), TCE was not detected in any of the borings performed. The source of these compounds is not evident, but may be related to those contaminants associated with the 29th and Mead CERCLA site. However, detection in only one boring suggests a localized source, rather than extensive ground water contamination from off-site sources associated with the 29th and Mead Superfund Site.

4. Phenanthrene, a PAH, was detected in excess of the KAL at BH-4. The source of the phenanthrene is not apparent, since the compound is present in gasoline, oil, and coal tar. Possible sources include those identified in Item 2 above or possibly the tarry substance observed at the surface along the north perimeter.

5. TPH, several PAHs, and elevated metals were detected in the surface soil sample (SS-1) where railroad run-off enters Kansas Metals property. The detected concentration of TPH exceeds the Kansas MCL and the PAH exceed cleanup criteria which have been applied by the EPA to other sites, arsenic, cadmium, lead, and mercury concentrations are elevated. The source of the detected compounds likely is the adjacent railroad. The apparent surface area impact is not extensive.

6. Samples of the surface soils at BH-2 and below the transformer detected PCBs below the cleanup criteria required by TSCA.

7. Elevated concentrations of metals were detected in the apparent trommel fines at BH-2. Elevated elements included arsenic, barium, cadmium, lead, mercury, and silver. Chemical analyses (TCLP) indicated these materials are not classified as a RCRA characteristic hazardous waste. However, the concentration of lead in the surface samples was well above cleanup criteria which the KDHE has previously applied to some other sites.

8. Slightly elevated levels of metals were observed in some of the ground water samples. The detected concentration of silver, .010 mg/L, exceeds the KAL of 0.05, but is at the reported laboratory detection level of 0.10 mg/L. At BH-3, lead was above the EPA MCL, but below the Kansas KAL. However, the water samples which were analyzed, even though filtered, were obtained from temporary monitor wells. It is likely that analysis of samples obtained from properly installed and development wells may indicate different conditions (likely reduced concentrations).

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5.0 RECOMMENDATIONS

As outlined above, several areas of concern were identified by the Phase 2 ESA performed. The most significant of these concerns include:

- The petroleum hydrocarbons in the near-surface soils, which exceed Kansas Maximum Contaminant Levels for soils and may serve as a source of contamination to the ground water.

- The trommel fines which have been spread on the surface in some portions of the site. These fines may exceed Kansas MCLs for soils and may be impacting the ground water.

- The petroleum hydrocarbons in the ground water. Although there is no TPH criteria for ground water, the KDHE has expressed concern (on a non-site-specific basis) regarding the measured concentrations. The presence of benzene and vinyl chloride in excess of Kansas Action Levels may further precipitate regulatory action.

Further work would be required to more accurately evaluate the concerns identified with respect to source, magnitude, and extent. Evaluation of the three major concerns described above would require the performance of a soils/ground water survey, the installation of monitor well borings, and chemical analyses. A conceptual evaluation workscope would include:

- 100 soils/ground water probes with a Geoprobe System to evaluate the extent of petroleum compounds in the near surface soils and in the ground water. The Geoprobe survey would incorporate on-site analysis for light hydrocarbons and off-site analysis for heavy hydrocarbons.

- 20 shallow (5 feet) soil borings and laboratory chemical analyses for metals to evaluate the extent of the trommel fines.

- 10 monitor wells to better define the extent and movement of the contaminant plume, to evaluate the aquifer characteristics, and to provide long-term monitoring.

- Development of a Remedial Action Plan (RAP) for mitigation of impact to the site soils and ground water.

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contaminants encountered at the site would be excluded from Superfund jurisdiction. However, some chlorinated hydrocarbons (vinyl chloride and cis-1,2-dichloroethylene) were detected in the site ground water.

The results of the work performed indicated soil and ground water contaminants above regulatory maximum contaminant levels. The KDHE has expressed a desire to receive information regarding contamination of soils and ground water. A copy of this report could be forwarded to:

Mr. Kyle Parker
Kansas Department of Health and Environment
1919 North Amidon, Suite 130
Wichita, Kansas 67203

If desired, Terracon would forward a copy of this report the KDHE, but only upon your specific instructions.

6.0 GENERAL COMMENTS

The results of this study represent conditions of the soils and ground water at the locations and times of the sampling event. Different conditions may be encountered at other locations or times. The limitations of the sampling methods must be recognized. The client should be aware that collecting ground water samples from permanently installed monitor wells versus open boreholes, and collecting discrete soil samples at selected depths versus disturbed soil samples (auger cuttings) may yield different results. In addition, the work scope performed should not be considered a comprehensive evaluation of the subsurface conditions at the facility. If additional information is developed in the future, then the conclusions of this report should be reviewed and modified if appropriate.

This report has been prepared for the exclusive use of our client for specific application to their project. It has been prepared in accordance with generally accepted environmental engineering practices within the constraints of the client's directives. No warranties, either express or implied, are intended or made.

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TABLE 1. ANALYTICAL RESULTS - SOIL SAMPLES							
Variable	Location						MCL[1]
	BH-1 (5-7 Feet)	BH-2 (0-0.5 Feet)	BH-3 (7.5-9.5 Feet)	BH-4 (10-12 Feet)	SS-1 (Surface)	SS-2 (Surface)	
Detected VOCs[2]	ND(1)	ND(1)	ND(1)	ND(1,000)[3]	ND(1)	NA	NE
Total Purgeable Hydrocarbons[4] (OA-1)	ND(100)	ND(100)	560	1,300	ND(100)	NA	100,000
Semi-volatile Petroleum Hydrocarbons[6] (OA-2)	7	4,200	120	2,000	710	NA	100
Detected PAHs[5]							
Benzo (a) Anthracene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.3	NA	NE
Benzo (a) Pyrene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.4	NA	NE
Benzo (b) Fluoranthene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.8	NA	NE
Benzo (g,h,i) Perylene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	0.8	NA	NE
Chrysene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	2.8	NA	NE
Fluoranthene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.0	NA	NE
Naphthalene	ND(0.5)	ND(13)	ND(0.5)	2.8	ND(0.5)	NA	NE
Phenanthrene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	2.2	NA	NE
Pyrene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.5	NA	NE
PCBs	NA	8.8	NA	NA	NA	8.3	10

Notes:
[1] Maximum Contaminant Level (MCL) established by USEPA.
[2] Detected Priority Pollutant Volatile organic compounds (VOCs) plus xylene analyzed per USEPA Methodology 8010/8020, with results reported in micrograms per kilogram (µg/kg). ND(), where noted, indicates that the select VOC was not above the concentration listed in parentheses.
[3] Detection level higher than normal due to matrix interferences.
[4] Analysis performed using KDHE recognized Methodology OA-1, with results reported in µg/kg. ND(), where noted, indicates that the specified constituent was not detected at the concentration listed in parentheses.
[5] Detected polynuclear aromatic hydrocarbons (PAHs) analyzed per USEPA Methodology 8270, with results reported in milligrams per kilogram (mg/kg). ND(), where noted, indicates that the specified constituent was not detected at the concentration listed in parentheses.
[6] Analysis performed using KDHE recognized Methodology OA-2, with results reported in mg/kg.
[7] Analysis performed using USEPA Methodology 8080, with results reported in mg/kg.
NE - Not Established
NA - Not Analyzed

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TABLE 2. TRACE ELEMENT CONCENTRATION - SOIL SAMPLES[1]

SAMPLE (DEPTH, FEET)	ARSENIC TOTAL	BARIUM TOTAL	CADMIUM TOTAL	CHROMIUM TOTAL	LEAD TOTAL	MERCURY TOTAL	SELENIUM TOTAL	SILVER TOTAL
BH-1								
(0 - 2')	4.7	130	1.6	14	170	0.2	ND(0.3)	ND(1)
5' - 7'	2	70	ND(0.5)	6	6	ND(0.1)	ND(0.5)	ND(1)
BH-2								
(0 - 0.5')	17	1100	13	39	18000	1.4	ND(0.5)	2
2.5' - 4.5'	3	150	ND(0.5)	9	100	ND(0.1)	ND(0.3)	ND(1)
5' - 7'	2.1	230	ND(0.5)	12	40	ND(0.1)	ND(0.3)	ND(1)
7.5' - 9.5'	2.7	120	ND(0.5)	12	97	0.1	ND(0.3)	ND(1)
10' - 12'	1.6	40	ND(0.5)	6	8.5	ND(0.1)	ND(0.3)	ND(1)
15' - 17'	0.9	20	ND(0.5)	2	2.2	ND(0.1)	ND(0.3)	ND(1)
BH-3								
(0 - 0.5')	2.5	140	1.6	12	310	0.2	ND(0.3)	ND(1)
7.5' - 9.5'	3	100	0.6	13	28	ND(0.1)	ND(0.5)	ND(1)
BH-4								
(0 - 0.5')	3	80	ND(0.5)	9	140	0.2	ND(0.3)	ND(1)
10' - 12'	ND(1)	30	ND(0.5)	4	4	ND(0.1)	ND(0.5)	ND(1)
SS-1								
Surface	9	180	71	17	180	0.2	ND(1)	ND(1)
Metals Content of Natural Kansas Soils[2]								
Kansas Soils, Avg.	6.8	694	0.06[3]	49	32	0.058	0.41	0.05[3]
Kansas Soils, Range	2.4 - 14	300 - 1000	0.01 - 0.7[3]	7 - 100	10 - 200	0.01 - 0.14	0.1 - 1.3	0.01 - 0.05[3]

ND = Not Detected; laboratory detection limits in parentheses.

[1] *Concentrations reported in milligrams per kilogram (mg/kg).*

[2] *Dragun, James, and Andrew Chiasson, 1991. Elements in North American Soils, Hazardous Materials Research Institute, Greenbelt, MD.*

[3] *USEPA Office of Solid Waste and Emergency Response, April 1983, "Hazardous Waste Land Treatment", SW-874, Page 273, Table 6.46.*

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Kansas Metals Company
Project No. 52945006

TABLE 3. TCLP CONCENTRATIONS - SOIL SAMPLES[1]									
Sample	Depth	Arsenic TCLP	Barium TCLP	Cadmium TCLP	Chromium TCLP	Lead TCLP	Mercury TCLP	Selenium TCLP	Silver TCLP
BH-2	0 - 0.5'	ND(0.1)	1.2	0.130	ND(0.01)	2.0	ND(0.02)	ND(0.05)	ND(0.01)
TCLP Criteria[2]		5.0	100.0	1.0	5.0	5.0	0.2	1.0	5.0

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[1] *Concentrations reported in mg/L.*

[2] *Maximum concentrations for non-hazardous waste classification, 40 CFR 261.*

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TABLE 4. ANALYTICAL RESULTS - GROUND WATER

Variable	Location				KNL[1]	KAL[2]	MCL[3]
	BH-1	BH-2	BH-3	BH-4			
Detected VOCs[4], ug/L							
Benzene	88	12	58	ND(10)	0.5	5.0	5.0
Cis-1,2-dichloroethylene	ND(50)	ND(0.4)	17	ND(10)	7	70	
Ethylbenzene	ND(50)	ND(0.4)	49	60	68	680	700
Toluene	ND(50)	0.4	12	11	200	2,000	1,000
Vinyl Chloride	ND(50)	ND(0.4)	17	ND(10)	0.2	2.0	2.0
Xylene	ND(50)	2	48	670	44	440	10,000
Total Purgeable Hydrocarbons[5] (OA-1), ug/L	24,000	210	1,600	27,000	NE	NE	NE
Semi-volatile Petroleum Hydrocarbons[7] (OA-2), ug/L	ND(2,000)[8]	1,900[9]	250[10]	7,800[11]	NE	NE	NE
Detected PAHs[6], ug/L							
Naphthalene	64	38	22	66	14.3	143	NE
Phenanthrene	ND(8)	ND(5)	ND(5)	7.8	0.0029	0.029	NE
Trace Elements - Soluble[13], ~~ug/L~~ mg/L							
Arsenic	NA	ND(0.01)	ND(0.01)	ND(0.01)	NE	0.05	0.05
Barium	NA	1.8	1.5	1.4	NE	1	2
Cadmium	NA	ND(0.005)	ND(0.005)	ND(0.005)	NE	0.005	0.005
Chromium	NA	ND(0.01)	ND(0.01)	ND(0.01)	NE	0.05	0.1
Lead	NA	0.003	0.042	0.004	NE	0.05	NE
Trace Elements - Total[12], mg/L							
Mercury	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	NE	0.002	0.002
Selenium	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	NE	0.045	0.05
Silver	ND(0.01)	0.01	ND(0.01)	ND(0.01)	NE	0.05	NE

Notes: [1] *Kansas Notification Level (KNL) established by KDHE.*
[2] *Kansas Action Level (KAL) established by KDHE.*
[3] *Maximum Contaminant Level (MCL) established by USEPA.*

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TABLE 4 (Notes Continued)

[4] Detected Priority Pollutant Volatile organic compounds (VOCs) analyzed per USEPA Methodology 8010/8020.
[5] Analysis performed using KDHE-approved Methodology OA-1.
[6] Detected Polynuclear Aromatic Hydrocarbons (PAHs) analyzed per USEPA Methodology 8270.
[7] Analysis performed using KDHE-approved Methodology OA-2.
[8] Detection level higher than normal due to matrix interferences.
[9] Results calculated from a motor oil standard.
[10] Results calculated from a diesel standard. However, the chromatograph does not match that of a diesel fuel standard.
[11] Results calculated from a diesel and motor oil standard. However, the chromatograph does not match that of a diesel fuel standard.

NE - Not Established
NA - Not Analyzed
ND - Not Detected; laboratory detection limits in parentheses.

~~Results reported in µ (micrograms).~~

A:TABLE.4

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TABLE 1. ANALYTICAL RESULTS - SOIL SAMPLES							
Variable	Location						MCL[1]
	BH-1 (5-7 Feet)	BH-2 (0-0.5 Feet)	BH-3 (7.5-9.5 Feet)	BH-4 (10-12 Feet)	SS-1 (Surface)	SS-2 (Surface)	
Detected VOCs[2]	ND(1)	ND(1)	ND(1)	ND(1,000)[3]	ND(1)	NA	NE
Total Purgeable Hydrocarbons[4] (OA-1)	ND(100)	ND(100)	560	1,300	ND(100)	NA	100,000
Semi-volatile Petroleum Hydrocarbons[6] (OA-2)	7	4,200	120	2,000	710	NA	100
Detected PAHs[5]							
Benzo (a) Anthracene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.3	NA	NE
Benzo (a) Pyrene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.4	NA	NE
Benzo (b) Fluoranthene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.8	NA	NE
Benzo (g,h,i) Perylene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	0.8	NA	NE
Chrysene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	2.8	NA	NE
Fluoranthene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.0	NA	NE
Naphthalene	ND(0.5)	ND(13)	ND(0.5)	2.8	ND(0.5)	NA	NE
Phenanthrene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	2.2	NA	NE
Pyrene	ND(0.5)	ND(13)	ND(0.5)	ND(1.3)	1.5	NA	NE
PCBs	NA	8.8	NA	NA	NA	8.3	10

Notes:
[1] Maximum Contaminant Level (MCL) established by USEPA.
[2] Detected Priority Pollutant Volatile organic compounds (VOCs) plus xylene analyzed per USEPA Methodology 8010/8020, with results reported in micrograms per kilogram (μg/kg). ND(), where noted, indicates that the select VOC was not above the concentration listed in parentheses.
[3] Detection level higher than normal due to matrix interferences.
[4] Analysis performed using KDHE recognized Methodology OA-1, with results reported in μg/kg. ND(), where noted, indicates that the specified constituent was not detected at the concentration listed in parentheses.
[5] Detected polynuclear aromatic hydrocarbons (PAHs) analyzed per USEPA Methodology 8270, with results reported in milligrams per kilogram (mg/kg). ND(), where noted, indicates that the specified constituent was not detected at the concentration listed in parentheses.
[6] Analysis performed using KDHE recognized Methodology OA-2, with results reported in mg/kg.
[7] Analysis performed using USEPA Methodology 8080, with results reported in mg/kg.
NE - Not Established
NA - Not Analyzed

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TABLE 2. TRACE ELEMENT CONCENTRATION - SOIL SAMPLES[1]

SAMPLE (DEPTH, FEET)	ARSENIC TOTAL	BARIUM TOTAL	CADMIUM TOTAL	CHROMIUM TOTAL	LEAD TOTAL	MERCURY TOTAL	SELENIUM TOTAL	SILVER TOTAL
BH-1								
(0 - 2')	4.7	130	1.6	14	170	0.2	ND(0.3)	ND(1)
5' - 7'	2	70	ND(0.5)	6	6	ND(0.1)	ND(0.5)	ND(1)
BH-2								
(0 - 0.5')	17	1100	13	39	18000	1.4	ND(0.5)	2
2.5' - 4.5'	3	150	ND(0.5)	9	100	ND(0.1)	ND(0.3)	ND(1)
5' - 7'	2.1	230	ND(0.5)	12	40	ND(0.1)	ND(0.3)	ND(1)
7.5' - 9.5'	2.7	120	ND(0.5)	12	97	0.1	ND(0.3)	ND(1)
10' - 12'	1.6	40	ND(0.5)	6	8.5	ND(0.1)	ND(0.3)	ND(1)
15' - 17'	0.9	20	ND(0.5)	2	2.2	ND(0.1)	ND(0.3)	ND(1)
BH-3								
(0 - 0.5')	2.5	140	1.6	12	310	0.2	ND(0.3)	ND(1)
7.5' - 9.5'	3	100	0.6	13	28	ND(0.1)	ND(0.5)	ND(1)
BH-4								
(0 - 0.5')	3	80	ND(0.5)	9	140	0.2	ND(0.3)	ND(1)
10' - 12'	ND(1)	30	ND(0.5)	4	4	ND(0.1)	ND(0.5)	ND(1)
SS-1								
Surface	9	180	71	17	180	0.2	ND(1)	ND(1)
Metals Content of Natural Kansas Soils[2]								
Kansas Soils, Avg.	6.8	694	0.06[3]	49	32	0.058	0.41	0.05[3]
Kansas Soils, Range	2.4 - 14	300 - 1000	0.01 - 0.7[3]	7 - 100	10 - 200	0.01 - 0.14	0.1 - 1.3	0.01 - 0.05[3]

ND = Not Detected; laboratory detection limits in parentheses.

[1] *Concentrations reported in milligrams per kilogram (mg/kg).*

[2] *Dragun, James, and Andrew Chiasson, 1991. Elements in North American Soils, Hazardous Materials Research Institute, Greenbelt, MD.*

[3] *USEPA Office of Solid Waste and Emergency Response, April 1983, "Hazardous Waste Land Treatment", SW-874, Page 273, Table 6.46.*

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Kansas Metals Company
Project No. 52945006

TABLE 3. TCLP CONCENTRATIONS - SOIL SAMPLES[1]									
Sample	Depth	Arsenic TCLP	Barium TCLP	Cadmium TCLP	Chromium TCLP	Lead TCLP	Mercury TCLP	Selenium TCLP	Silver TCLP
BH-2	0 - 0.5'	ND(0.1)	1.2	0.130	ND(0.01)	2.0	ND(0.02)	ND(0.05)	ND(0.01)
TCLP Criteria[2]		5.0	100.0	1.0	5.0	5.0	0.2	1.0	5.0

THRCE.TBL

[1] *Concentrations reported in mg/L.*

[2] *Maximum concentrations for non-hazardous waste classification, 40 CFR 261.*

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TABLE 4. ANALYTICAL RESULTS - GROUND WATER

Variable	Location				KNL[1]	KAL[2]	MCL[3]
	BH-1	BH-2	BH-3	BH-4			
Detected VOCs[4], ug/L							
Benzene	88	12	58	ND(10)	0.5	5.0	5.0
Cis-1,2-dichloroethylene	ND(50)	ND(0.4)	17	ND(10)	7	70	
Ethylbenzene	ND(50)	ND(0.4)	49	60	68	680	700
Toluene	ND(50)	0.4	12	11	200	2,000	1,000
Vinyl Chloride	ND(50)	ND(0.4)	17	ND(10)	0.2	2.0	2.0
Xylene	ND(50)	2	48	670	44	440	10,000
Total Purgeable Hydrocarbons[5] (OA-1), ug/L	24,000	210	1,600	27,000	NE	NE	NE
Semi-volatile Petroleum Hydrocarbons[7](OA-2), ug/L	ND(2,000)[8]	1,900[9]	250[10]	7,800[11]	NE	NE	NE
Detected PAHs[6], ug/L							
Naphthalene	64	38	22	66	14.3	143	NE
Phenanthrene	ND(8)	ND(5)	ND(5)	7.8	0.0029	0.029	NE
Trace Elements - Soluble[13], ~~ug/L~~ mg/L							
Arsenic	NA	ND(0.01)	ND(0.01)	ND(0.01)	NE	0.05	0.05
Barium	NA	1.8	1.5	1.4	NE	1	2
Cadmium	NA	ND(0.005)	ND(0.005)	ND(0.005)	NE	0.005	0.005
Chromium	NA	ND(0.01)	ND(0.01)	ND(0.01)	NE	0.05	0.1
Lead	NA	0.003	0.042	0.004	NE	0.05	NE
Trace Elements - Total[12], mg/L							
Mercury	ND(0.0002)	ND(0.0002)	ND(0.0002)	ND(0.0002)	NE	0.002	0.002
Selenium	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	NE	0.045	0.05
Silver	ND(0.01)	0.01	ND(0.01)	ND(0.01)	NE	0.05	NE

Notes: [1] *Kansas Notification Level (KNL) established by KDHE.*
[2] *Kansas Action Level (KAL) established by KDHE.*
[3] *Maximum Contaminant Level (MCL) established by USEPA.*

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TABLE 4 (Notes Continued)

[4] Detected Priority Pollutant Volatile organic compounds (VOCs) analyzed per USEPA Methodology 8010/8020.
[5] Analysis performed using KDHE-approved Methodology OA-1.
[6] Detected Polynuclear Aromatic Hydrocarbons (PAHs) analyzed per USEPA Methodology 8270.
[7] Analysis performed using KDHE-approved Methodology OA-2.
[8] Detection level higher than normal due to matrix interferences.
[9] Results calculated from a motor oil standard.
[10] Results calculated from a diesel standard. However, the chromatograph does not match that of a diesel fuel standard.
[11] Results calculated from a diesel and motor oil standard. However, the chromatograph does not match that of a diesel fuel standard.

NE - Not Established
NA - Not Analyzed
ND - Not Detected; laboratory detection limits in parentheses.

~~Results reported in µ (micrograms)~~.

A:TABLE.4

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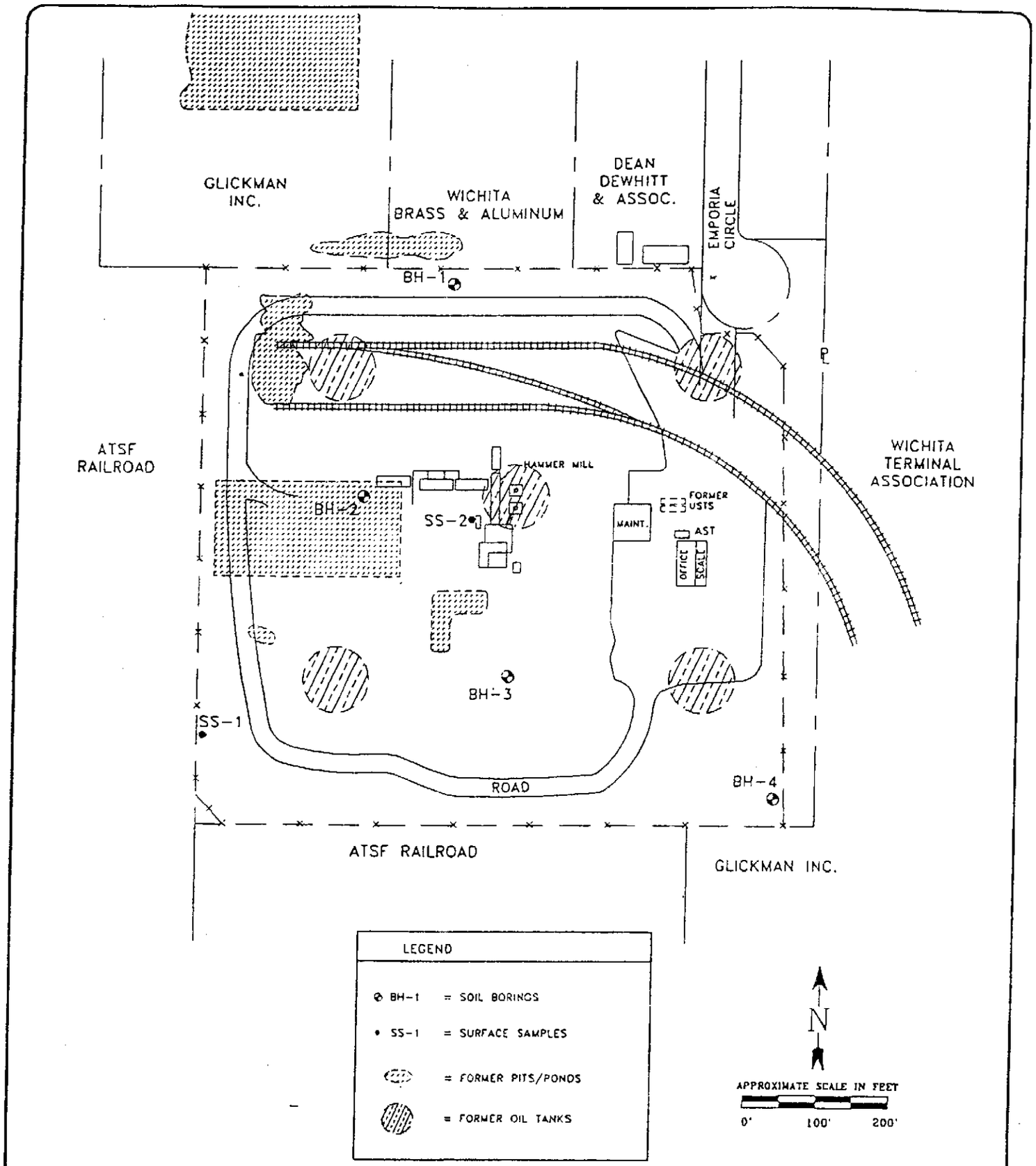

PROJ.# 52945006	CHECKED BY: DAA
SCALE: As Shown	DRAWN BY: KJB
FN: SITEMAP.DWG	
DATE: MARCH, 1994	

SITE DIAGRAM

KANSAS METALS COMPANY
2829 N. EMPORIA
WICHITA, KANSAS

FIGURE 2

Terracon

Figure(s)
Aerial Photographs and Sample Location Map(s)

CDM

1" = 200'

100 0 200

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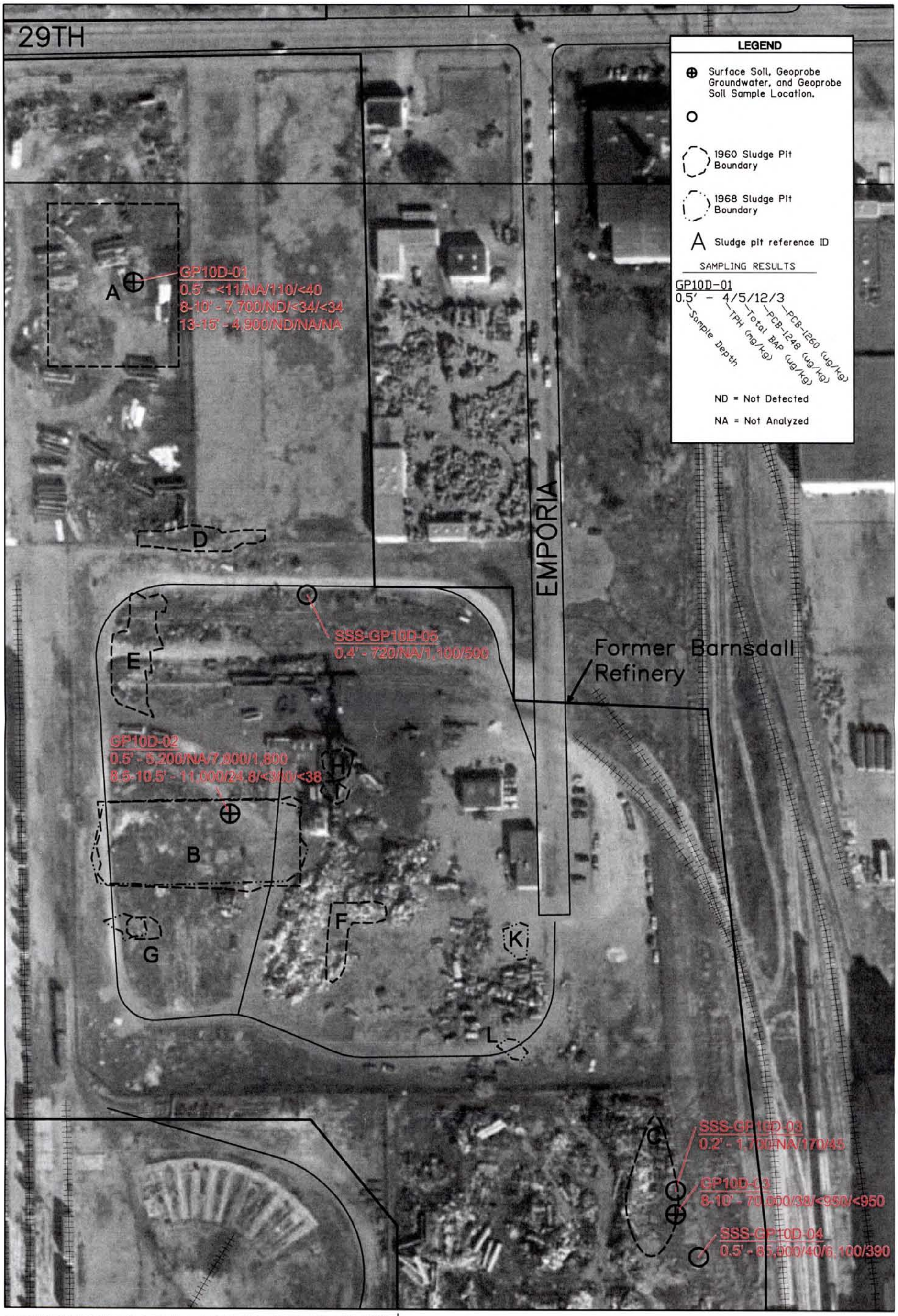
Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Barnsdall Refinery (Area 10D)



CDM

1" = 120'

60 0 120

Figure 2
North Industrial Corridor (NIC) Site
Sludge Pit Sampling Results, Former Barnsdall Refinery (Area 10D)

Table(s)
Analytical Data Table(s)

Table 1
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, VOCs by EPA Method 8260

Station	GP10D-01	GP10D-01	GP10D-02	GP10D-02	GP10D-03	GP10D-03	GP10D-04	GP10D-05
Sample Depth in Feet	**0.5**	**8-10**	**0.5**	**8.5-10.5**	**0.2**	**8.5-10.5**	**0.5**	**0.4**
Sample date	**1/19/01**	**1/19/01**	**1/18/01**	**1/18/01**	**1/22/01**	**1/22/01**	**1/22/01**	**1/22/01**
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
1,1,1-Trichloroethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,1,2,2-Tetrachloroethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,1,2-Trichloroethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,1-Dichloroethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,1-Dichloroethene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,2-Dichlorobenzene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,2-Dichloroethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,2-Dichloropropane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,3-Dichlorobenzene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
1,4-Dichlorobenzene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Benzene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Bromodichloromethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Bromoform	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Bromomethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Carbon tetrachloride	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Chlorobenzene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Chloroethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Chloroform	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Chloromethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
cis-1,2-Dichloroethene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
cis-1,3-Dichloropropene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Dibromochloromethane	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Ethylbenzene	<6.1	**1400**	<6.2	**24**	<5.0	<620	<620	<5.0
m,p-Xylene	<6.1	**920**	<6.2	**23**	**13 UB**	**1100**	<620	<5.0
Methylene chloride	<6.1	<700	<6.2	<6.0	**5.5**	<620	<620	**5.6 UB**
o-Xylene	<6.1	<700	<6.2	**26**	<5.0	**640**	<620	<5.0
Tetrachloroethene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Toluene	<6.1	<700	<6.2	**17**	**8.3**	<620	<620	<5.0
trans-1,2-Dichloroethene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
trans-1,3-Dichloropropene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Trichloroethene	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0
Trichlorofluoromethane	<6.1	<700	**7.2**	<6.0	<5.0	<620	<620	<5.0
Vinyl chloride	<6.1	<700	<6.2	<6.0	<5.0	<620	<620	<5.0

Bold text indicates results above analytical detection limits.
UB = Not detected; contained in method blank.

CDM

Table 2
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10D-01	GP10D-01	GP10D-01	GP10D-02	GP10D-02	GP10D-03	GP10D-03	GP10D-04	GP10D-05
Sample Depth in Feet	0.5	8-10	13-15	0.5	8.5-10.5	0.2	8-10	0.5	0.4
Sample date	1/19/01	1/19/01	1/19/01	1/18/01	1/18/01	1/22/01	1/22/01	1/22/01	1/22/01
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
1,2,4-Trichlorobenzene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
1,2-Dichlorobenzene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
1,3-Dichlorobenzene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
1,4-Dichlorobenzene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2,4,5-Trichlorophenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2,4,6-Trichlorophenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2,4-Dichlorophenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2,4-Dimethylphenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2,4-Dinitrophenol	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
2,4-Dinitrotoluene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2,6-Dinitrotoluene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2-Chloronaphthalene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2-Chlorophenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2-Methylnaphthalene	<400	**14000**	**5800**	<4100	**1500**	<3300	<3300	**25000**	<3300
2-Methylphenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
2-Nitroaniline	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
2-Nitrophenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
3,3'-Dichlorobenzidine	<800	<6800	<7400	<8200	<760	<6600	<6600	<13000	<6600
3-Nitroaniline	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
4,6-Dinitro-2-methylphenol	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
4-Bromophenylphenyl ether	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
4-Chloro-3-methylphenol	<800	<6800	<7400	<8200	<760	<6600	<6600	<13000	<6600
4-Chloroaniline	<800	<6800	<7400	<8200	<760	<6600	<6600	<13000	<6600
4-Chlorophenylphenyl ether	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
4-Methylphenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
4-Nitroaniline	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
4-Nitrophenol	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
Acenaphthene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Acenaphthylene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Anthracene	<400	<3400	<3700	<4100	<380	<3300	<3300	**3300 J**	<3300
Benzo(a)anthracene	<400	<3400	<3700	<4100	**380**	<3300	**1400 J**	<6600	<3300
Benzo(a)pyrene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Benzo(b)fluoranthene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Benzo(g,h,i)perylene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Benzo(k)fluoranthene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Benzoic acid	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
Benzyl alcohol	<800	<6800	<7400	<8200	<760	<6600	<6600	<13000	<6600
bis(2-Chloroethoxy)methane	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
bis(2-Chloroethyl) ether	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
bis(2-Chloroisopropyl) ether	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
bis(2-Ethylhexyl)phthalate	<400	<3400	<3700	**35000 J**	<380	<3300	**2400 J**	<6600	**1800 J**
Butylbenzylphthalate	<400	<3400	<3700	**7500**	<380	<3300	<3300	<6600	**3900**
Chrysene	<400	<3400	<3700	<4100	**860**	<3300	**2400 J**	**4000 J**	<3300
Di-n-butylphthalate	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Di-n-octylphthalate	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Dibenz(a,h)anthracene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Dibenzofuran	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Diethylphthalate	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Dimethylphthalate	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Fluoranthene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Fluorene	<400	<3400	<3700	<4100	**390**	<3300	<3300	<6600	<3300
Hexachloro-1,3-butadiene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Hexachlorobenzene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300

Table 2
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10D-01	GP10D-01	GP10D-01	GP10D-02	GP10D-02	GP10D-03	GP10D-03	GP10D-04	GP10D-05
Sample Depth in Feet	**0.5**	**8-10**	**13-15**	**0.5**	**8.5-10.5**	**0.2**	**8-10**	**0.5**	**0.4**
Sample date	**1/19/01**	**1/19/01**	**1/19/01**	**1/18/01**	**1/18/01**	**1/22/01**	**1/22/01**	**1/22/01**	**1/22/01**
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Hexachlorocyclopentadiene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Hexachloroethane	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Indeno(1,2,3-cd)pyrene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Isophorone	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
N-Nitroso-di-n-propylamine	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
N-Nitrosodiphenylamine	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Naphthalene	<400	**5100**	**1700 J**	<4100	<380	<3300	<3300	**7100**	<3300
Nitrobenzene	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Pentachlorophenol	<1900	<16000	<18000	<20000	<1800	<16000	<16000	<32000	<16000
Phenanthrene	<400	**3500**	**1600 J**	<4100	**2100**	<3300	**2900 J**	**16000**	<3300
Phenol	<400	<3400	<3700	<4100	<380	<3300	<3300	<6600	<3300
Pyrene	<400	<3400	<3700	<4100	**1300**	<3300	**1700 J**	**13000**	<3300

Bold text indicates results above analytical detection limits.
J = Result estimated, value measured between the reporting limit and the detection limit

Table 3
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, Pesticides/PCBs by EPA Method 8080

Station	GP10D-01	GP10D-01	GP10D-02	GP10D-02	GP10D-03	GP10D-03	GP10D-04	GP10D-05
Sample Depth in Feet	**0.5**	**8-10**	**0.5**	**8.5-10.5**	**0.2**	**8-10**	**0.5**	**0.4**
Sample date	**1/19/01**	**1/19/01**	**1/18/01**	**1/18/01**	**1/22/01**	**1/22/01**	**1/22/01**	**1/22/01**
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
4,4'-DDD	<4.1	<340	<4.2	<390	<3.3	<97	<910	<3.3
4,4'-DDE	<1.6	<130	<1.6	<150	<1.3	<38	<360	<1.3
4,4'-DDT	<4.8	<400	<4.9	<450	<3.9	<110	<1100	<3.9
Aldrin	<1.6	<130	<1.6	<150	<1.3	<38	<360	<1.3
alpha-BHC	<1.2	<100	<1.2	<110	<0.98	<29	<270	<0.97
alpha-Chlordane	<2.1	<170	<2.1	<200	<1.7	<49	<460	<1.7
beta-BHC	<2.4	<200	<2.4	<230	<2.0	<57	<540	<1.9
Chlordane (Technical)	<5.6	<470	<5.7	<530	<4.6	<130	<1200	<4.5
delta-BHC	<3.6	<300	<3.7	<340	<2.9	<86.	<800	<2.9
Dieldrin	<0.80	<67	<0.82	<76	<0.65	<19	<180	<0.65
Endosulfan I	<5.6	<470	<5.7	<530	<4.6	<130	<1200	<4.5
Endosulfan II	<1.6	<130	<1.6	<150	<1.3	<38	<360	<1.3
Endosulfan sulfate	<26.	<2200	<27	<2500	<22	<630	<5900	<21
Endrin	<2.4	<200	<2.4	<230	<2.0	<57	<540	<1.9
Endrin aldehyde	<9.2	<770	<9.4	<870	<7.5	<220	<2100	<7.4
Endrin ketone	<4.0	<340	<4.1	<380	<3.3	<95	<890	<3.2
gamma-BHC	<1.6	<130	<1.6	<150	<1.3	<38	<360	<1.3
gamma-Chlordane	<2.1	<170	<2.1	<200	<1.7	<49	<460	<1.7
Heptachlor	<1.2	<100	<1.2	<110	<0.98	<29	<270	<0.97
Heptachlor epoxide	<4.0	<340	<4.1	<380	<3.3	<95	<890	<3.2
Methoxychlor	<70	<5900	<72	<6700	<58	<1700	<16000	<57
Toxaphene	<96	<8000	<98	<9100	<78	<2300	<21000	<78
PCB-1016	<40	<34	<41	<380	<33	<950	<890	<32
PCB-1221	<40	<34	<41	<380	<33	<950	<890	<32
PCB-1232	<40	<34	<41	<380	<33	<950	<890	<32
PCB-1242	<40	<34	<41	<380	<33	<950	<890	<32
PCB-1248	**110**	<34	**7800**	<380	**170**	<950	**6100**	**1100**
PCB-1254	<40	<34	<41	<38	<33	<950	<890	<32
PCB-1260	<40	<34	**1800**	<38	45	<950	**390 J**	**500**

Bold text indicates results above analytical detection limits.
J = Result estimated, value mesured between the reporting limit and the detection limit

Table 4
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, Total Petroleum Hydrocarbons (TPH)

Station	GP10D-01	GP10D-01	GP10D-01	GP10D-02	GP10D-02	GP10D-03	GP10D-03	GP10D-04	GP10D-05
Sample Depth in Feet	**0.5**	**8-10**	**13-15**	**0.5**	**8.5-10.5**	**0.2**	**8-10**	**0.5**	**0.4**
Sample date	**1/19/01**	**1/19/01**	**1/19/01**	**1/18/01**	**1/18/01**	**1/22/01**	**1/22/01**	**1/22/01**	**1/22/01**
Compound	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Fuel Oil	<11	<45	<48	<52	<100	<8.6	<950	<2300	<9.1
Jet Fuel	<11	<45	<48	<52	<100	<8.6	<950	<2300	<9.1
Kerosene	<11	<45	<48	<52	<100	<8.6	<950	<2300	<9.1
Mineral Spirits	<11	<45	<48	<52	<100	<8.6	<950	<2300	<9.1
Motor Oil	<11	<45	<48	**5200**	<100	**1700**	<950	<2300	**720**
TPH as Diesel	<11	**7700**	**4900**	<52	**11000**	<8.6	**70000**	**85000**	<9.1
TPH as Gasoline	<6	**790**	**230**	<6.2	**88**	<5	**340**	**370**	<5

Bold text indicates results above analytical detection limits.

Table 5
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, Metals

Station	GP10D-01	GP10D-01	GP10D-02	GP10D-02	GP10D-03	GP10D-03	GP10D-04	GP10D-05
Sample Depth in Feet	0.5	8-10	0.5	8.5-10.5	0.2	8-10	0.5	0.4
Sample date	1/19/01	1/19/01	1/18/01	1/18/01	1/22/01	1/22/01	1/22/01	1/22/01
Compound	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	**12600**	**1180**	**52800**	**10800**	**4990**	**8440**	**352**	**8070**
Antimony	<1.14	<0.998	**15.7**	<1.15	**1.51**	**21.7**	<0.971	**1.75**
Arsenic	**3.12**	<0.499	**3.43**	**1.85**	**1.97**	**7.85**	**0.982**	**3.21**
Barium	**157**	**19.9**	**786**	**93.2**	**86.8**	**812**	**6.71**	**261**
Beryllium	**0.713**	<0.0998	**0.317**	**0.432**	**0.441**	**0.293**	<0.0971	**0.462**
Cadmium	**1.07**	<0.499	**15.3**	<0.575	**10.1**	**12.2**	<0.485	**5.3**
Calcium	**17200**	**535**	**40600**	**3450**	**30400**	**22800**	**11800**	**12200**
Chromium	**14.8**	**1.71**	**93.7**	**10.1**	**11.4**	**89.6**	**1.9**	**22.8**
Cobalt	**7.69**	**1.33**	**11**	**4.97**	**4.03**	**13.9**	<0.680	**6.45**
Copper	**27**	**2.42**	**2570**	**170**	**93.9**	**477**	**22**	**75.8**
Iron	**15800**	**3120**	**35300**	**11500**	**9910**	**52900**	**1710**	**19100**
Lead	**54.1**	**2.48**	**1170**	**1380**	**195**	**1590**	**110**	**304**
Magnesium	**3890**	**394**	**6320**	**2760**	**4870**	**2670**	**167**	**2410**
Manganese	**409**	**48.5**	**660**	**130**	**178**	**527**	**18.9**	**225**
Mercury	<0.187	<0.158	**1.84**	<0.177	**0.322**	**0.289**	<0.154	**0.354**
Nickel	**16.7**	<2.99	**187**	**10.6**	**16.9**	**146**	<2.91	**64.1**
Potassium	**2580**	**214**	**1580**	**1690**	**1390**	**1220**	<97.1	**1330**
Selenium	**2.24**	<0.499	**6.24**	**1.1**	<0.495	**9.22**	**1.56**	**3.13**
Silver	<0.801	<0.698	**2.96**	<0.805	<0.693	**1.23**	<0.680	<0.648
Sodium	**90.6**	**259**	**511**	**171**	**525**	**1410**	**3250**	**202**
Thallium	<1.83	<1.60	**3.53**	<1.84	<1.58	**2.18**	<1.55	<1.48
Vanadium	**30.2**	**5.97**	**23.9**	**24.4**	**16**	**17.1**	**5.03**	**21.2**
Zinc	**155**	**8.71**	**4970**	**34.3**	**1790**	**3040**	**61.3**	**701**

CDM

Bold text indicates results above analytical detection limits.

Table 6
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, VOCs by EPA Method 8260

Station	GP10D-01	GP10D-02	GP10D-03
Groundwater Depth Zone / Sample Depth in Feet	S/16	S/16	S/18
Sample date	01/19/01	01/18/01	01/22/01
Compound	(µg/L)	(µg/L)	(µg/L)
1,1,1-Trichloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	<1.0
Benzene	**8.7**	**13**	**3**
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
Ethylbenzene	**5.9**	<1.0	<1.0
m,p-Xylene	**8.2**	<1.3	<1.3
Methylene chloride	<1.0	<1.0	<1.0
o-Xylene	**5.8**	**1.8**	<1.1
Tetrachloroethene	<1.0	<1.0	<1.0
Toluene	**3.5**	<1.0	**2.7**
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0
Trichlorofluoromethane	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	**1.4**

Bold text indicates results above analytical detection limits.

Table 7
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10D-01	GP10D-02	GP10D-03
Groundwater Depth Zone / Sample Depth in Feet	S/16	S/16	S/18
Sample date	01/19/01	01/18/01	01/22/01
Compound	(µg/L)	(µg/L)	(µg/L)
1,2,4-Trichlorobenzene	<110	<11	<11
1,2-Dichlorobenzene	<110	<11	<11
1,3-Dichlorobenzene	<110	<11	<11
1,4-Dichlorobenzene	<110	<11	<11
2,4,5-Trichlorophenol	<540	<53	<57
2,4,6-Trichlorophenol	<110	<11	<11
2,4-Dichlorophenol	<110	<11	<11
2,4-Dimethylphenol	<110	<11	<11
2,4-Dinitrophenol	<540	<53	<57
2,4-Dinitrotoluene	<110	<11	<11
2,6-Dinitrotoluene	<110	<11	<11
2-Chloronaphthalene	<110	<11	<11
2-Chlorophenol	<110	<11	<11
2-Methylnaphthalene	**150**	<11	<11
2-Methylphenol	<110	<11	<11
2-Nitroaniline	<540	<53	<57
2-Nitrophenol	<110	<11	<11
3,3'-Dichlorobenzidine	<220	<21	<23
3-Nitroaniline	<540	<53	<57
4,6-Dinitro-2-methylphenol	<540	<53	<57
4-Bromophenylphenyl ether	<110	<11	<11
4-Chloro-3-methylphenol	<220	<21	<23
4-Chloroaniline	<220	<21	<23
4-Chlorophenylphenyl ether	<110	<11	<11
4-Methylphenol	<110	<11	<11
4-Nitroaniline	<540	<53	<57
4-Nitrophenol	<540	<53	<57
Acenaphthene	<110	<11	<11
Acenaphthylene	<110	<11	<11
Anthracene	<110	<11	<11
Benzo(a)anthracene	<110	<11	<11
Benzo(a)pyrene	<110	<11	<11
Benzo(b)fluoranthene	<110	<11	<11
Benzo(g,h,i)perylene	<110	<11	<11
Benzo(k)fluoranthene	<110	<11	<11
Benzoic acid	<540	<53	<57
Benzyl alcohol	<220	<21	<23

Table 7
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10D-01	GP10D-02	GP10D-03
Groundwater Depth Zone / Sample Depth in Feet	S/16	S/16	S/18
Sample date	01/19/01	01/18/01	01/22/01
Compound	(µg/L)	(µg/L)	(µg/L)
bis(2-Chloroethoxy)methane	<110	<11	<11
bis(2-Chloroethyl) ether	<110	<11	<11
bis(2-Chloroisopropyl) ether	<110	<11	<11
bis(2-Ethylhexyl)phthalate	<110	<11	<11
Butylbenzylphthalate	<110	<11	<11
Chrysene	<110	<11	<11
Di-n-butylphthalate	<110	<11	<11
Di-n-octylphthalate	<110	<11	<11
Dibenz(a,h)anthracene	<110	<11	<11
Dibenzofuran	<110	<11	<11
Diethylphthalate	<110	<11	<11
Dimethylphthalate	<110	<11	<11
Fluoranthene	<110	<11	<11
Fluorene	<110	<11	<11
Hexachloro-1,3-butadiene	<110	<11	<11
Hexachlorobenzene	<110	<11	<11
Hexachlorocyclopentadiene	<110	<11	<11
Hexachloroethane	<110	<11	<11
Indeno(1,2,3-cd)pyrene	<110	<11	<11
Isophorone	<110	<11	<11
N-Nitroso-di-n-propylamine	<110	<11	<11
N-Nitrosodiphenylamine	<110	<11	<11
Naphthalene	**150**	<11	<11
Nitrobenzene	<110	<11	<11
Pentachlorophenol	<540	<53	<57
Phenanthrene	<110	<11	<11
Phenol	<110	<11	<11
Pyrene	<110	<11	<11

Bold text indicates results above analytical detection limits.

Table 8
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, Pesticides/PCBs by EPA Method 8080

Station	GP10D-01	GP10D-02	GP10D-03
Groundwater Depth Zone / Sample Depth in Feet	S/16	S/16	S/18
Sample date	01/19/01	01/18/01	01/22/01
Compound	(µg/L)	(µg/L)	(µg/L)
4,4'-DDD	<0.12	<0.12	<0.12
4,4'-DDE	<0.043	<0.043	<0.045
4,4'-DDT	<0.13	<0.13	<0.14
Aldrin	<0.043	<0.043	<0.045
alpha-BHC	<0.032	<0.032	<0.034
alpha-Chlordane	<0.054	<0.054	<0.057
beta-BHC	<0.065	<0.065	<0.068
Chlordane (Technical)	<0.15	<0.15	<0.16
delta-BHC	<0.097	<0.097	<0.10
Dieldrin	<0.022	<0.022	<0.023
Endosulfan I	<0.15	<0.15	<0.16
Endosulfan II	<0.043	<0.043	<0.045
Endosulfan sulfate	<0.71	<0.71	<0.75
Endrin	<0.065	<0.065	<0.068
Endrin aldehyde	<0.25	<0.25	<0.26
Endrin ketone	<0.11	<0.11	<0.11
gamma-BHC	<0.043	<0.043	<0.045
gamma-Chlordane	<0.054	<0.054	<0.057
Heptachlor	<0.032	<0.032	<0.034
Heptachlor epoxide	<0.11	<0.11	<0.11
Methoxychlor	<1.9	<1.9	<2.0
Toxaphene	<2.6	<2.6	<2.7
PCB-1016	<1.1	<1.1	<1.1
PCB-1221	<1.1	<1.1	<1.1
PCB-1232	<1.1	<1.1	<1.1
PCB-1242	<1.1	<1.1	<1.1
PCB-1248	<1.1	<1.1	<1.1
PCB-1254	<1.1	<1.1	<1.1
PCB-1260	<1.1	<1.1	<1.1

Table 9
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, Total Petroleum Hydrocarbons (TPH)

Station	**GP10D-01**	**GP10D-02**	**GP10D-03**
Groundwater Depth Zone / Sample Depth in Feet	**S/16**	**S/16**	**S/18**
Sample date	**01/19/01**	**01/18/01**	**01/22/01**
Compound	(mg/L)	(mg/L)	(mg/L)
Fuel Oil	<0.40	<0.40	<0.40
Jet Fuel	<0.40	<0.40	<0.40
Kerosene	<0.40	<0.40	<0.40
Mineral Spirits	<0.40	<0.40	<0.40
Motor Oil	<0.40	<0.40	<0.40
TPH as Diesel	**3.0**	**1.2**	<0.40
TPH as Gasoline	**0.849**	**<0.50**	<0.50

Bold text indicates results above analytical detection limits.

Table 10
Former Barnsdall Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, Total Metals

Station	GP10D-01	GP10D-02	GP10D-03
Groundwater Depth Zone / Sample Depth in Feet	S/16	S/16	S/18
Sample date	01/19/01	01/18/01	01/22/01
Compound	(µg/L)	(µg/L)	(µg/L)
Aluminum	<75.0	**4190**	<75.0
Antimony	<10.0	<10.0	<10.0
Arsenic	<5.00	**70.8**	**82.2**
Barium	**767**	**1300**	**493**
Beryllium	<1.00	<1.00	<1.00
Cadmium	<5.00	<5.00	<5.00
Calcium	**81000**	**150000**	**120000**
Chromium	<7.00	<7.00	<7.00
Cobalt	<7.00	<7.00	<7.00
Copper	<10.0	**13.1**	<10.0
Iron	**13000**	**65800**	**21700**
Lead	**6.21**	**25.8**	**7.03**
Magnesium	**26100**	**51200**	**31400**
Manganese	**3370**	**651**	**5560**
Mercury	<0.200	<0.200	<0.200
Nickel	<30.0	<30.0	<30.0
Potassium	**2180**	**4430**	**2870**
Selenium	<10.0	<10.0	<5.00
Silver	<7.00	**8.73**	<7.00
Sodium	**82900**	**117000**	**69300**
Thallium	<5.00	<5.00	<5.00
Vanadium	<12.0	<12.0	<12.0
Zinc	**128**	**192**	<100

Bold text indicates results above analytical detection limits.

Appendix L-2
Former Golden Rule Refinery

PRP Evaluation Summary

Former Golden Rule Refinery
Northeast of 29th and Broadway

Potential Source Area PRP and Work Plan Addendum Map ID - 10C
Contaminants of Concern - Petroleum Hydrocarbons, PCBs, Metals
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Former Golden Rule Refinery, Northeast of 25th and Broadway

The facility operated as a refinery prior to 1950, with refinery operations believed to have ceased during the late 1930s. The former refinery property is now occupied by various facilities including Wichita Brass and Aluminum (southwest quarter of the former refinery property) and Compressed Gases, Inc. (southeast quarter of the former refinery property). The remaining portions of the former refinery property are currently undeveloped.

Sludge Pit Contamination

The Former Golden Rule Refinery was located north of East 29th Street and east of railroad property border the east side of Broadway Avenue. The eastern extent of the facility extended to St. Francis. The northern portion of the facility extended to the projection of approximately 31st street. The attached figure and Plate 9-1 of the NIC RI Report show the approximate boundaries of the former refinery. Past investigations at the facility were discussed in Section 2.4.1 of the NIC RI Report. The Former Golden Rule Refinery is a confirmed source area for petroleum hydrocarbon contamination, metals, and PCB contamination. The source of the petroleum contamination is from two different types of releases. Five apparent sludge pits have been identified from historical aerial photographs. The sludge pit locations are shown in the attached figure. Three of the most prominent former sludge pits were investigated during the RI. The investigation revealed that all three pits had significant free product (Pits A, C, and E). Groundwater impacts from the investigated sludge pits appear to be minimal, despite evident soil impacts. Groundwater sample results show a lead impact (7.15 and 19.13 µg/L) at pits A and C. Additionally, an arsenic impact has been noted at Pit E (9.94 µg/L). The soil and product in the sludge pits has been impacted by PCBs and metals (antimony, lead, selenium) as noted in the attached tables.

Significant petroleum hydrocarbon contamination also appears to be present at the southeast portion of the former refinery property where the bulk of the refining operations were conducted. Free product was observed in the groundwater at Geoprobe location GP02A-04 and petroleum odors have been noted at other Geoprobe

locations in the area. The extent of petroleum hydrocarbon contamination not associated with the sludge pit locations has not been completely delineated, but does not appear to extend significantly downgradient (south) of the former refinery.

Additional Petroleum Hydrocarbon Contamination

Significant petroleum hydrocarbon contamination also appears to be present at the southeast portion of the former refinery property where the bulk of the refining operations were conducted. Free product was observed in the groundwater at Geoprobe location GP02A-04 and petroleum odors have been noted at other Geoprobe locations in the area. The extent of petroleum hydrocarbon contamination not associated with the sludge pit locations has not been completely delineated, but does not appear to extend significantly downgradient (south) of the former refinery.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is primarily to the south-southeast. Facility-specific groundwater level data are lacking.

Polk Directory Review and RCRA Information Summary

Name of Company: Golden Rule
Name and/or Contact Person:
Street Address of Company:
City, State and Zip Code:
Regarding the Following
Property:
Phone Number of Contact:
History: 1931 E. 29th & Topeka Refinery
(120 W. 1st. Golden Rule Refining Co.)

1946 300 E. 29th. Bulk Station
(120 W. 1st. Golden Rule Oil Co.)
(1016 S. Santa Fe 1st Plant)

Name of Company:		Golden Rule Refinery
Name and/or Contact Person:		
Street Address of Company:		**410 E. 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		Former Costal Boneyard Facility
Phone Number of Contact:		
History:	1951	Residential
	1961	
	1965	
	1970	No Listing
	1975	No Listing
	1980	No Listing
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

Name of Company:		Golden Rule Refinery
Name and/or Contact Person:		
Street Address of Company:		**412 E. 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		Former Costal Boneyard Facility
Phone Number of Contact:		
History:	1951	Wichita Brass & Aluminum Foundry
	1961	
	1965	Quality Drum Service (barrel dealer); Quality Solvent Co (chem. Mfr); Wichita Brass & Aluminum (foundry)
	1970	Quality Solvent Co; Wichita Brass & Aluminum Foundry
	1975	Quality Solvent Co; Wichita Brass & Aluminum
	1980	Wichita Brass & Aluminum
	1984/5	Wichita Brass & Aluminum Foundry Inc.
	1990	Wichita Brass & Aluminum Foundry Inc.
	1995/6	Wichita Brass & Aluminum Foundry Inc.
	2000	Wichita Brass & Aluminum Foundry (nfer foundries nec)

RCRA Info:

Name of Company:		Golden Rule Refinery
Name and/or Contact Person:		
Street Address of Company:		**444 E. 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		Former Costal Boneyard Facility
Phone Number of Contact:		
History:	1951	Mid West Wrecking Co (bldgs)
	1961	
	1965	No Listing
	1970	No Listing
	1975	Nance Speed Equipment
	1980	No Listing
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

Name of Company:		Golden Rule Refinery
Name and/or Contact Person:		
Street Address of Company:		**510 E. 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		Former Costal Boneyard Facility
Phone Number of Contact:		
History:	1951	Turner Weather Stripping and Heating Co.
	1961	
	1965	No Listing
	1970	No Listing
	1975	Accountants Consulting Service
	1980	No Listing
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

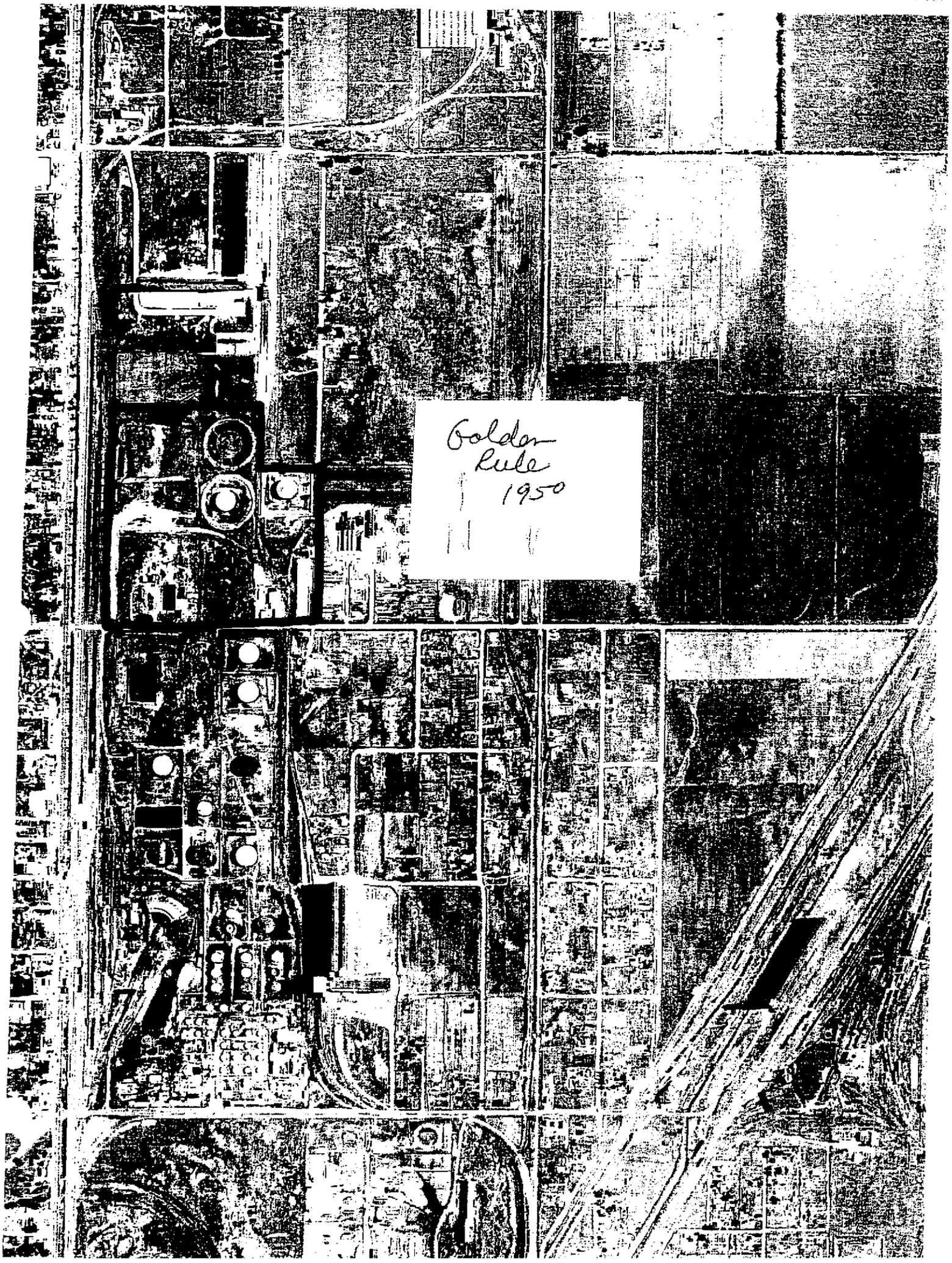
RCRA Info:

Name of Company:		Golden Rule Refinery
Name and/or Contact Person:		
Street Address of Company:		**514 E 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		Former Costal Boneyard Facility
Phone Number of Contact:		
History:	1951	Todd-Roberts Insulation Co
	1961	
	1965	No Listing
	1970	No Listing; (515)-Ferralloy Foundry
	1975	State Insulation Co. (res insulation)
	1980	No Listing; (515)-Ferralloy Foundry
	1984/5	No Listing; (515)-Ferralloy Foundry
	1990	No Listing; (515)-Ferralloy Foundry
	1995/6	No Listing; (515)-Ferralloy Foundry
	2000	No Listing; (515)-Ferralloy Foundry

RCRA Info:

Name of Company:		Golden Rule Refinery
Name and/or Contact Person:		
Street Address of Company:		**602 E. 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		Former Costal Boneyard Facility
Phone Number of Contact:		
History:	1951	
	1961	
	1965	Air Reduction Sales Co
	1970	Air Reduction Sales Co
	1975	Wichita Welding Supply Inc.
	1980	Wichita Welding Supply Inc.
	1984/5	Wichita Welding Supply Inc.
	1990	Compressed Gases Inc.
	1995/6	Compressed Gases Inc.
	2000	Compressed Gases Inc.

RCRA Info:


Golden
Rule
1950

DEPARTMENT OF HEALTH AND ENVIRONMENT

Division of Environment

RECEIVED

OCT 1981

BUREAU OF ENVIRONMENTAL SANITATION

M E M O R A N D U M

October 12, 1981

TO: SUPERFUND SITES FILE

FROM: Dale T. Stuckey, Field Representative DTS

SUBJECT: Investigation of Oil Sludge Pits Associated with Past Refinery Operations in Wichita. Section 4, T27S, R1E.

Primarily from a few off-hand remarks made by Mike Carter of the Wichita Brass and Aluminum Foundry and his father, Emmett Carter, I learned of the existance of two past refinery operations in the general vicinity of 29th Street and Broadway in Wichita. One went by the name of Golden Rule Refinery and was located in the northeast corner of the 29th street and Broadway intersection. It apparently went out of business in the late 1930's, probably 1938 or 1939. The other refinery went by the name of Barnsdall Refinery and was bounded by 29th street on the north, 25th street on the south, Broadway and the railroad tracks on the west, and St. Francis street on the east. This refinery went out of business about 1955. There were some oil sludge pits associated with each site.

GOLDEN RULE REFINERY

The Golden Rule Refinery was situated where Wichita Brass and Aluminum Foundry is located now. It was run by an Elden or Elbert Rule. When he went out of business he sold the land to a Walt Stevens who in turn, in 1941, sold the land to Emmett Clark. That year Emmett started up his foundry operation. Both Mike and Emmett Carter remember there being a general dump area just west of their property and east of the railroad tracks back in the mid-1940's. Initially Mike thought he remembered it containing some oil sludge but later he stated he didn't really remember what was in the pit. He believed it was closed out around 1946. During the time when I first made contact with Mike while investigating his company's abandoned lacquer reclamation project with its associated backlog of solvent and paint waste drums, he informed me that directly underneath the area over which the drums were scattered was a sizeable oil sludge pit. But in later conversations with him and his father, I was told they didn't think that there was, in fact, any oil sludge buried under their property. It was their feeling that all the old waste material associated with the refinery and with the dump had been burned off. Mike did mention, however,

that if one did some digging around out by the old stills, one would be likely to run into some oily dirt. In scraping down through old layers of dried paint sludge in this area, he had himself encountered some.

Visible on the enclosed 1938 aerial photograph is a cluster of possible oil sludge pits around two tanks on the western edge of the Golden Rule Refinery. This area corresponds to the old salvage and lacquer reclamation area located at the Wichita Brass and Aluminum Foundry currently. Also visible on this photograph, just north of the aforementioned area, is what appears to be a long sausage-shaped pit. This property is presently owned by a Dolese Concrete Company. On September 23, 1981 I made a brief reconnaisance of this area along with Kent Rowe of the Wichita-Sedgwick County Department of Community Health. In a location corresponding with that of the sausage-shaped pit we found a large mound of concrete. We later spoke with an employee of Dolese, who though declining to give us his name, told us that the concrete had been poured back in 1953. In 1951 he remembered there being oil in a pit there. He said that it had about a one foot soil cover on top and was fairly deep. One of the company's trucks had somehow gotten into it and was buried. It can be seen from the enclosed 1950 aerial photograph that this pit was indeed still there in 1950, though the refinery operation itself had been completely dismantled and there was no sign of any of the other pits.

BARNSDALL REFINERY

A check of plat records in the Sedgwick County Clerk's office showed that Barnsdall Oil Company's property was transferred over to Bareco Oil Company on August 8, 1935. Whether this was just a name change or an actual change of ownership is not known. On April 11, 1955 Bareco Oil Company's property was transferred over to Industrial Development Inc.

Oil sludge pits associated with the old Barnsdell and/or Bareco Oil Refinery were more numerous and the investigation in regards to them more involved, than was the case for the Golden Rule refinery. Basically there were two major pits on their property and I attempted to trace the destiny of these as best I could.

* * *

The major pit at the northwest corner of the property was square in outline, appeared to have a surface area of about one acre, and first shows up on the 1950 aerial photograph. It also appears in the 1960 photograph but is absent in the 1968 series. On August 1, 1962 this northwest corner property was deeded from Industrial Development Inc. to Kansas Paint and Color, Inc. Kansas Paint and Color owned the land up until January 6, 1975 when they deeded it to Glickman, Inc. This plat of land is currently referred to as K.P.&C. addition. I had a brief phone conversation with the plant manager (he declined to give his name) of Kansas Paint and Color on September 23, 1981 in connection with this pit. He said that his company had hired a contractor to

clean it out around 1965. All the water was pumped out and dumped and the oil sludge was dredged out and hauled off to an adjacent tract of land south of there, spread out over the ground and buried. Some of this oil sludge was also hauled off and used to stabilize dusty county roads. He declined to give any more specifics on how the sludge was handled and the exact location of where it was buried.

In conversation with both Mike and Emmett Carter it was confirmed to me that there was indeed a large oil sludge pit just south of their property and on the other side of 29th street back in the 60's. They remembered it having caught fire in 1959 and that a fire truck from Boeing Aircraft had to be used to put it out. They were also under the impression that the oil sludge had been cleaned out in the mid-60's. Mike remembered seeing them come in with an auger to dig it out and he believed that they had excavated a series of trenches running east-west, in a location somewhat southeast of the original pit, into which the oil sludge was dumped, mixed with dirt and covered.

I also had a brief phone conversation on September 29 with Steve Potucek of the Wichita Planning Commission concerning this northwest pit. He told me that Kansas Paint and Color had originally bought the land with the intent of setting up a metals reclamation operation, and that $35,000 was shelled out to clean up the oil sludge pit.

* * *

The second major pit was located about 200 yards due south of the northwest pit, was also about one acre in size,and was rectangular in outline. Emmett Carter believes that all this oil sludge was dug out, spread over a wide area in the same general vicinity and buried. The pit shows up on the 1960, 1968 and 1974 aerial photographs. This tract of land was owned by Industrial Development, Inc. up until September 17, 1973 when Johnnie Darr deeded the land to Frank H. Ise. Johnnie Darr had apparently obtained the land as a result of Industrial Development, Inc. having failed to pay its taxes. On July 25, 1974 Frank H. Ise deeded the land to James Gardner (former city commissioner). On August 12, 1974 James Gardner deeded the land to Wichita Metals, Inc., a firm that operates a car crusher on the site. ~~I spoke with~~ Dean Kline of Kansas Metals, Inc. by phone of September 24. He informed me that when construction began on the car crusher in 1974, there were no pits on the property. Since the 1974 aerial photograph was dated March, 1974, it appears that this main pit and all smaller associated pits were cleaned out sometime between March and August 12, 1974 - a period of time when the land was owned by James Gardner. I spoke with Mr. Gardner by phone on September 29 in an effort to gather facts about any cleanup operations but he refused to divulge any information whatsoever. It was his feeling that any kind of publicity on this matter would shed negative light on all associated parties.

In the above paragraph I mentioned that there were some smaller pits in this area. The pits I am referring to can most clearly be seen in the 1960 aerial photograph. There were two, irregular in outline, between the north and south major pits, and there were two south of southern major

pit. The boomerang shaped pit at the southeast corner of the southern major pit is about where the car crusher is sitting now. Emmett and Mike Carter remember that a horse got mired down in some oil sludge close to this location sometime back in the '50's. The long pit running east-west and situated just southeast from the northern major pit, was sitting in close proximity to where a fence line runs now which encloses Kansas Metals property. On September 23 Kent Rowe and myself discovered what, appeared to be, an oil sludge pit with an upper coating of dirt at this same general location. The sludge was very thick and could be walked over while sinking in slowly. Several skeletons of dead animals were entrained on the surface. Enclosed are a series of Polaroid snapshots taken of the area. Most all of this material was sitting on land which is now owned by Mike Carter, though the eastern most extremity of the sludge was on land which is being leased from Mike Carter by Roofing Service Company. It is possible that the waste originated from the roofing company's operations, but it appeared to me to be more of a refinery waste product. I believed I could detect some refinery odor while probing around in the sludge. On September 28 I revisited this site and collected a sample of the sludge in a mason jar. It should be presently undergoing heavy metals analysis in our Topeka lab.

CONCLUSION

This pretty much concludes the information I have gathered on this subject to date. The problem which arises, is that, though it appears all the oil sludge was handled in a way in which microbial breakdown would be encouraged (i.e. - through mixing with dirt), my assessment is gathered second-hand and I have no hard facts to go on regarding the clean up operations. The people that would know the specifics, the plant manager at Kansas Paint and Color and James Gardner, have shown no willingness to make the information available to me. In my mind, the course that needs to be taken, is for a higher official than myself to attempt extracting information from these two sources and if this fails, for field work, in the form of augering or drilling, to commence on revealing the location of the sludge, its physical and chemical characteristics and any threat it may pose to the ground water. The water table in the area of concern is only 15 to 20 feet deep.

Likewise the possibility of buried oil sludge on the old Golden Rule Refinery property needs to be looked into. It is conceivable that the old sausage-shaped pit previously mentioned might still be in existance underneath tons of concrete.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: October 27, 1981
Time Received: 11:15 am
Date Completed: November 30, 1981

LLI Project No.: 81-7449

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Soil

Sample Identification	Analysis	Results
One Foot Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter
Six Inch Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter

The above soil samples were taken by Mr. Dale Stuckey (KDHE Employee) in late october 19[illegible] at the location he determined to be the worst as far as leaking drums. The results of the EP Toxicity analysis indicate that no hazardous materials had leaked to the 6 inch nor to the 1 foot depth and were probably not ground water contaminants.

Comments:

Michael W. Carter
President

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

Department of Health and Environment
Division of Environment

PHOTO MOUNTING SHEET

Name of Site: Uncontrolled Hazardous Waste Site at Wichita Reworked Aluminum Foundry

Location: City Wichita County Sedgwick Legal

No. 1

Date: Aug. 18 1981 Time: 10:00 A.M.

General Direction Faced: East

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at one of the drums in which wastes is actually oozing out onto the ground.

No. 2

Date: Aug. 18, 1981 Time: 10:00 A.M

General Direction Faced: West

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at a small portion of the dump site showing drums stacked high at the left and several drums scattered in the center.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: September 14, 1981
Time Received: 8:00 am
Date Completed: September 24, 1981

LLI Project No.: 81-7149

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Composite Waste Paint Sludge Collected September 10, 1981

Sample Identification	Analysis	Results
Sludge	Specific Gravity	1.658 g/ml
	Dissolved Sulfide	< 3 mg/liter
	Free Cyanide	51 mg/kg
	Total Cyanide	57 mg/kg
	Total Arsenic	4.4 mg/kg
	Total Barium	113 mg/kg
	Total Cadmium	22 mg/kg
	Total Chromium	600 mg/kg
	Total Lead	2,400 mg/kg 5/mg
	Total Mercury	0.09 mg/kg ok.
	Total Selenium	< 1 mg/kg
	Total Silver	0.65 mg/kg
	EP Toxicity	
	Arsenic	< 0.25 mg/liter
	Barium	< 5.0 mg/liter
	Cadmium	0.16 mg/liter
	Chromium - Hexavalent	108 mg/liter
	Chromium	116 mg/liter 5 mg/liter
	Lead	< 0.25 mg/liter
	Mercury	< 0.01 mg/liter
	Selenium	< 0.05 mg/liter
	Silver	< 0.25 mg/liter

RECEIVED
AUG 27 1987
BUREAU OF ENVIRONMENTAL REMEDIATION

Comments:

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

STATE OF KANSAS
DIVISION OF ENVIRONMENT
TOPEKA, KANSAS

Job No. _____

Date Aug. 18, 1981

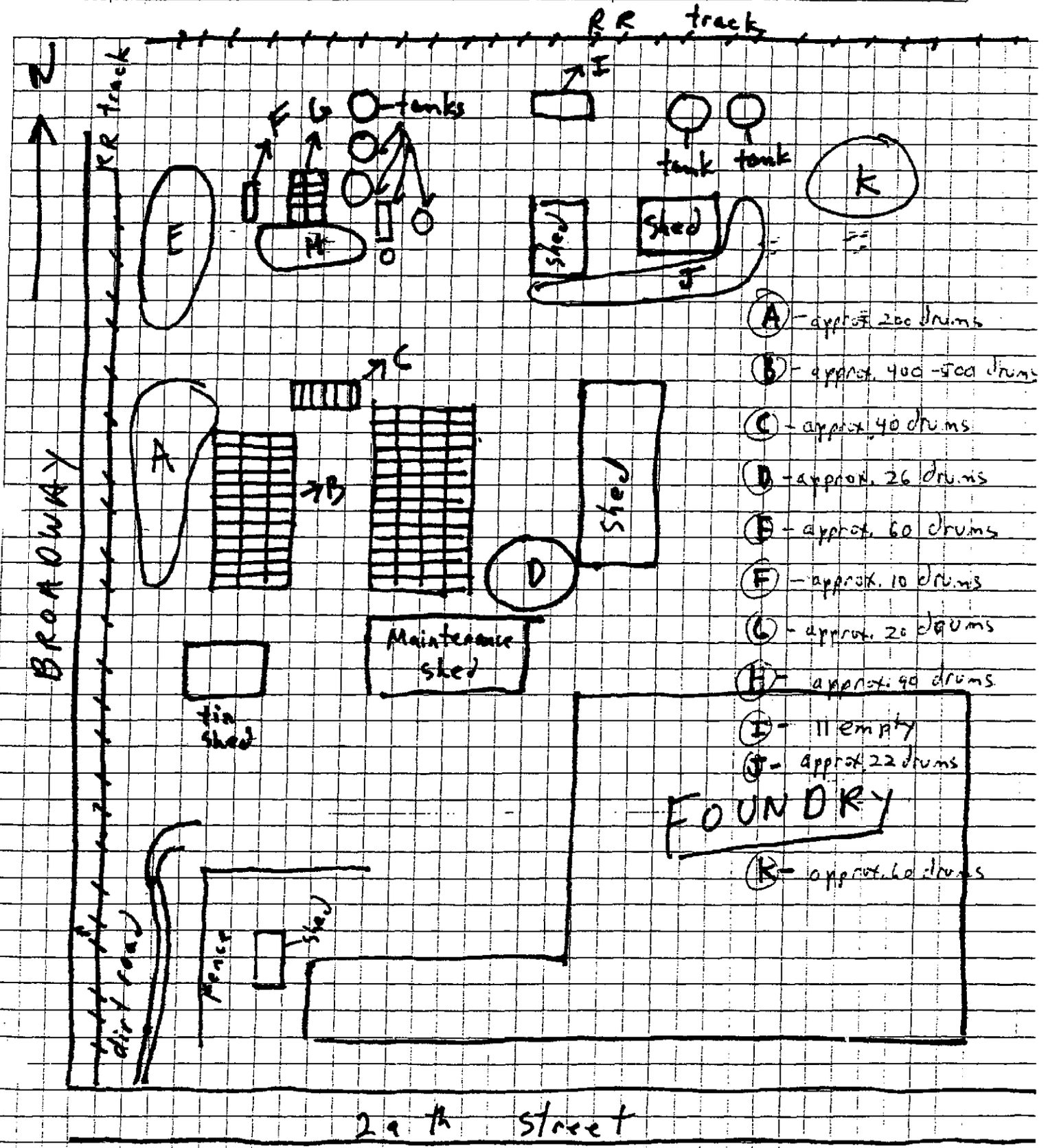
Sheet _____ of _____

Project _____

By Paul T. Stanley

Subject Wichita Brass and Aluminum Foundry Complaint

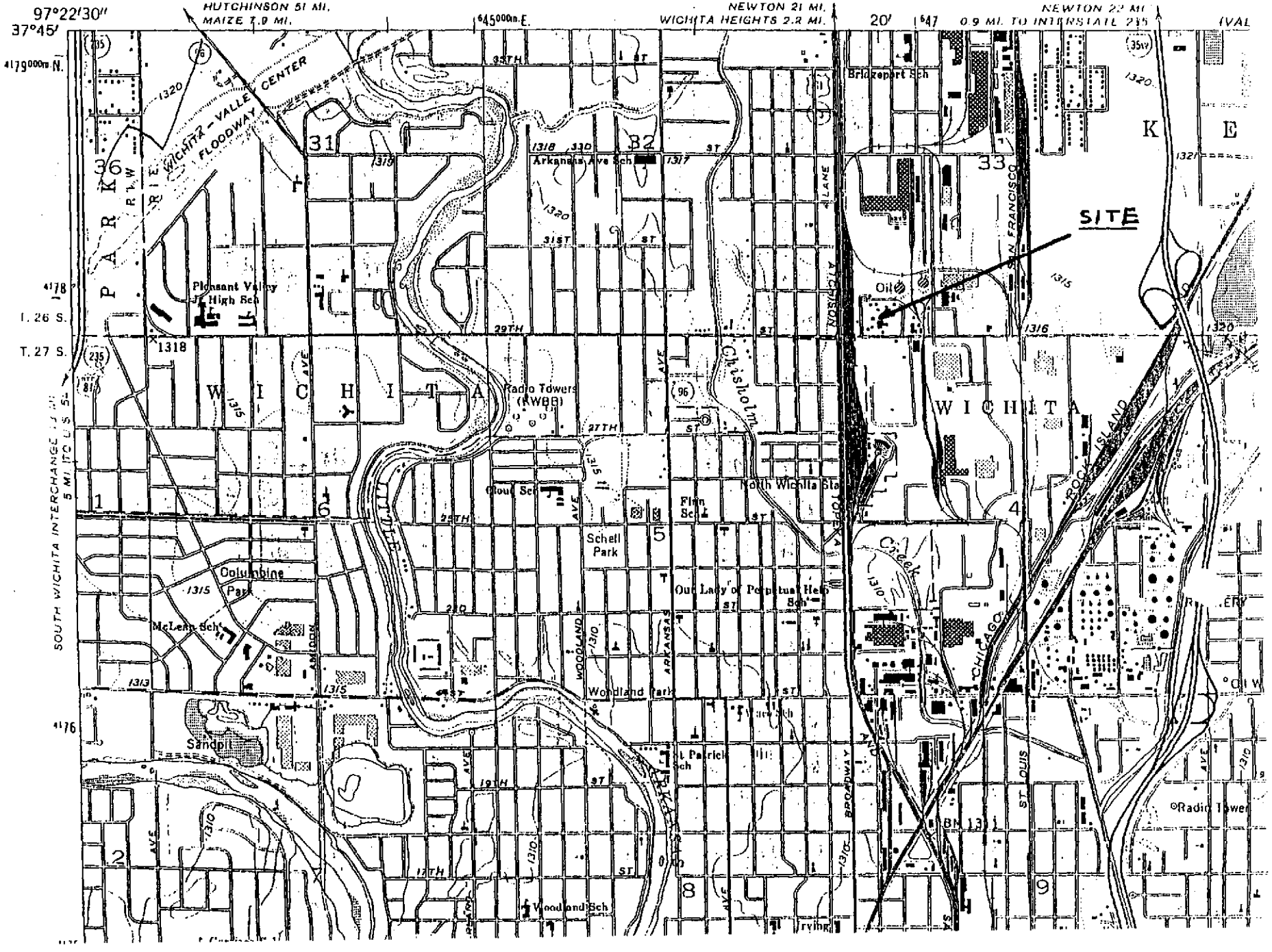
Ck'd. _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Wichita Brass + Aluminum Foundry, Wichita.

STATE



11.6
Wichita Brass + Alum

United States Department of the Interior

GEOLOGICAL SURVEY
Water Resources Division
1950 Constant Avenue - Campus West
Lawrence, Kansas 66046

May 20, 1986

RECEIVED
BUREAU OF
MAY 29 1986
WASTE
MANAGEMENT

Ms. Emily Roth
Bureau of Waste Management, Superfund Section
Kansas Department of Health and Environment
Forbes Field, Bldg. 321
Topeka, Kansas 66620

Dear Emily,

Please find enclosed the final site investigation package for Wichita Brass and Aluminum, the former Golden Rule refinery, and the former Barnsdall Refinery. Your review comments and requests of April 10, 1986, were considered and incorporated into the final reports. The final package includes the following:

1. Narrative reports for each site, including an Executive Summary for each report.

2. Complete laboratory analysis of samples collected during the fall of 1985.

3. EPA's Site Investigation forms for each site.

4. EPA's Hazard Ranking Score for the composite sites and documentation.

Thank you very much for your time and cooperation.

Sincerely,

Robert J. Hart

Robert J. Hart
Hydrologist

cc: Joseph Rosenshein, USGS
John Stamer, USGS
Jim Power, KDHE
Karl Birns, KDHE

INFORMATION REQUEST - ATTACHMENT B

1. MICHAEL W. CARTER, PRESIDENT
   WICHITA BRASS AND ALUMINUM FOUNDRY, INC.
   412 EAST 29TH STREET, NORTH
   P.O. BOX 4144
   WICHITA, KANSAS 67204-0144
   316 838-4286

2. MANUFACTURING AND PROCESSING ACTIVITIES

   No information is available on the activities of the Golden Rule Refinery.

   Wichita Brass and Aluminum Foundry, Inc. (SIC Code 3440) has operated continuously at this location since 1943, and has manufactured aluminum and magnesium alloy sand and permanent mold castings for Wichita's aircraft industry as well as other commercial customers. No chlorinated organic solvents have been used in this operation.

3. No hazardous wastes listed have been used at Wichita Brass and Aluminum Foundry, Inc.

   See attached manifests on previous clean-up activities (1981 & 1988)

4. A. See No. 3 above (manifests).
   B. Unknown.
   C. See attached manifests.
   D. No. 16 - SITE HISTORY.
   E. See attached manifests.
   F. See attached manifests.

5. No knowledge of spills, leaks or releases.

6. No such system has ever existed to our knowledge.

INFORMATION REQUEST - ATTACHMENT B

7. Enclosed please find copies of our Comprehensive General Liability insurance policies for:

   08-01-86 to 08-01-87
   08-01-87 to 08-01-88
   08-01-88 to 08-01-89

   These policies were acquired through Alpha Omega Insurance in Wichita, Kansas. All previous years' insurance back to approximately 1960, were acquired through the Harrison Insurance Agency in Wichita. That agency has gone out of business and copies of those policies are not available.

8. Tax Returns are enclosed for years 1983, 1984, 1985, 1986, 1987.

9. Financial Statements are enclosed for years 1984, 1985, 1986, 1987, 1988.

10. See No. 12 below.

11. Articles of Incorporation and Corporation By-Laws are enclosed.

12. MICHAEL W. CARTER, President, Director, 50% Shareholder
    VICTOR D. CARTER, Vice President, Director, 50% Shareholder
    JENNIFER J. CARTER, Secretary-Treasurer, Director
    VICKIE S. CARTER, Assistant Secretary-Treasurer, Director

    This is the entire corporate structure.

13. None to our knowledge.

14. None to our knowledge.

15. None to our knowledge.

INFORMATION REQUEST - ATTACHMENT B

16. SITE HISTORY - (NO KNOWLEDGE PRIOR TO GOLDEN RULE REFINERY)
Golden Rule oil refinery operated on this site until approximately 1943, when the east 200 feet frontage was purchased by Wichita Brass and Aluminum Foundry, which began operations there at that time (See attached letter of July 10, 1946). Numerous oil sludge pits were on the property and are still encountered when digging.

The west 287 feet of the property was bought from Golden Rule refinery by a Walt Stevens prior to 1946 and the open sludge ponds shown in aerial photographs were used as a landfill until approximately 1955. Mr. Stevens sold the property in the early 1960's to his son-in-law, Wilbur Durham, a Compton, California, doctor, who then sold the property to the above-mentioned foundry in approximately 1965.

The solvent recovery operation was operated by an unknown individual until it was purchased in approximately 1959 by Emmett L. Carter, who operated it until 1964 on a part time basis and then only sporadically until 1971 when it ceased operation. In 1981, the KDHE oversaw the clean-up operation associated with the removal of all waste solvents remaining as well as the associated sludges and drums at a cost in excess of $30,000. EPA toxicity tests were completed at that time, which indicated no contamination of soil at the 6-inch or the 12-inch depth (See attached Langston Lab report and manifests).

In 1988, the dismantling of the solvent recovery operation was completed in conjunction with the possible sale of this property by Wichita Brass and Aluminum Foundry, Inc. During this effort, three (3) tanks were found to have paint sludge in the bottom. The tanks were removed in compliance with local, state, and federal laws at a cost in excess of $40,000 (See attached manifests).

17. No knowledge of any.

INFORMATION REQUEST - ATTACHMENT B

18. No other records are available to the best of our knowledge.

19. No such area exists to our knowledge, except for the landfill operated by Walt Stevens prior to 1955 as stated in #16 - SITE HISTORY.

20. Wichita Brass and Aluminum Foundry, Inc. occupies the same property as the Golden Rule Oil Company. This is in the Chisholm Creek drainage and was subject to area-wide flooding three or four times per year during the 1930's, 1940's and 1950's. Such patterns of flooding could have redistributed surface materials and even have carried many materials away, such as hydrocarbon products and by-products.

    Aerial photographs of the area taken in 1938, 1950, 1960, 1963, 1968, 1974, and 1977, indicate our property as well as the property adjacent east, north and south, to be occupied by many open pits containing hydrocarbon by-products. Only God knows what may or may not have been disposed of over nearly forty years...or what may have been moved by flood waters to or from the 29th and Mead site. The 29th and Mead site was "out of town", in an industrial area, and we are sure that under those circumstances 20, 30, 40 or even 50 years ago, it was acceptable practice to dump almost anything into the area known as "The Tar Pits" (Reference John's Sludge Pond and Super Refined Oil Response Actions). Under the circumstances that prevailed many years ago, prior to the existance of RCRA, CERCLA, and the Superfund, it may not be surprising to find such a large area of varied contamination.

Gone Good While was

THE GOLDEN RULE OIL COMPANY

BLUE RIBBON GASOLINE AND KEROSENE

WITH VISCOSITY, EMPIRE PROCESSED AND DOWNING'S AND PENNSYLVANIA LUBRICATING OILS, GREASES

AND IRRIGATION EQUIPMENT

BATTERY CHARGERS, GAS TANKS, ETC.

FREE TOWN AND COUNTRY DELIVERY

WICHITA 2, KANSAS

July 20, 1948

Wichita Brass and Aluminum,
Wichita,
Kansas

Attention of E. L. CARTER
and
R. L. MOHLEY

Dear Sirs:

This letter will be a receipt to you for $2,050.00 paid by you today as balance due on land sold to you, except $2,000.00 which I am to carry by note and mortgage to be paid on or before one year at five per cent interest. It being understood that the requirements made by your attorney on abstract of title are not yet completed by me but are to be completed and turned to you when completed.

Very truly yours,

Elbert B. Rule

Elbert B. Rule

120 West First Street,

Wichita, 2, Kansas.

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

Joseph F. Harkins, Secretary

Forbes Field
Topeka, Kansas 66620
913-862-9360

August 19, 1981

Michael Carter
President
Wichita Brass and Aluminum Foundry, Inc.
412 E. 29th St. N
Box 4144
Wichita, KS 67204

Dear Mr. Carter:

As you became aware yesterday, there is a definite problem regarding the shut down lacquer thinner reclamation unit with its associated backlog of drums. Though most of these drums appeared empty at the time of my investigation, there was a substantial number which still contained free liquid, sludge, or dry residue. I can only assume, from what you told me and from the odor in the air, that some of these still contain solvent and/or paint sludge or residue. Under K.A.R. 28-29-39 solvents of the nature used as lacquer thinner have been designated as listed hazardous wastes while paint sludges may or may not be considered hazardous, depending on the concentration of heavy metals which are detected in the sludge or residue by virtue of a standard Extraction Procedure (EP toxicity) test.

It is important to understand that you have a real and immediate problem with these abandoned waste drums. They are in a very seriously deteriorated condition and it can be seen that several have corroded through and the contents leaked out onto the ground. I saw several that were in the actual process of leaking during the time of my visit. Though there is an associated fire risk with the remaining solvent, the most serious danger is one of groundwater contamination. Since the operation was shut down eight years ago probably most of the damage has already been done, however, that does not justify an attitude of letting the remaining sources of contamination run their course.

What our department needs to see is some action taken to alleviate the problem by Wednesday August 26, 1981. First and foremost, empty drums, that is those which contain less than a two-inch bottom layer of waste, need to be seperated from non-empty drums. The empty drums can be thrown off to one side and the non-empty drums can also be moved to a central location, unless it is apparent that movement will cause the drum to rupture. It is probable that a solvent recovery firm can be contracted to suck off any free solvent the waste paint solids however, will have to be analyzed to determine hazardousness. unless a reasonable assumption can be made that it is hazardous without testing. One important thing to remember is that under no condition must any of these drums, empty or otherwise, leave the site without our department's prior knowledge and approval.

The Reid Supply Company

911 E. Indianapolis
Wichita, Kansas 67211
267-1231
(AC 316)

950 Liberty
Kansas City, Missouri 64101
842-4440
(AC 816)

CONTRACT FOR PICK-UP AND RESALE OF SOLVENT

GENERATOR: Wichita Brass & Aluminum

412 E. 29th N. Wichita, Ks. 67219

GENERATOR EPA ID NO.: Emergency Number

Transporter and Recycling Facility: The Reid Supply Company

Transporter and Recycling Facility EPA NO.: KSD 007246846

This agreement made this 25th day of August, 19 81, between the GENERATOR above-named and The Reid Supply Company, Inc., an approved Transporter and Recycling Facility for hazardous wastes.

WHEREAS the GENERATOR has on hand certain quantities of hazardous materials and wastes and has requested that The Reid Supply Company pick-up said wastes and remove the same from the premises of GENERATOR indicated above, and

WHEREAS, The Reid Supply Company is presently involved in the business of transporting and recycling such hazardous wastes;

IT IS THEREFORE AGREED, for and in consideration of the promises hereafter made by both parties, that:

1. Reid Supply Company agrees to pick-up at the GENERATOR'S location set out above the following quantities of waste solvents for the price set out below:

Waste Solvent @ $1.50 /~~drum~~ gal. TOTAL minimum 2000 gal.

_____ @ _____ /drum TOTAL _____

Bulk Pick Up

2. The waste solvents so obtained from GENERATOR shall either be resold by Reid Supply Company to another recycling facility or recycled and reprocessed by Reid Supply Company at its own facilities.

3. GENERATOR ~~hereby agrees~~ may agree to repurchase from Reid Supply Company any recycled waste solvent generated by Reid Supply Company in its recycling operation in the quantities and at the prices set out below:

_____ @ _____ /drum TOTAL _____

_____ @ _____ /drum TOTAL _____

4. GENERATOR ~~hereby agrees~~ may agree to purchase from The Reid Supply Company reconditioned drums for storage and transportation of waste solvents, said drums conforming to DOT standards 17ESTC in the quantities and at the cost set out below:

Reid Yellow	@	$18.25/drum	TOTAL	$18.25 per drum
	@	/drum	TOTAL	

5. GENERATOR ~~hereby agrees~~ may agree to purchase from Reid Supply Company at such future times as it may require, new or virgin solvents marketed by Reid Supply Company at such times and in such quantities as GENERATOR shall require in its daily business operation.

The price of said solvents shall be determined by Reid Supply Company and shall fluctuate from time to time depending on cost to Reid Supply Company and manufacturers price increases. Reid Supply Company hereby reserves the right to cancel and rescind this contract in the event that GENERATOR does not purchase from Reid Supply Company new or virgin solvents as herein provided.

6. GENERATOR hereby warrants to Reid Supply Company that all drums of waste solvent which will be made available to Reid Supply Company for pick-up and recycling shall conform to all applicable local, state, and federal requirements for the storage and identificati of hazardous wastes, and specifically that;

a. The waste solvents will be stored in DOT approved 17ESTC containers;

b. The drums containing hazardous waste solvents shall be properly labeled in accordance with all applicable laws.

7. It shall be the responsibility of GENERATOR to obtain and properly complete the required EPA hazardous waste manifest form (7-BLS-C). It is further specifically understood and agreed that Reid Supply Company shall be under no obligation whatsoever to pick-up hazardous waste solvents as provided herein unless GENERATOR shall have obtained a GENERATOR EPA number and have properly labeled all hazardous waste solvents offered to Reid Supply Company.

8. It is further understood and agreed that Reid Supply Company is not involved in the transportation, handling, reprocessing, or sale of any radioactive waste material and in this regard, should Reid Supply Company determine that any hazardous waste solvents ~~offered to Reid Supply Company contains~~ any radioactive material, either before or after pick-up from GENERATOR, Reid Supply Company reserves the right to return any such waste to GENERATOR, whereupon, GENERATOR shall be responsible for disposing of said waste and, in addition, shall reimburse Reid Supply Company for any costs incurred in the transportation or handling of said radioactive waste.

GENERATOR by:

FOR REID SUPPLY COMPANY, INC.

Gene E. Stamm, General Manager

NIES

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 746
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-1

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐☐

EPA I.D. No. KSP 000000005

Business Name WICHITA BRASS AND ALUMINUM FOUNDRY, INC.

Business Address 412 E. 29th St. North

Pickup Address/Location Same

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838 – 4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:
Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. ☐☐☐☐☐☐

Site Location 8808 No. 127th St. East, Valley Center, Kans EPA I.D. No. KSD 070902952

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazzard Class
100449	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

*Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions

Date of Shipment Dec. 1981

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Michael W. Carter
Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070902952

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Hauler License No. ☐☐☐☐

Business Address 8808 N. 127th St. East Truck License No. ☐☐☐☐☐☐☐

Phone Number (316) 744-1286 Date Received December 3, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name Hauler License No. ☐☐☐☐

Business Address Truck License No. ☐☐☐☐☐☐☐

Phone Number ( ) Date Received

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Disposal Location

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site RETURN TO GENERATOR ABOVE Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Date Shipped to Final TSDF

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

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LIVE THE LAND

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 745
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-2

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐

EPA I.D. No. KSP000000005

Business Name WICHITA BRASS & ALUMINUM FOUNDRY, INC.

Business Address 412 E. 29th St. North

Pickup Address/Location SAME

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838 - 4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:

Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. K S 1 8 3

Site Location 8808 No. 127th St. East, Valley Center, Kansas EPA I.D. No. KSD 070902952

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazzard Class
100449	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

*Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions

Date of Shipment December 3, 1981

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Michael W. Carter
Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070902952

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Hauler License No. ☐☐☐☐

Business Address 8808 No. 127th St. East Valley Center, Ks Truck License No. ☐☐☐☐☐☐☐

Phone Number (316) 744-9286 Date Received December 3, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Ernest Morgan
Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name Hauler License No. ☐☐☐☐

Business Address Truck License No. ☐☐☐☐☐☐☐

Phone Number ( ) Date Received

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Disposal Location

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site RETURN TO GENERATOR ABOVE Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Date Shipped to Final TSDF

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

NIES

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 745
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No UHA-3

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ____

EPA I.D. No. 000000005 KSP-

Business Name WICHITA BRASS AND ALUMINUM FOUNDRY, INC.

Business Address 412 East 29th Street, North

Pickup Address/Location Same

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838-4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:

Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. KS199

Site Location 8808 No. 127th Street East, Valley Center, Kansas EPA I.D. No. KSD 07090295

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazzard Class
100649	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

*Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions ____

Date of Shipment December 1, 1981

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070502952

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC.

Hauler License No. ____

Business Address 8808 N. 127th Street, East

Truck License No. ____

Phone Number (316) 744-1286 Date Received December 2, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Hauler No. 2

EPA I.D. No. ____

Hauler Name ____

Hauler License No. ____

Business Address ____

Truck License No. ____

Phone Number ( ) ____ Date Received ____

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No. ____

Waste Receiving Site RETURN TO GENERATOR ABOVE

Permit No. ____

Site Location ____

Phone Number ( ) ____ Date Received ____ Disposal Location ____

Discrepancies Noted: ____

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No. ____

Waste Receiving Site ____

Permit No. ____

Site Location ____

Phone Number ( ) ____ Date Received ____ Date Shipped to Final TSDF ____

Discrepancies Noted: ____

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

4

H.R.I. WASTE SAMPLE ANALYSIS

HYDROCARBON RECYCLERS, INC.
2525 New York
Wichita, Kansas 67219
(316) 267-5742

Detailed Analysis X
Confirmation Analysis ___

Approx. 8/5/88

Generator Wichita Brass & Aluminium Code # W-21 Date Received ___
Address 412 E. 29th N. P.O. Box ___ Phone # ___
City/State Wichita KS Zip Code 67219 Contact ___
Sample Labeled as Waste Paint Related Material Pickup Date ___
Manifest Document # ___

PHYSICAL/VISUAL ANALYSIS OF WASTE SAMPLE

Color ___ Phase: Unilayer ___ Bilayer ___ Multilayer ___
Odor ___ Water ___% Solvent ___% Solids ___%

RCRA HAZARDOUS WASTE DETERMINATION

Ignitability: Flashpoint ___ °F/°C
Corrosivity: pH ___
Reactivity: ___

EP Toxicity (ppm.)
Barium ___
Cadmium ___
Chromium ___
Lead ___

TCLP (ppm.)
Acetone ___
MEK ___
Toluene ___
Xylene ___

ANALYSIS PER DISPOSAL METHOD

KILN FUEL OR DISTILLATION

Gas Chromatograph: % Solvent

Methyl Ethyl Ketone	3.8
1,1,1 - Trichlorethane	0.2
Trichlorethylene	0.2
Methyl Isobutyl Ketone	1.1
Toluene	14.1
Butyl Acetate	1.1
Ethyl Benzene	1.3
Xylene	5.9
Styrene	9.1
Cyclohexanone	41.3
Isophorone	4.9
Butyl Cellosolve	1.3
C_9-C_{12} Alkyl Benzenes	1.7
C_7-C_{10} Aliphatics	14.0
Benzene	<0.1

Energy Content 13400 BTU/lb.
Halogen 1.5 % by weight
Halogen (Bielstein) ___ 1000 ppm.
pH 6 Specific Gravity 1.10
PCB's <50 ppm. Compatibility ___

INCINERATION OR HAZARDOUS WASTE LANDFILL

Organic Solvent Content (ppm.)
Acetone ___ MEK ___ Toluene ___ Xylene ___
Total Organic Solvent Content (sniffer) (ppm.) ___
Halogen (Bielstein) ___ 1000 ppm. Corrosivity: pH ___
Specific Gravity ___ Compatibility ___

WASTE WATER, COOLANTS, AND OIL

Flashpoint ___ °F/°C Corrosivity: pH ___ BS&W ___%
Total Organic Solvent Content (sniffer) (ppm.) ___
Halogen (Bielstein) ___ 1000 ppm. Specific Gravity ___
PCB (oil)(ppm.) ___ Compatibility ___
Total Heavy Metals (ppm.):
Barium ___ Chromium ___
Cadmium ___ Lead ___

Comments: Ash - 1%

Chemist: Steve Lovensheimer Date 8-15-88 Approval: Stephen M Keiter Date 8/30/88

RECOMMENDATION: Kiln Fuel X Distillation ___ Incineration ___ H. W. Landfill ___ Water/Oil ___

COPIES: Generator, Operator, Chemist, File (original) 1/88

U.S. POLLUTION CONTROL, INC.

HAZARDOUS WASTE PROFILE SHEET

5600

EXHIBIT A TO _____ Contract Dated _____

As prescribed by the Resource Conservation and Recovery Act (Public Law 98-580 Sec. 3004), a detailed chemical and physical analysis must be submitted before we can handle your waste stream. This information is necessary to help us evaluate whether we can safely and economically transport and dispose of your controlled industrial wastes in an environmentally sound manner. Be as complete as possible. If an area is not applicable, mark as such. Should a laboratory analysis be available, please attach it to this form. We can arrange analytical laboratory services, if neded, for an appropriate fee. All information we receive will be held in strictest confidence to protect your interests. **SAMPLE WILL NOT BE PROCESSED UNLESS ALL AREAS OF THIS SHEET ARE PROPERLY FILLED IN.**

Purchase Order No. _____ Sales Representative _____

I. Generator Information

( ) Check if small quantity Generator per CFR-40

Name of Company: WICHITA BRASS & ALUM

US EPA ID: KSD

Facility Address: 417 E. 29th, WICHITA, KS 67204

Invoicing Information: _____

Mailing Address: P.O. Box 4144

Technical Contact: MIKE CARTER — Title: PRES. — Phone ( ) 838-4280

General Contact: _____ — Title: _____ — Phone ( )

II. Waste Stream General Information

Waste Name: WASTE PAINT RELATED MAT'L

Process Producing Waste: ABANDONED TANK

ANTICIPATED VOLUME: 1000 gal per year ____ per month ____ per week ____ one time only X

Color: DARK — Odor: MILD

III. Waste Properties

Physical State @ 25°C: ( ) Liquid ( ) Powder ( ) Solid (X) Sludge

Layers: (X) Single Phase ( ) Bi-layered ( ) Multi-layered

Free Liquids: ( ) Yes (X) No

pH: N/A — Type Acid: N/A — Density: N/A

Normality: N/A — Type: N/A — Caustic: N/A

(X) Organic ( ) Inorganic

Flash Point: <140 °F

Chemical Composition (X) % ( ) PPM (List all known)

	Range Lower	Range Upper
TOLUENE	(C)	(50)
XYLENE	(C)	(50)
	( )	( )
	( )	( )
	( )	( )
	( )	( )
	( )	( )

Metals-EP Tox Test — Mg/l or PPM

Arsenic (As)	( )	Lead (Pb)	* (UNK)	Nickel (Ni)	( )
Barium (Ba)	( )	Vanadium (V)	( )	Zinc (Zn)	* (UNK)
Cadmium (Cd)	( )	Selinium (Se)	( )	Thallium (Tl)	( )
Chromium (Cr)	* (UNK)	Silver (Ag)	( )	Cobalt (Co)	( )
Mercury (Hg)	( )	Copper (Cu)	( )		

Possible Component (include unit of measure) NONE

Cyanides _____ 2, 4, D _____ Dioxin _____

Sulfides _____ Phenolics _____ Organic Chlorides _____

IV. PCB Oil: Type NO Concentration % ____ % ppm ____ **PCB Equip:** Type ____ Concentration % ____ % ppm ____

PCB Solids: Type ____ Concentration % ____ % ppm ____ Has equipment been drained and flushed according to 40 CFR Part 761? ____

Attach information for dimensions, weight and nameplate capacity for all equipment.

V. Hazardous Characteristics (From CFR-40)

U.S. EPA Hazardous Code(s): D001

Is the waste: ( ) Pyrophoric ( ) Infectious ( ) Water reactive ( ) Radioactive ( ) Pathogenic ( ) Explosive ( ) Pesticides/Herbicides ( ) Biological ( ) Shock sensitive ( ) Etological

VI. Shipping Information (From CFR-49)

Proper DOT Shipping Name: WASTE PAINT RELATED MATERIAL

DOT Hazard Class: FLAMMABLE — UN/NA Number: NA 1263 — Reportable Quantity: RQ=100 #

Method of Shipment: ( ) Bulk Liquids ( ) Bulk Solids ( ) Drums ( ) Other

Special Handling and Safety Instructions: FROM NORTH TANK.

I certify and warrant that the above information, the information attached, and the waste stream as described is true and correct to the best of my knowledge and ability and not willful or deliberate omissions exist and that all known and/or suspected hazards have been disclosed, and a sample representative of the waste stream has been or is being sent to the proper facility. Further, I certify the samples have been collected using the appropriate EPA sampling guidelines and acknowledge that the current sample profile fee will be charged by U.S. Pollution Control, Inc. and be paid by generator.

Michael W. Carter — President — 7/30/88

SALES ORDER

ORDER NUMBER 1817

C.S.I. mB

CONSERVATION SERVICES, INC.
2525 N. NEW YORK
WICHITA, KANSAS 67219
(316) 267-5742

DRUM DEL

DATE 9-27-88

SOLD TO:

SHIP TO: WICHITA BRASS & ALUM
412 E 29th North
WICHITA, KS

CUSTOMER NO.	P.O. NUMBER	TO BE SHIPPED	SHIP DATE	SHIP VIA	TERMS NET	1%	FOB WHSE	DEST	PREP	COL	SALE
	MIKE	9-27	9-27	1	X			X			S

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	CODE	UNIT	TAXABLE YES	TAXABLE NO	DESCRIPTION
	40	40	DS	EA		X	17-H STEEL DM
	45	45	MISC 38	EA		X	DRUM GASKETS

Returned 1 Drum Dammaged on previous Delivery.

Victor D. Carter

FILLED BY	DELIVERED BY	GROSS WEIGHT

EMPTY'S RETURNED: JUGS ____ 15 GAL ____ 30 GAL ____ 55 GAL ____

PALLETS: SHIPPED ____ RETURNED ____

RECEIVED BY X

CODE: B Balance of item back ordered
C Shipment of item considered complete
D We do not stock this item
S To be shipped separately

DEPOSIT CONTAINERS MUST BE RETURNED IN RE-USEABLE CONDITION WITHIN 90 DAYS FOR DEPOSIT REFUND.

AN EQUAL OPPORTUNITY EMPLOYER

PACKING SHEET & CUSTOMER'S COPY

SALES ORDER

ORDER NUMBER 1767

CONSERVATION SERVICES, INC.

2525 N. NEW YORK
WICHITA, KANSAS 67219
(316) 267-5742

DRUM DEL

DATE 9-12-88

SOLD TO:

SHIP TO: WICHITA BRASS & ALUMINUM
412 E. 29th NORTH
WICHITA KS 67219

CUSTOMER NO.	P.O. NUMBER	TO BE SHIPPED	SHIP DATE	SHIP VIA	TERMS NET 1%	FOB WHSE DEST	PREP COL	SALE
	MIKE CARTER	ASAP		UPS/CI	☒ ☐	☐ ☒	☐ ☐	

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	CODE	UNIT	TAXABLE YES	TAXABLE NO	DESCRIPTION
	40		DS	EACH		X	17-H DRUMS

FILLED BY

DELIVERED BY

GROSS WEIGHT

EMPTIES RETURNED: JUGS ____ 15 GAL ____ 30 GAL ____ 55 GAL ____

PALLETS: SHIPPED ____ RETURNED ____

RECEIVED BY X

CODE: B Balance of item back ordered
C Shipment of item considered complete
D We do not stock this item
S To be shipped separately

AN EQUAL OPPORTUNITY EMPLOYER

DEPOSIT CONTAINERS MUST BE RETURNED IN RE-USEABLE CONDITION WITHIN 90 DAYS FOR DEPOSIT REFUND.

PACKING SHEET & CUSTOMER'S COPY

STATE OF KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT
Forbes Field
Topeka, Kansas 66620-0001
Phone (913) 296-1500

Mike Hayden, *Governor*

Stanley C. Grant, Ph.D., *Secretary*
Gary K. Hulett, Ph.D., *Under Secretary*

September 27, 1988

Mike Carter
Wichita Brass & Aluminum
Foundry, Inc.
P.O. Box 4144
Wichita, Kansas 67204

Re: EPA I.D. Number: KSP000000144
412 East 29th North
Wichita, Kansas 67219

Dear Mr. Carter:

This is a follow-up letter to the telephone request of September 26, 1988 for a temporary EPA I.D. Number.

You have been assigned the number KSP000000144 with the effective date of October 3, 1988 and the expiration date of November 2, 1988.

We understand the number assigned is for the purpose of disposal of approximately 150 barrels of paint sludge.

I have enclosed a blank notification form 8700-12. You should complete the form and return it to this department no later than ten (10) days from receipt of this letter.

You should submit a copy of all hazardous waste manifests to me after shipment is complete. If you have any questions, please feel free to call me at (913) 296-1607.

Sincerely,

John Paul Goetz, ~~P.E.,~~ Chief
Hazardous Waste Section
Bureau of Waste Management

sc/jpg.ltr
C Dale Stuckey

Please print or type with ELITE type (12 charact r inch) in the unshaded areas only

STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT

Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law (*Section 3010 of the Resource Conservation and Recovery Act*).

For Official Use Only

Comments

Installation's EPA ID Number	Approved	Date Received (yr. mo. day)	County
KSP000000144 (T/A C 1)			

I. Name of Installation

WICHITA BRASS & ALUM FDRY INC

II. Installation Mailing Address

Street or P.O. Box: BOX 4144

City or Town	State	ZIP Code
WICHITA	KS	67204

III. Location of Installation

STREET ADDRESS OR LOCATION FROM KNOWN REFERENCE POINT: 412 E 29TH STREET NORTH

City or Town	State	ZIP Code
WICHITA	KS	67204

IV. Installation Contact

Name and Title (*last, first, and job title*)	Phone Number (*area code and number*)
CARTER MICHAEL PRES	316 834 2846

V. Ownership

A. Name of Installation's Legal Owner	B. Type of Ownership (*enter code*)
WICHITA BRASS & ALUM	P

VI. Type of Regulated Waste Activity (*Mark 'X' in the appropriate boxes. Refer to instructions.*)

A. Hazardous Waste Activity

- [X] 1a. Generator
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5. Market or Burn Hazardous Waste Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

NOTE: If generator, you must complete section X.E. on back side of form.

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer (*or On site Burner*) Who First Claims the Oil Meets the Specification

RECEIVED OCT 5 1988 BUREAU OF WASTE MANAGEMENT

VII. Waste Fuel Burning: Type of Combustion Device (*enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.*)

[ ] A. Utility Boiler [ ] B. Industrial Boiler [ ] C. Industrial Furnace

VIII. Mode of Transportation (*transporters only — enter 'X' in the appropriate box(es)*)

[ ] A. Air [ ] B. Rail [ ] C. Highway [ ] D. Water [ ] E. Other (*specify*)

IX. First or Subsequent Notification

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

[X] A. First Notification [ ] B. Subsequent Notification (*complete item C*)

C. Installation's EPA ID Number: KSP000000144

Form 8700-12 (Rev. 11-85) Previous edition is obsolete.

Continue on reverse

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSP 000000144

Manifest Document No.: 00001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD 981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD 007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Material, Flammable Liquid NA 1263 RQ=100 lbs		40	DM	16,000 #	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

RECEIVED
OCT 19 1988
BUREAU OF WASTE MANAGEMENT

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Michael W. Carter | Signature: Michael W. Carter | Month 10 Day 5 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month 10 Day 5 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Pamela K. Robertson | Signature: Pamela K. Robertson | Month 10 Day 5 Year 88

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSP 000000144

Manifest Document No.: 00002

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100lbs		40	DM	16,000	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

OCT 19 1988
BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: MICHAEL W CARTER | Signature: Michael W. Carter | Month 10 Day 06 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month 10 Day 6 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: David R Harris | Signature: David R Harris | Month 10 Day 06 Year 88

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. 60646 (312) 478-0900

EPA Form 8700-22 (Rev. 9/86) Previous editions are obsolete.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. KSP 000000144

Manifest Document No. 00003

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316)838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100 lbs.		40	DM	16,000#	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

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BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: MICHAEL W. CARTER | Signature: Michael W. Carter | Month 10 Day 06 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DOERMAN | Signature: Gary Doerman | Month 10 Day 6 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: RONALD K. ROBERTSON | Signature: Ronald K. Robertson | Month 10 Day 18 Year 88

Please print or type. (Form designed for use on elite (pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. KSP 000000144

Manifest Document No. 00004

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100 lbs.		15	DM	6,000	P	F003 F005
b.							
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OCT 19 1988

BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: MICHAEL W. CARTER | Signature: Michael W. Carter | Month 10 Day 06 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month 10 Day 6 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: David R Harris | Signature: David R Harris | Month 10 Day 7 Year 88

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. 60646 (312) 478-0900

EPA Form 8700-22 (Rev. 9/86) Previous editions are obsolete.

SCAN SCREEN U.S.T. TANK INFORMATION ENTER Q-QUIT: _

ENTER INFORMATION CODE: _ ENTER SEQUENCE #: ___
(OPTIONS=T,C)

412 E 29th St N

FACILITY #: 42280 FACILITY NAME: WICHITA BRASS AND ALUMINUM FOUND

SEQ NO	TNK NO	EST YR	CAP. IN GAL	PETROLEUM	OUT OF SERVICE	STATUS OF TANK
001	A001	1978	001200	GASOLINE	REMOVED	PERM. OUT

Excerpts from Report(s) Prepared by Others

NIC

11.6 Wichita Brass & Aluminum Foundry

Analytical Data

AD

DEPARTMENT OF HEALTH AND ENVIRONMENT

Division of Environment

RECEIVED
OCT 1981
BUREAU OF ENVIRONMENTAL SANITATION

M E M O R A N D U M

October 12, 1981

TO: SUPERFUND SITES FILE

FROM: Dale T. Stuckey, Field Representative DTS

SUBJECT: Investigation of Oil Sludge Pits Associated with Past Refinery Operations in Wichita. Section 4, T27S, R1E.

Primarily from a few off-hand remarks made by Mike Carter of the Wichita Brass and Aluminum Foundry and his father, Emmett Carter, I learned of the existance of two past refinery operations in the general vicinity of 29th Street and Broadway in Wichita. One went by the name of Golden Rule Refinery and was located in the northeast corner of the 29th street and Broadway intersection. It apparently went out of business in the late 1930's, probably 1938 or 1939. The other refinery went by the name of Barnsdall Refinery and was bounded by 29th street on the north, 25th street on the south, Broadway and the railroad tracks on the west, and St. Francis street on the east. This refinery went out of business about 1955. There were some oil sludge pits associated with each site.

GOLDEN RULE REFINERY

The Golden Rule Refinery was situated where Wichita Brass and Aluminum Foundry is located now. It was run by an Elden or Elbert Rule. When he went out of business he sold the land to a Walt Stevens who in turn, in 1941, sold the land to Emmett Clark. That year Emmett started up his foundry operation. Both Mike and Emmett Carter remember there being a general dump area just west of their property and east of the railroad tracks back in the mid-1940's. Initially Mike thought he remembered it containing some oil sludge but later he stated he didn't really remember what was in the pit. He believed it was closed out around 1946. During the time when I first made contact with Mike while investigating his company's abandoned lacquer reclamation project with its associated backlog of solvent and paint waste drums, he informed me that directly underneath the area over which the drums were scattered was a sizeable oil sludge pit. But in later conversations with him and his father, I was told they didn't think that there was, in fact, any oil sludge buried under their property. It was their feeling that all the old waste material associated with the refinery and with the dump had been burned off. Mike did mention, however,

that if one did some digging around out by the old stills, one would be likely to run into some oily dirt. In scraping down through old layers of dried paint sludge in this area, he had himself encountered some.

Visible on the enclosed 1938 aerial photograph is a cluster of possible oil sludge pits around two tanks on the western edge of the Golden Rule Refinery. This area corresponds to the old salvage and lacquer reclamation area located at the Wichita Brass and Aluminum Foundry currently. Also visible on this photograph, just north of the aforementioned area, is what appears to be a long sausage-shaped pit. This property is presently owned by a Dolese Concrete Company. On September 23, 1981 I made a brief reconnaisance of this area along with Kent Rowe of the Wichita-Sedgwick County Department of Community Health. In a location corresponding with that of the sausage-shaped pit we found a large mound of concrete. We later spoke with an employee of Dolese, who though declining to give us his name, told us that the concrete had been poured back in 1953. In 1951 he remembered there being oil in a pit there. He said that it had about a one foot soil cover on top and was fairly deep. One of the company's trucks had somehow gotten into it and was buried. It can be seen from the enclosed 1950 aerial photograph that this pit was indeed still there in 1950, though the refinery operation itself had been completely dismantled and there was no sign of any of the other pits.

BARNSDALL REFINERY

A check of plat records in the Sedgwick County Clerk's office showed that Barnsdall Oil Company's property was transferred over to Bareco Oil Company on August 8, 1935. Whether this was just a name change or an actual change of ownership is not known. On April 11, 1955 Bareco Oil Company's property was transferred over to Industrial Development Inc.

Oil sludge pits associated with the old Barnsdell and/or Bareco Oil Refinery were more numerous and the investigation in regards to them more involved, than was the case for the Golden Rule refinery. Basically there were two major pits on their property and I attempted to trace the destiny of these as best I could.

* * *

The major pit at the northwest corner of the property was square in outline, appeared to have a surface area of about one acre, and first shows up on the 1950 aerial photograph. It also appears in the 1960 photograph but is absent in the 1968 series. On August 1, 1962 this northwest corner property was deeded from Industrial Development Inc. to Kansas Paint and Color, Inc. Kansas Paint and Color owned the land up until January 6, 1975 when they deeded it to Glickman, Inc. This plat of land is currently referred to as K.P.&C. addition. I had a brief phone conversation with the plant manager (he declined to give his name) of Kansas Paint and Color on September 23, 1981 in connection with this pit. He said that his company had hired a contractor to

clean it out around 1965. All the water was pumped out and dumped and the oil sludge was dredged out and hauled off to an adjacent tract of land south of there, spread out over the ground and buried. Some of this oil sludge was also hauled off and used to stabilize dusty county roads. He declined to give any more specifics on how the sludge was handled and the exact location of where it was buried.

In conversation with both Mike and Emmett Carter it was confirmed to me that there was indeed a large oil sludge pit just south of their property and on the other side of 29th street back in the 60's. They remembered it having caught fire in 1959 and that a fire truck from Boeing Aircraft had to be used to put it out. They were also under the impression that the oil sludge had been cleaned out in the mid-60's. Mike remembered seeing them come in with an auger to dig it out and he believed that they had excavated a series of trenches running east-west, in a location somewhat southeast of the original pit, into which the oil sludge was dumped, mixed with dirt and covered.

I also had a brief phone conversation on September 29 with Steve Potucek of the Wichita Planning Commission concerning this northwest pit. He told me that Kansas Paint and Color had originally bought the land with the intent of setting up a metals reclamation operation, and that $35,000 was shelled out to clean up the oil sludge pit.

* * *

The second major pit was located about 200 yards due south of the northwest pit, was also about one acre in size, and was rectangular in outline. Emmett Carter believes that all this oil sludge was dug out, spread over a wide area in the same general vicinity and buried. The pit shows up on the 1960, 1968 and 1974 aerial photographs. This tract of land was owned by Industrial Development, Inc. up until September 17, 1973 when Johnnie Darr deeded the land to Frank H. Ise. Johnnie Darr had apparently obtained the land as a result of Industrial Development, Inc. having failed to pay its taxes. On July 25, 1974 Frank H. Ise deeded the land to James Gardner (former city commissioner). On August 12, 1974 James Gardner deeded the land to Wichita Metals, Inc., a firm that operates a car crusher on the site. I spoke with Dean Kline of Kansas Metals, Inc. by phone of September 24. He informed me that when construction began on the car crusher in 1974, there were no pits on the property. Since the 1974 aerial photograph was dated March, 1974, it appears that this main pit and all smaller associated pits were cleaned out sometime between March and August 12, 1974 - a period of time when the land was owned by James Gardner. I spoke with Mr. Gardner by phone on September 29 in an effort to gather facts about any cleanup operations but he refused to divulge any information whatsoever. It was his feeling that any kind of publicity on this matter would shed negative light on all associated parties.

In the above paragraph I mentioned that there were some smaller pits in this area. The pits I am referring to can most clearly be seen in the 1960 aerial photograph. There were two, irregular in outline, between the north and south major pits, and there were two south of southern major

pit. The boomerang shaped pit at the southeast corner of the southern major pit is about where the car crusher is sitting now. Emmett and Mike Carter remember that a horse got mired down in some oil sludge close to this location sometime back in the '50's. The long pit running east-west and situated just southeast from the northern major pit, was sitting in close proximity to where a fence line runs now which encloses Kansas Metals property. On September 23 Kent Rowe and myself discovered what, appeared to be, an oil sludge pit with an upper coating of dirt at this same general location. The sludge was very thick and could be walked over while sinking in slowly. Several skeletons of dead animals were entrained on the surface. Enclosed are a series of Polaroid snapshots taken of the area. Most all of this material was sitting on land which is now owned by Mike Carter, though the eastern most extremity of the sludge was on land which is being leased from Mike Carter by Roofing Service Company. It is possible that the waste originated from the roofing company's operations, but it appeared to me to be more of a refinery waste product. I believed I could detect some refinery odor while probing around in the sludge. On September 28 I revisited this site and collected a sample of the sludge in a mason jar. It should be presently undergoing heavy metals analysis in our Topeka lab.

CONCLUSION

This pretty much concludes the information I have gathered on this subject to date. The problem which arises, is that, though it appears all the oil sludge was handled in a way in which microbial breakdown would be encouraged (i.e. - through mixing with dirt), my assessment is gathered second-hand and I have no hard facts to go on regarding the clean up operations. The people that would know the specifics, the plant manager at Kansas Paint and Color and James Gardner, have shown no willingness to make the information available to me. In my mind, the course that needs to be taken, is for a higher official than myself to attempt extracting information from these two sources and if this fails, for field work, in the form of augering or drilling, to commence on revealing the location of the sludge, its physical and chemical characteristics and any threat it may pose to the ground water. The water table in the area of concern is only 15 to 20 feet deep.

Likewise the possibility of buried oil sludge on the old Golden Rule Refinery property needs to be looked into. It is conceivable that the old sausage-shaped pit previously mentioned might still be in existance underneath tons of concrete.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: October 27, 1981
Time Received: 11:15 am
Date Completed: November 30, 1981

LLI Project No.: 81-7449

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Soil

Sample Identification	Analysis	Results
One Foot Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter
Six Inch Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter

The above soil samples were taken by Mr. Dale Stuckey (KDHE Employee) in late october 19[illegible] at the location he determined to be the worst as far as leaking drums. The results of the EP Toxicity analysis indicate that no hazardous materials had leaked to the 6 inch nor to the 1 foot depth and were probably not ground water contaminants.

Comments:

Michael W Carter
President

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

Department of Health and Environment
Division of Environment

PHOTO MOUNTING SHEET

Name of Site: Uncontrolled Hazardous Waste Site at Wichita Brass and Aluminum Foundry

Location: City Wichita County Sedgwick Legal

No. 1

Date: Aug. 18, 1981 Time: ~~9:30~~ 10:00 A.M

General Direction Faced: East

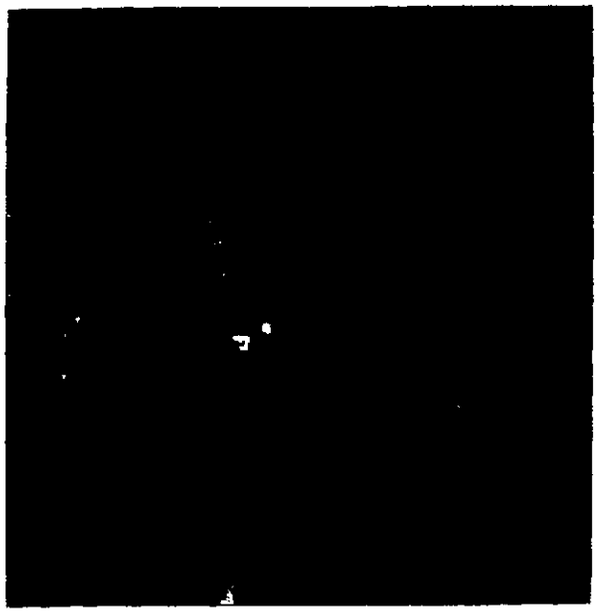
Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at one of the drums in which wastes is actually oozing out onto the ground.

Dale Sturbaum

No. 2



Date: Aug. 18, 1981 Time: 10:00 A.M

General Direction Faced: West

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at a small portion of the dump site showing drums stacked high at the left and several drums scattered in the center.

Dale Sturbaum

STATE OF KANSAS
DIVISION OF ENVIRONMENT
TOPEKA, KANSAS

Job No. _____

Date Aug. 13, 1981

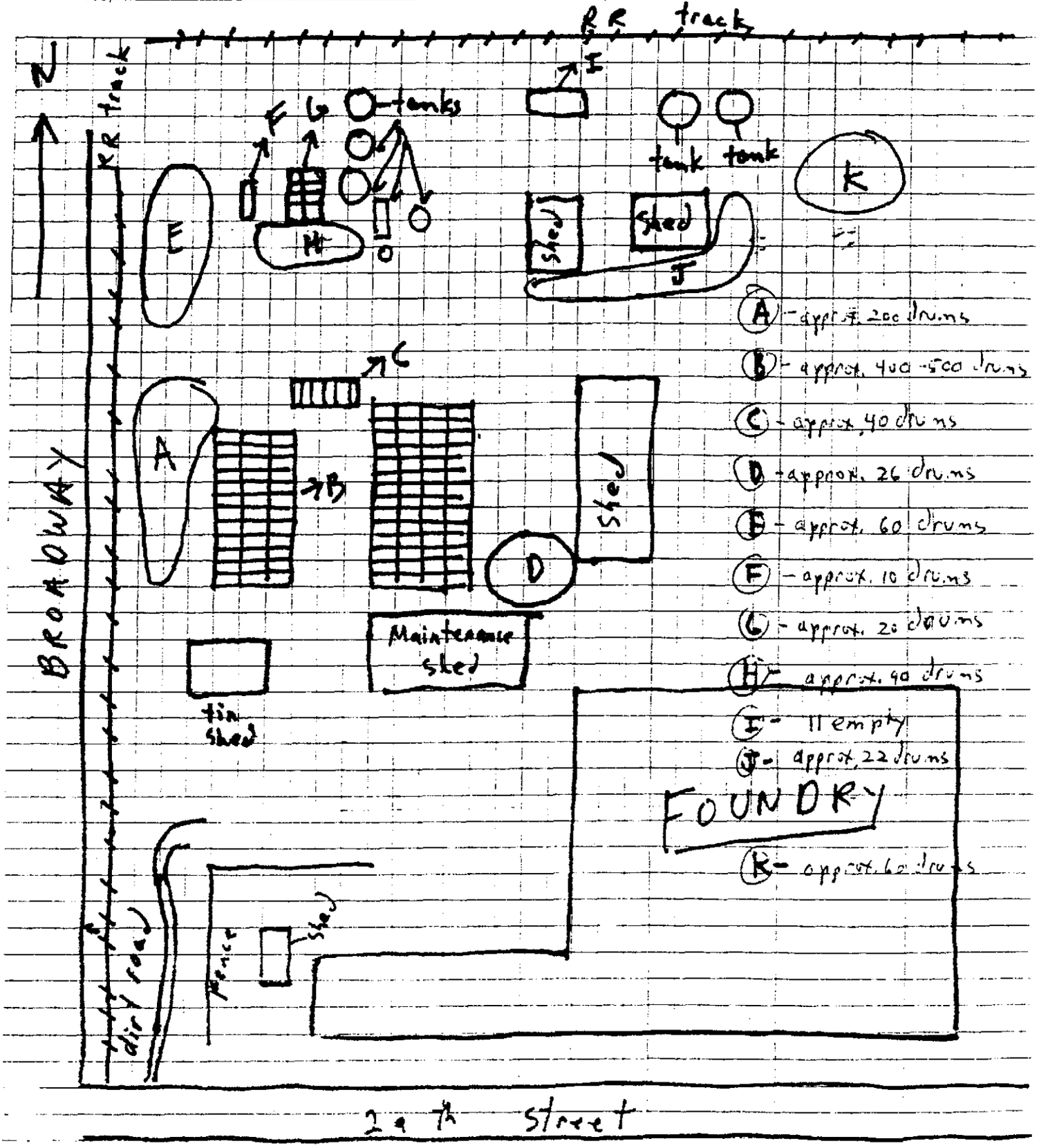
Sheet _____ of _____

Project _____

By Neil T Stanley

Subject Wichita Brass and Aluminum Foundry Complaint

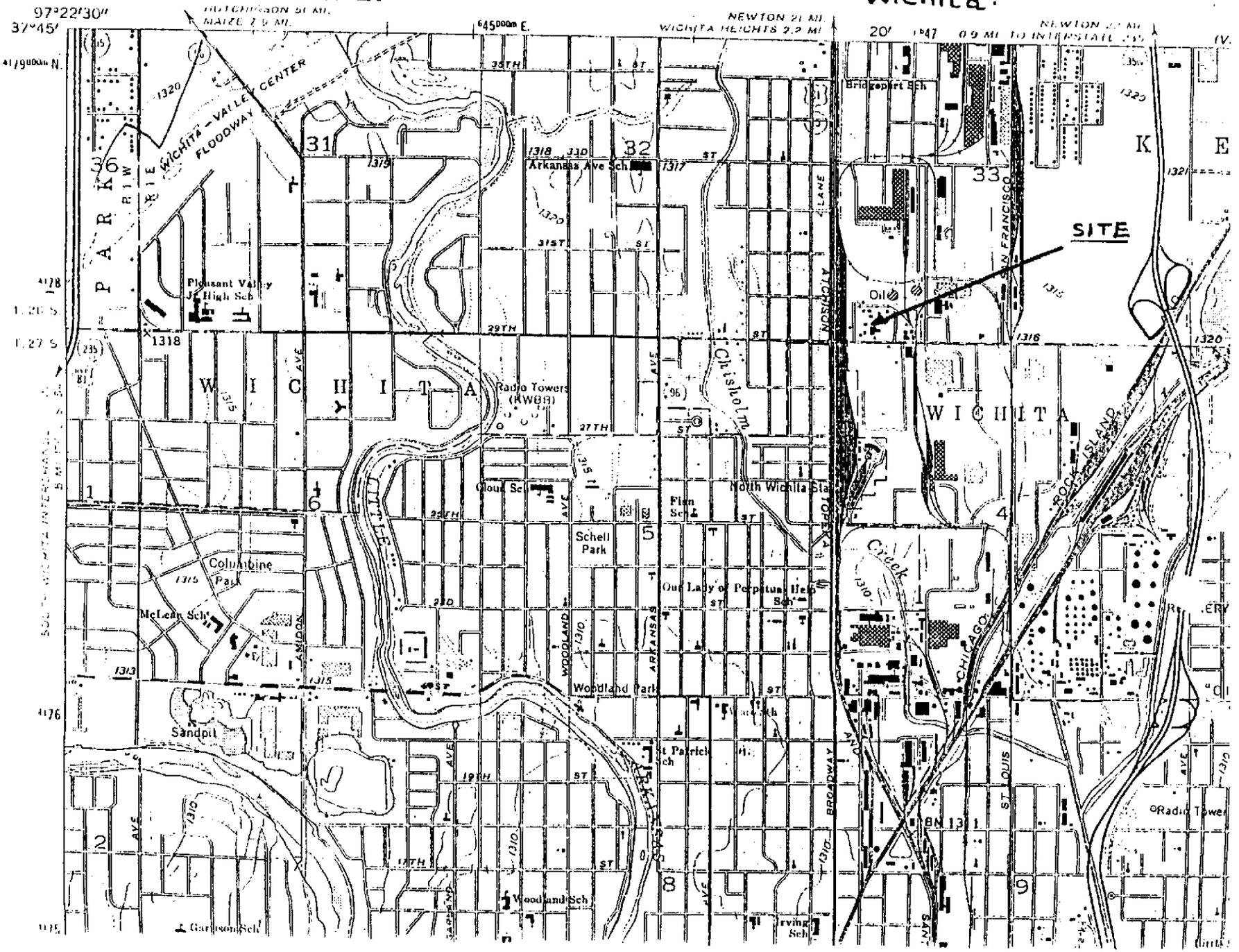
Ck'd. _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Wichita Brass + Aluminum Foundry, Wichita.

STAT



LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: September 14, 1981
Time Received: 8:00 am
Date Completed: September 24, 1981

LLI Project No.: 81-7149

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Composite Waste Paint Sludge Collected September 10, 1981

Sample Identification	Analysis	Results
Sludge	Specific Gravity	1,658 g/ml
	Dissolved Sulfide	< 3 mg/liter
	Free Cyanide	51 mg/kg
	Total Cyanide	57 mg/kg
	Total Arsenic	4.4 mg/kg
	Total Barium	113 mg/kg
	Total Cadmium	22 mg/kg
	Total Chromium	600 mg/kg
	Total Lead	2,400 mg/kg 5/mg
	Total Mercury	0.09 mg/kg
	Total Selenium	< 1 mg/kg
	Total Silver	0.65 mg/kg
	EP Toxicity	
	Arsenic	< 0.25 mg/liter
	Barium	< 5.0 mg/liter
	Cadmium	0.16 mg/liter
	Chromium - Hexavalent	108 mg/liter
	Chromium	116 mg/liter 5 mg/l G.
	Lead	< 0.25 mg/liter
	Mercury	< 0.01 mg/liter
	Selenium	< 0.05 mg/liter
	Silver	< 0.25 mg/liter

RECEIVED
AUG 27 1987
BUREAU OF ENVIRONMENTAL REMEDIATION

Comments:

Approved: Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

NARRATIVE REPORT FOR THE SITE INVESTIGATION OF

WICHITA BRASS AND ALUMINUM, WICHITA, KANSAS

RECEIVED
BUREAU OF
MAY 29 1986
WASTE
MANAGEMENT

TN MC\NEW_DATA

1985

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I. Executive summary

During 1984 and 1985, the U.S. Geological Survey, in cooperation with the Kansas Department of Health and Environment, conducted a site investigation of a potential hazardous-waste site known as Wichita Brass and Aluminum. Two other contiguous sites to Wichita Brass and Aluminum known as the former Barnsdall Refinery and the former Golden Rule Refinery also were investigated. Several ground-water wells located on these sites and on contiguous properties to these sites were sampled. Analyses of ground-water, surface-water, and soil samples showed evidence of the presence of priority pollutants.

A hazard-ranking score (HRS) was assigned to the area, which includes Wichita Brass and Aluminum, Barnsdall, Golden Rule, and surrounding contiguous industrial sites. The composite score (39.11) was based primarily on the observance of ground-water contamination on- and offsite. Ground-water, surface-water, and soil analyses indicated that several past and present facilities have contributed to the overall decrease in environmental quality of the area.

The site of Wichita Brass and Aluminum contained a solvent-reclamation facility that recycled paints, lacquers, and thinners from 1950 to 1973. Prior to 1950, an oil refinery (the former Golden Rule refinery) was operated on and near the site. Both facilities produced hazardous substances that may have contributed to the contamination of the soil and ground water. The largely industrialized nature of the surrounding contiguous properties also may have contributed to the general decrease in ground-water quality in the area.

Analytical results of ground-water samples from wells installed during 1984 and 1985 showed concentrations and persistence of priority pollutants immediately under the site. Volatile organic compounds, such as benzene, were detected during 1984 (1.3 to 7.5 μg/L) and during 1985 (17 to 35 μg/L) that exceeded Kansas Notification Levels (KNL, 0.67 μg/L) and Action Levels (KAL, 6.7 μg/L). Vinyl chloride concentrations ranged from 4.1 to 12.6 μg/L during 1984 and 25 to 44 μg/L during 1985. These concentrations exceeded KNL and KAL standards of 1.0 and 10 μg/L, respectively.

Polynuclear aromatic hydrocarbons (PAH) were detected in the ground water below the site. These carcinogenic compounds consisted of naphthalene (32.2 to 67 μg/L) and phenanthrene (1.8 to 3.7 μg/L). Water-quality criterion for drinking water for PAH's, established by the Environmental Protection Agency (EPA), is 0.0028 μg/L.

Soil contamination was detected onsite that consisted of heavy metals and PAH's. Very toxic and persistent compounds, such as PCB's (1,572 μg/kg), lead (540 μg/g), antimony (4,100 μg/g), and chromium (3,100 μg/g), were detected near the former solvent-reclamation and oil-refinery facilities.

Sediment analysis (bed material) from Chisholm Creek located west of the site, revealed concentrations of antimony (3,400 to 8,100 μg/g), chrysene (54.8 to 149 μg/kg), fluoranthene (54.8 to 141 μg/kg), phenanthrene (26.6 to 108 μg/kg), and pyrene (42.5 to 149 μg/kg). Concentrations were usually larger at the downstream sampling point. The observed compounds are characteristically toxic and persistent.

Air-quality analysis onsite did not show concentrations of ionizable vapors exceeding background concentrations of 0.3 ppm. However, vapors coming from onsite wells during their installation ranged from 4 to 130 ppm.

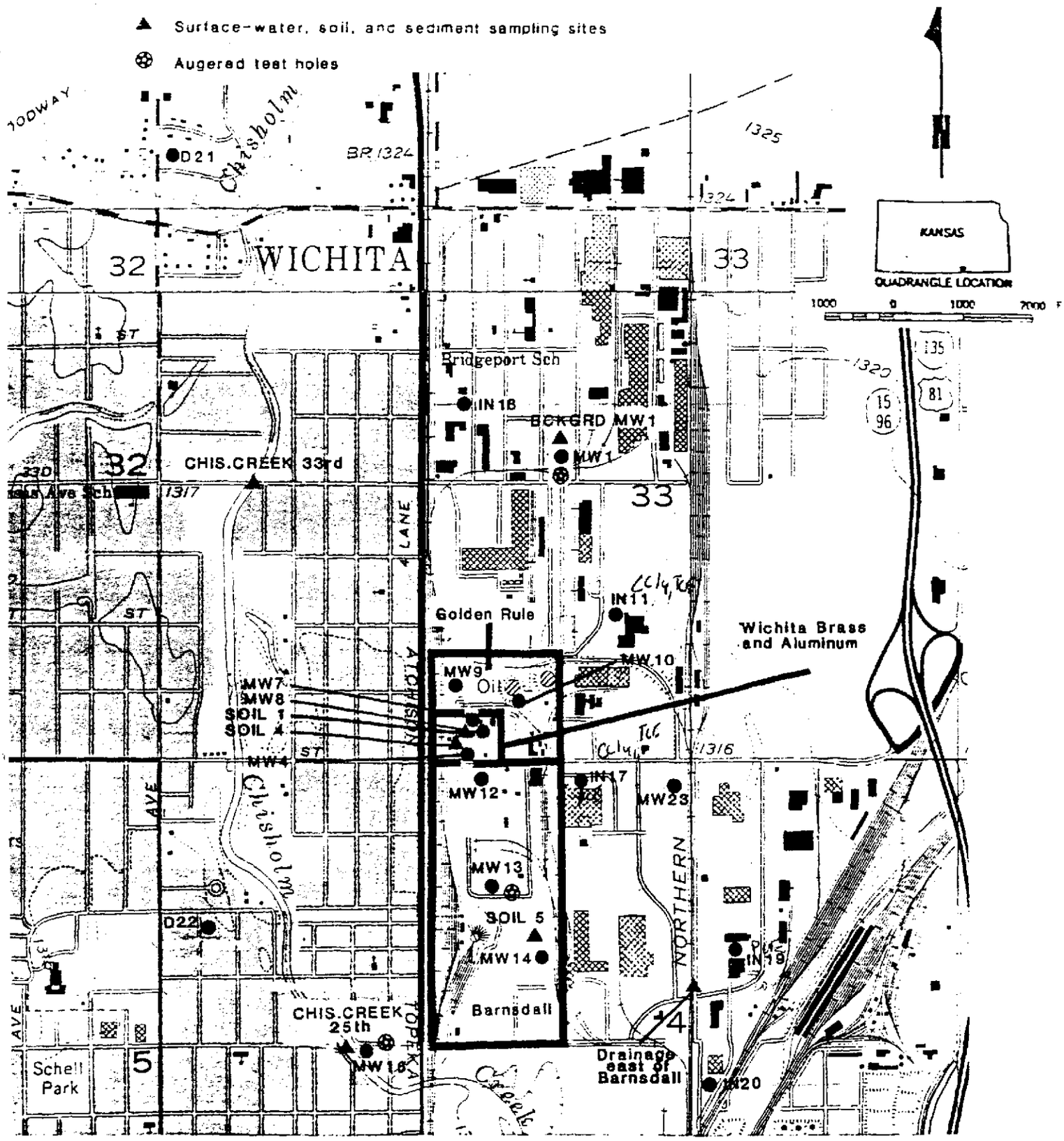


Figure 1. Location of Wichita Brass and Aluminum, Golden Rule refinery, Barnsdall refinery, ground-water, surface-water, soil, and sediment sampling points, and augered test holes.

After the reclamation facility closed in 1973, an estimated 1,300 drums of unprocessed paint and solvents were stored on the west edge of the property. The drums were reported to have been corroded and leaking solvents, thinners, and paint onto the unprotected ground surface. Under the direction of the State, these drums were removed from the site and disposed of at the then approved KIES, Furley, Kans., waste-disposal facility during 1981. Besides the drums, the facility used eight storage tanks of various sizes in the reclamation process.

During 1984, a site investigation of the area was made by the U.S. Geological Survey. As a result of this investigation, several priority pollutants were detected in the ground water immediately below and downgradient from the former drum-storage area. A HNu photo-ionizable air analyzer did not detect ionizable vapors above background concentrations of 0.3 ppm. Vapors coming from the ground-water wells that were placed near the areas of past reclamation activities ranged from less than 10 ppm to 40 ppm. Material on the auger flights was visibly contaminated with oily residues. Volatile organic compounds were detected in all ground-water wells placed on the site. The 1984 investigation prompted further investigation of the site and surrounding industrial facilities to better define the extent of contamination. The ground-water flow paths in the region, the permeability of the soil, and the largely transmissive nature of the associatedaquifer enhance the potential transport of contaminants downgradient from the site.

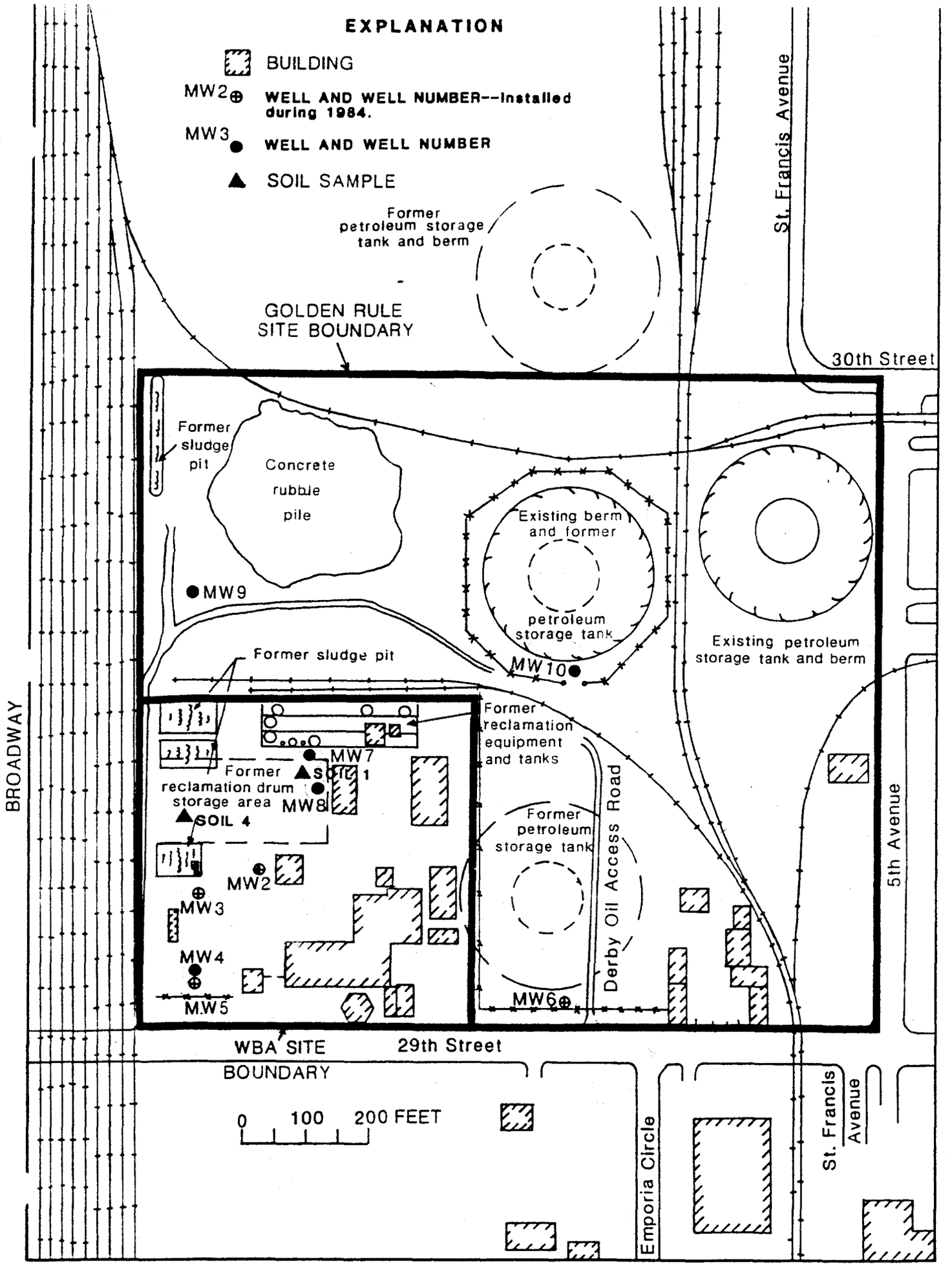
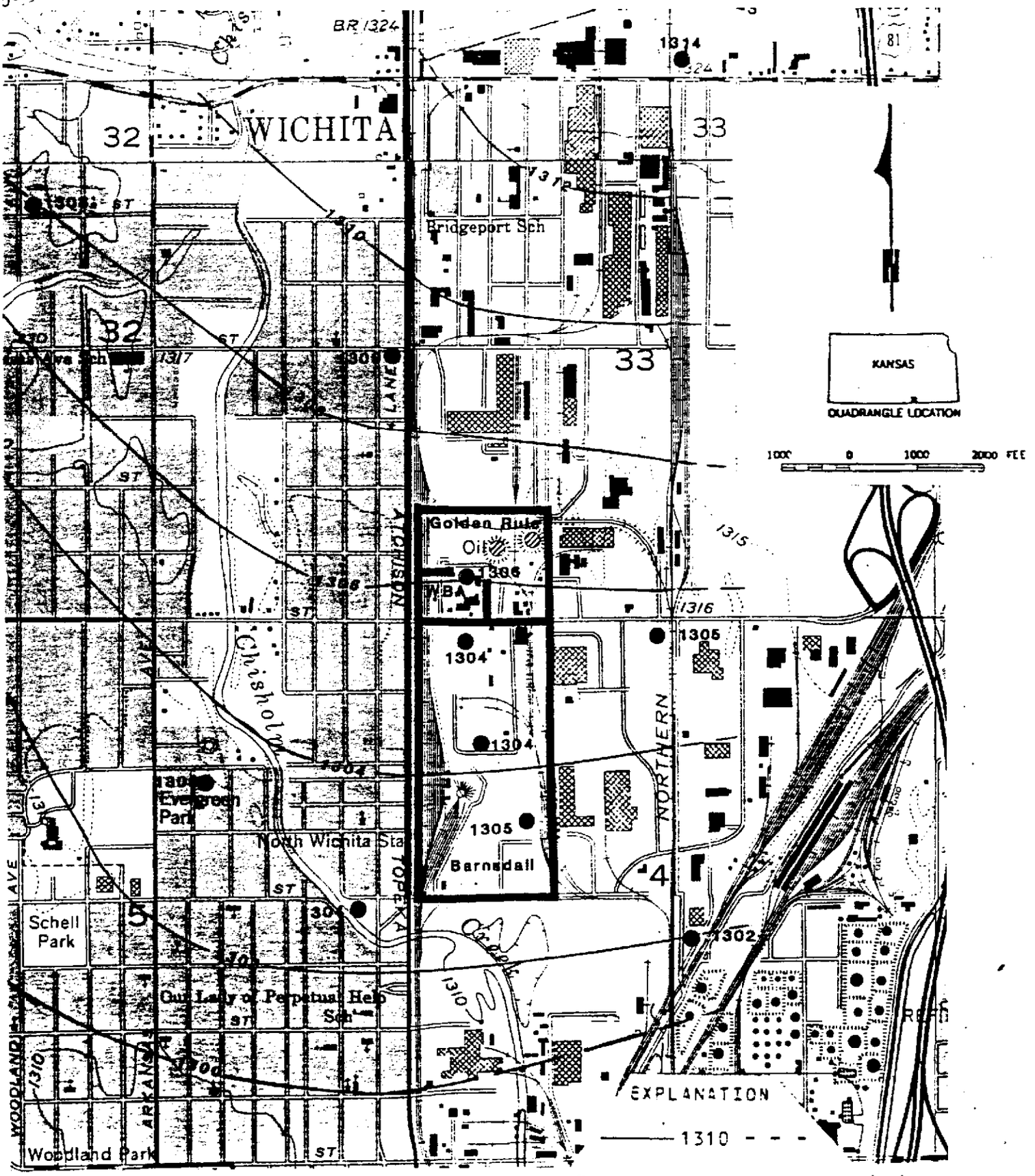


Figure 2. Location and detailed characteristics of the Wichita Brass and Aluminum site (WBA).

Figure 6. Potentiometric surface for the alluvial aquifer during October 30, 1990.



● Measured water level (altitude).

Shows altitude of potentiometric surface. Contour interval 2 feet. National Geodetic Vertical Datum of 1929.

VI. Discussion and evaluation of analytical results

The investigation of the Wichita Brass and Aluminum site was conducted between September 10 and November 5, 1985, by the U.S. Geological Survey. A preliminary investigation was conducted during 1984. The site contains of hazardous waste produced by past solvent-reclamation and oil-refinery operations. Tables cited in this discussion list selected compounds that were detected in samples, and therefore, the reader should refer to the complete analytical results that accompany this report.

Samples from wells MW7 and MW8 showed concentrations and persistence of several volatile organic compounds of which several are listed as carcinogens by the Environmental Protection Agency (EPA). Analysis of ground water immediately downgradient from the reclamation facility showed concentrations of benzene, toluene, and vinyl chloride. Concentrations of benzene ranged from 17 µg/L in MW8 to 35 µg/L in MW7; these concentrations exceed the Kansas Notification Level (KNL) of 0.67 µg/L and the Kansas Action Level (KAL) of 6.7 µg/L. Benzene also was detected during the 1984 investigation in MW2 (7.5 µg/L), MW4 (1.7 µg/L), and MW5 (1.3 µg/L), which are located downgradient from the former reclamation facility and former acid sludge pits. Benzene is a raw material for production of many organic compounds such as lacquers and solvents (Merck Index, 1983), and it was used in the oil-refinery business as a solvent aiding the removal of impurities from oil (Kalichevsky, 1933).

Other volatile organic compounds detected in the ground water were toluene and vinyl chloride. Toluene is used also as a solvent for paints and lacquers, but it is less toxic than benzene (Merck Index, 1983). It was detected in MW7 (4.2 μg/L) during 1985 and in MW5 (3.7 μg/L) during the 1984 investigation. These concentrations exceed the KNL of 3.5 μg/L. Vinyl chloride, a carcinogen, was detected in MW7 and MW8 with concentrations of 44 and 25 μg/L respectively; both concentration far exceed the KNL and KAL of 1.0 and 10 μg/L, respectively. These concentrations also exceed EPA's Water Quality Criteria (WQC) of 2.0 μg/L for human health. Vinyl chloride was detected during the 1984 investigation in MW2 (12.6 μg/L), MW4 (4.1 μg/L), and MW5 (4.8 μg/L). See table 2a for analytical results of volatile organic compounds.

Polynuclear aromatic hydrocarbons (PAH's) were detected in MW7 and MW8. Concentrations of napthalene (a carcinogenic compound) ranged from 32.2 μg/L to 67 μg/L in MW7 and MW8, respectively. These concentrations exceeded the WQC standards of 0.0028 μg/L for PAH's. Phenanthrene also was detected with concentrations ranging from 1.8 μg/L in MW4 to 3.7 μg/L in MW8. See table 2b for analytical results of acid and base/neutral extractable compounds.

Concentrations of heavy metals were detected in several wells onsite. Barium was detected in MW7 and MW8 with concentrations ranging from 1,500 to 1,300 μg/L which exceeds the Primary Drinking Water Standard (PDWS) of 1,000 μg/L established by the U.S. Environmental Protection Agency and the Kansas Department of Health and Environment (KDHE). See table 2c for analytical results.

Monitor wells MW12 and MW16 (downgradient from the site) did not show any volatile or extractable organic compounds. Heavy metals were present in these wells but did not exceed any known drinking-water standards.

Two domestic wells located to the west and northwest of the site, D21 and D22, were sampled. D21 did not show contamination, however, D22 showed concentrations of trichloroethylene (TCE, 20 μg/L) and chloroethylene (4.6 μg/L). The source of these contaminants is unknown. The well is located approximately 1/2 mile to the southwest of the site. D22 is used exclusively for lawn and garden purposes; however, the concentration of TCE exceeded the WQC standard of 2.7 μg/L and the KNL and KAL of 1.8 and 18 μg/L, respectively.

Soil analysis on site showed large concentrations of PAH's and heavy metals. Soil samples collected near MW7 and MW8 (SOIL 1) showed concentrations of hexachlorobenzene (450 μg/kg), naphthalene (870 μg/kg), and PCB's (1,572 μg/kg). PCB's are listed as a carcinogen by the U.S. Environmental Protection Agency and are very persistent and toxic. Concentrations of cadmium (40 μg/g), chromium (3,100 μg/g), lead (540 μg/g), and antimony (4,100 μg/g) were detected in the soil near MW7 and MW8. These metals are very toxic (Sax, 1975). See tables 3a and 3b for analytical results of soil samples.

Sediment samples (bed material) collected in Chisholm Creek located west of the site revealed concentrations of PAHs and metals during 1985. A sample collected at 33rd street showed concentrations of chrysene (27.8 μg/kg), fluoranthene (54.8 μg/kg), phenanthrene (26.6 μg/kg), and pyrene (42.5 μg/kg). Downstream analysis at 25th Street usually showed higher concentrations of PAHs than at 33rd Street. For example, concentrations of chrysene were 121.2 μg/kg greater, fluoranthene 86.2 μg/kg greater, and phenanthrene was 81.4 μg/kg greater. These contaminants may have originated from the site or from surrounding industrial areas contiguous to the site. See tables 3a and 3b for analytical results.

NARRATIVE REPORT FOR THE SITE INVESTIGATION OF

THE FORMER GOLDEN RULE REFINERY, WICHITA, KANSAS

PREPARED BY
USGS
SEE HART & SPRUILL
1988

RECEIVED
BUREAU OF
MAY 29 1986
WASTE
MANAGEMENT

1985

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I. Executive summary

During 1984 and 1985, the U.S. Geological Survey, in cooperation with the Kansas Department of Health and Environment, conducted a site investigation of a potential hazardous-waste site known as the Golden Rule Refinery. Two other contiguous sites to Golden Rule known as Wichita Brass and Aluminum and the former Barnsdall refinery also were investigated. Several ground-water wells located on these sites and on contiguous properties to these sites were sampled. Analysis of ground-water, surface-water, and soil samples showed evidence of the presence of priority pollutants.

A hazard-ranking score (HRS) was assigned to the area, which includes Golden Rule, Wichita Brass and Aluminum, Barnsdall, and surrounding contiguous industrial sites. The composite score (39.11) was based primarily on the observance of ground-water contamination on- and offsite. Ground-water, surface-water, and soil analyses indicated that several past and present facilities have contributed to the overall decreased in environmental quality of the area.

The site of the former Golden Rule Refinery consisted of an oil refinery prior to 1950. On the same site, a solvent-reclamation facility was operated by Wichita Brass and Aluminum from about 1950 to 1973. The reclamation facility occupied approximately 5 acres of the total 40 acres of the Golden Rule Refinery. Both facilities produced hazardous substances that may have contributed to contamination of the soil and ground water. The largely industrialized nature of the surrounding contiguous properties also may have contributed to the general decrease in ground-water quality of the area.

The geology of the area consists of unconsolidated Pleistocene deposits of fine to coarse sand, fine to very coarse gravel, and some silt and clay. These alluvial deposits average 45 feet in thickness. The Wellington Formation of Permian age underlies the unconsolidated alluvial deposits.

Soils in the area are generally deep, moderately well drained, and have slight permeability (0.2 to 0.6 in/hr). Slopes are 0 to 1 percent. Drainage is primarily artificial consisting of sewer systems, drainage ditches, and gutters.

Ground water within the alluvial valley is the most widely used source of water for domestic and stock purposes. Wells penetrating the aquifer are capable of yielding large quantities of water (more than 500 gal/min). Depth to the water table in the vicinity of the site ranges from 9 to 12 feet below land surface. Ground-water flow is to the south and southwest.

The majority of the population within a 3-mile radius of the site are supplied by municipal utilities. However, populations north of 37th Street are not served by municipal utilities. Several lawn and garden wells are used extensively, primarily to the west of the site.

Surface water near the site consists of the Arkansas and Little Arkansas Rivers, Chisholm Creek, and the Wichita drainage ditch. Chisholm Creek is the closest surface-water body to the site (less than 1/4 mile). These water bodies flow southeasterly from the site.

Surface-terrain conductivity surveys showed large and small conductivity readings ranging from 15.6 to 41 millimhos per meter from land surface to 45 feet below land surface, in an area of a former acid sludge pit. Acid sludge characteristically would exhibit small-conductivity capabilities. Background readings were approximately 30 millimhos per meter.

Ground-water wells were sampled onsite and offsite. The wells consisted of monitoring, industrial, domestic, and lawn and garden wells. These wells were primarily shallow in depth, ranging from 13 to 25 feet below land surface. Other wells ranged in depth from 27 to 44 feet below land surface. Contamination was detected in the majority of wells sampled, and established water-quality standards were exceeded in some instances.

Analytical results of ground-water samples showed concentrations and persistence of priority pollutants immediately under the site in wells installed during 1984 and 1985. Volatile organic compounds were detected in wells located downgradient from a former petroleum storage tank. Concentrations of methylene chloride (73-187 μg/L) were detected during 1984 and 1985, exceeding State water-quality standards of 150 μg/L. Trichloroethylene was detected on- and off-site, ranging from 8.8 to 1,935 μg/L during 1984 and 1985, and exceeding the Environmental Protection Agency's water-quality criteria of 2.7 μg/L for human health (WQC). Other carcinogenic compounds were detected such as benzene and vinyl chloride.

Polynuclear aromatic hydrocarbons (PAH) were detected in the ground water below the site during 1984 and 1985. These carcinogenic compounds consisted of anthracene (0.8 to 1.5 μg/L) and phenanthrene (1.8 to 3.5 μg/L). Concentrations exceeded WQC standards of 0.0028 μg/L for PAH's.

Soil contamination exceeding background concentrations was detected onsite. Heavy metals and PAHs detected included lead (480 μg/g), antimony (4,300 μg/g), chrysene (8,200 μg/kg), phenanthrene (9,800 μg/kg), and pyrene (10,200 μg/kg). These compounds may be associated with past oil-refinery and solvent-reclamation operations that once existed on site.

Sediment analysis (bed material) for Chisholm Creek, located west of the site, revealed concentrations of antimony (3,400 to 8,100 g/g), chrysene (54.8 to 149 μg/kg), fluoranthene (54.8 to 141 μg/kg), phenanthrene (26.6 to 108 μg/kg), and pyrene (42.5 to 149 μg/kg). Concentrations were usually larger at the downstream sampling point. The observed compounds are characteristically toxic and persistent.

Air-quality analysis on site did not show concentrations of ionizable vapors exceeding background concentrations of 0.3 ppm. However, vapors coming from onsite wells during their installation, ranged from 4 to 130 ppm.

II. Introduction

During the fall of 1985, the U.S. Geological Survey, in cooperation with the Kansas Department of Health and Environment, conducted a site investigation of a potential hazardous-waste site identified as the Golden Rule Refinery, located in Wichita, Kansas. Data collected for a previous investigation conducted on the site during the fall of 1984 indicated the presence of several priority pollutants in ground water under the site. Based on information obtained from the initial investigation, it was concluded that there is potential for movement of contaminants from this site (and the adjacent industrial area) into existing local supply wells. Work conducted for this site inspection provided sufficient data to evaluate human health and environmental hazards associated with the site.

III. Site history

The site of the former Golden Rule Refinery is located at 29th and Broadway Streets, Wichita, Kansas (figure 1). The property of Golden Rule covers approximately 40 acres and currently is owned by Wichita Brass and Aluminum, Dolese Brothers Concrete, Derby Oil Company, and Wichita Welding Supply.

The refinery operated during the early 1900's and closed out during the late 1930's (1938 or 1939). The refinery created several acid-oil sludge pits (figure 2) where by-products from the refinery process were disposed. These pits apparently were unlined. Current owners of the property believe the sludge pits were burned after 1950. A pit that existed in the northwest corner of the property was reported to have been covered with concrete during 1953. The concrete was removed and piled nearby sometime after 1981. No pits are currently visible.

In the years following the refinery operation (1950-73), a part of the site (3-5 acres) was used as a solvent-reclamation facility where paints, lacquers, and thinners were recycled using spent solvents from nearby industries. This property currently is owned by Wichita Brass and Aluminum Foundry. The reclamation facility closed out in 1973. An estimated 1,300 drums of unprocessed paint and solvents were stored on the west edge of the property. The drums were reported to have been corroded and leaking solvents, thinners, and paint onto the unprotected ground surface. Under the direction of the State, these drums were removed from the site during 1981 and disposed of at the then approved KIES, Furley, Kans., waste-disposal facility. Besides the drums, the facility used eight storage tanks of various sizes in the reclamation process.

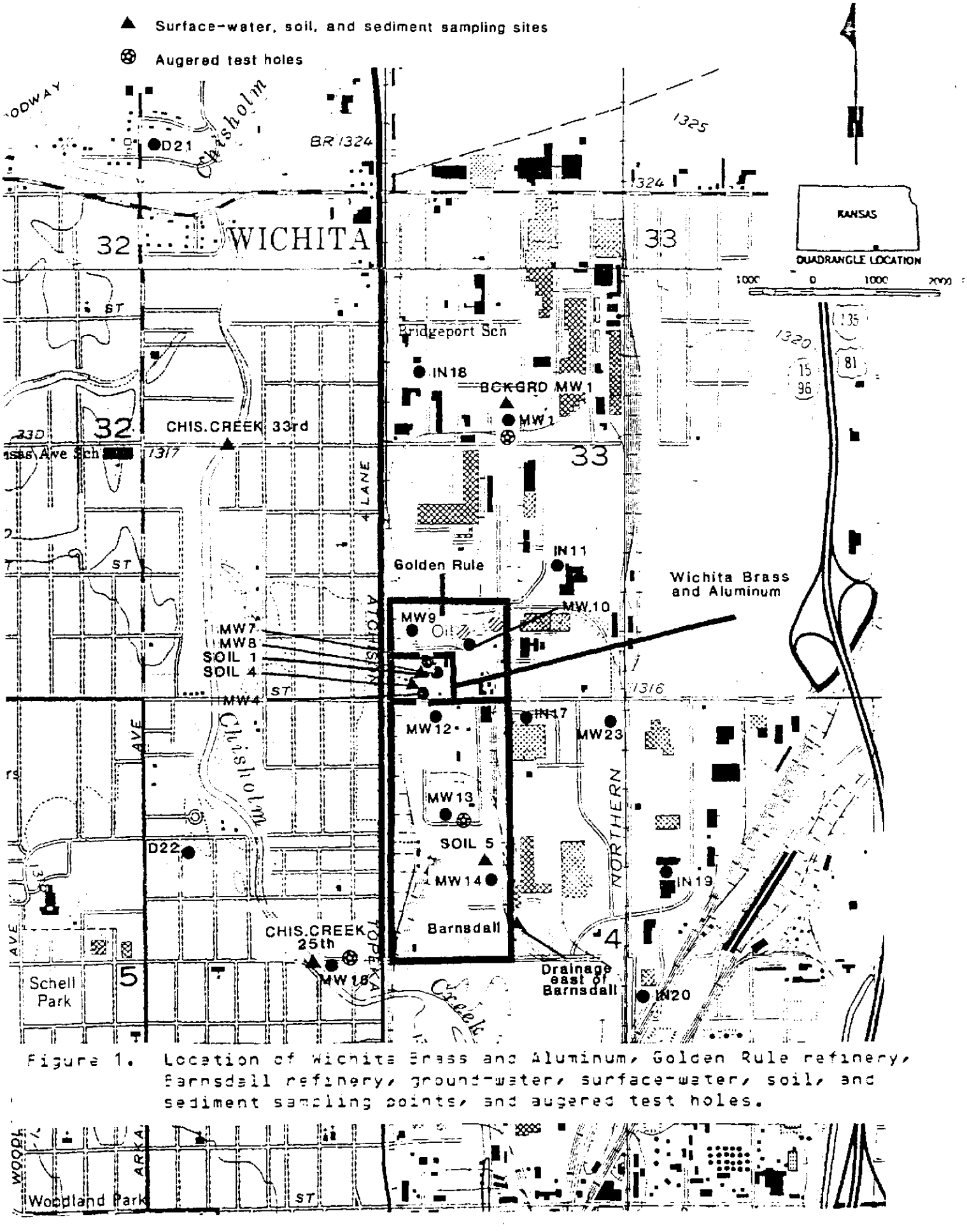


Figure 1. Location of Wichita Brass and Aluminum, Golden Rule refinery, Barnsdall refinery, ground-water, surface-water, soil, and sediment sampling points, and augered test holes.

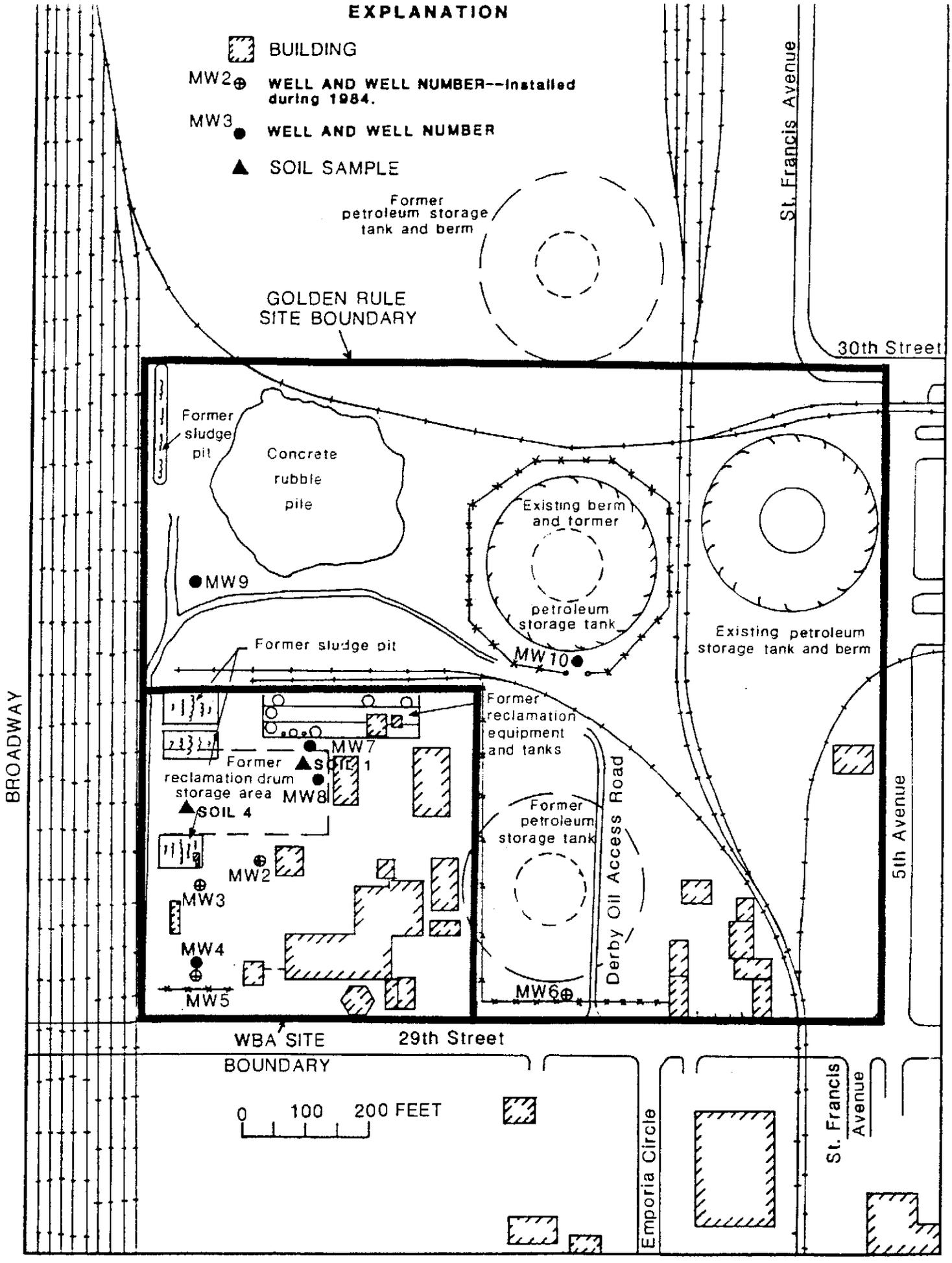
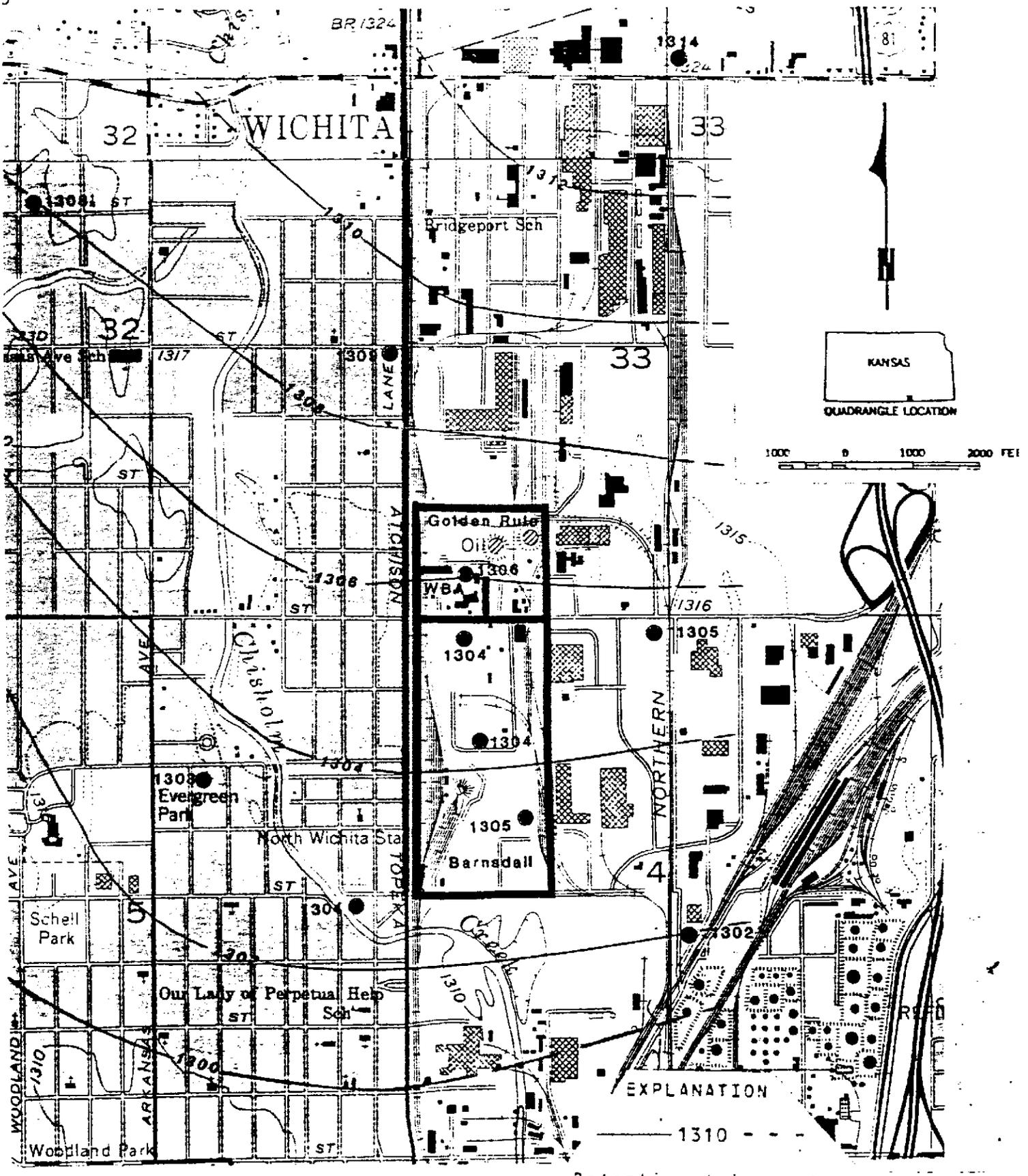


Figure 2. Location and detailed characteristics of the former Golden Rule refinery.

During 1984, a preliminary investigation of the former Golden Rule site was made by the U.S. Geological Survey. As a result of this investigation, several priority pollutants were detected in the ground water immediately below and downgradient from the sludge pits and former drum-storage area. Concentrations of benzene (1.6 to 7.5 µg/L), trichloroethylene (1,935 µg/L), and vinyl chloride (4.1 to 12.6 µg/L) were observed in ground-water monitoring wells in the vicinities of the sludge pits and reclamation area. A HNu photo-ionizable air analyzer did not detect ionizable vapors larger than background concentrations of 0.3 ppm. Vapors coming from the monitoring wells during their installation ranged from less than 10 ppm to 40 ppm. Material on the auger flights was visibly contaminated with oily residues. Volatile organic compounds were detected in all ground-water wells placed on the site. The 1984 investigation prompted further investigation of the site and surrounding industrial facilities to better define the extent of contamination. The ground-water flow paths in the region, the permeability of the soil, and the largely transmissive nature of the associated aquifer enhance the potential transport of contaminants downgradient from the site.

Figure 4. Potentiometric surface for the alluvial aquifer during October 30, 1985.



● Measured water level (altitude).

Shows altitude of potentiometric surface. Contour interval 2 feet. National Geodetic Vertical Datum of 1929.

GROUNDWATER TECHNOLOGY

Groundwater Technology, Inc.
1950 South Florence, Wichita, KS 67209 USA
Tel: (316) 943-3444 Fax: (316) 943-1321

Volumes 1 – V

VOLUME I

PRELIMINARY RESULTS FROM INVESTIGATION OF THE 29TH AND MEAD AREA

Project No. 040020138

August 27, 1991
Revised: June 12, 1992
Revised: June 13, 1996

Prepared For:

Wichita North Industrial District

Prepared By:

Fluor Daniel GTI
1950 S. Florence
Wichita, Kansas 67209

GROUNDWATER TECHNOLOGY

VOLUME I
PRELIMINARY RESULTS FROM INVESTIGATION

29TH AND MEAD SITE
WICHITA, KANSAS

WICHITA NORTH INDUSTRIAL DISTRICT

Includes:
Appendixes A and B

4.1.2.3 Soil BNA Analysis

Soil samples collected from the 0 to 3 foot horizon in each background boring was submitted to GTEL for BNA analysis by EPA Method 8270. No BNA compounds were detected above practical quantitation limits.

4.1.2.4 Soil Metals Analysis

Three soil samples from each background soil boring were analyzed for metals by GTEL. The metals detected were arsenic, barium, chromium, lead, and iron. **Table 9** presents the results of the metals analysis.

Concentrations of arsenic in samples ranged from non-detectable to 3.2 mg/kg. The highest concentration of arsenic was detected in the 9 to 12 foot sample at B5-BG-1 (see **Figure 5**). Barium concentrations ranged from 32 mg/kg to 130 mg/kg. The highest barium concentration was detected in the 3 to 9 foot sample at B5-BG-1. Chromium concentrations ranged from 1 mg/kg to 10 mg/kg. The highest concentration of chromium was from the 3 to 9 foot interval at B5-BG-1. Lead was detected ranging from 3 mg/kg to 37 mg/kg. The highest lead concentration was detected from the 0 to 3 foot interval of A1-BG-2. Iron concentrations in the samples ranged from 2,600 mg/kg to 14,000 mg/kg. The highest iron concentration was detected in the 3 to 9 foot interval of B5-BG-1. No sample contained any metal that exceeded USGS average or native soil concentration ranges. USGS averages and native soil concentrations for metals are shown in **Table 9.**

4.1.3 BORINGS AT REFINERY PITS

4.1.3.1 Soil VOC Analysis - PID Screening

VOC concentrations, as measured with a PID in soil samples collected from four borings at refinery pits, ranged from non-detectable to 3.2 ppm. The highest concentration was from the 0 to 5 foot interval of pit boring B3-PB-2. PID soil screening results are presented in **Table 10.**

4.1.3.2 Soil VOC Analysis - Laboratory

Concentrations of VOCs in the soil samples from borings at refinery pits submitted to GTEL for analysis by EPA Method 8010/8020 were non-detectable.

4.1.3.3 Soil BNA Analysis

Soil samples from the borings at refinery pits were submitted to GTEL for analysis of BNAs by EPA Method 8270. Bis(2-ethylhexyl)phthalate was detected in B3-PB-4 at 360 μg/kg. No other BNA compounds were detected in the borings above practical quantitation limits.

4.1.3.4 Soil Metals Analysis

The metals detected in the soil samples from the borings at refinery pits were antimony, arsenic, barium, chromium, iron, lead, mercury, silver, and cadmium. **Table 11** presents the results of the metals analysis.

Concentrations of antimony in the borings at the refinery pits ranged from non-detectable to 7.8 mg/kg. The highest concentration of antimony was detected in the sample from B3-PB-2. Concentrations of arsenic ranged from 0.68 mg/kg to 22 mg/kg. The highest concentration of arsenic was detected in the sample from B4-PB-1. Barium concentrations ranged from 58 mg/kg to 810 mg/kg. The highest concentration of barium was detected in the sample from B4-PB-1. Chromium concentrations ranged from non-detectable to 37 mg/kg in the sample from B4-PB-1. Iron concentrations ranged from 11,000 mg/kg to 49,000 mg/kg. The highest concentration of iron was detected in the sample from B4-PB-1. Lead concentrations ranged from non-detectable to 950 mg/kg in the sample from B3-PB-4. Mercury concentrations were non-detectable except for the samples from B4-PB-1 at 0.22 mg/kg and B3-PB-2 at 0.87 mg/kg. Silver concentrations were non-detectable except for the sample from B4-PB-1 at 3.5 mg/kg. Cadmium concentrations were non-detectable except for the sample from B4-PB-1 at 6.2 mg/kg. Concentrations for all quantified metals in B4-PB-1 except iron exceeds the maximum reported concentration in background borings. Matrix spike QA/QC results for sample B4-PB-1 were outside of control limits for the metals chromium, lead, selenium and silver. Matrix spike results outside of control limits indicate that the sample matrix for sample B4-PB-1 has characteristics, such as heterogeneity, that effect the analytical method and, therefore, the results. Percent recoveries for the metals chromium and lead were above the maximum control limit which suggest that the portion of the sample used for the matrix spike actually contained higher concentrations than the portion of the sample used as the analytical sample. The percent recovery was 73.4 which is just below the minimum control limit of 75. Laboratory duplicate QA/QC results for sample B4-PB-1 were outside of control limits for barium, chromium, lead, mercury, and silver. Pursuant to EPA data validation guidelines this data is qualified as "estimated". The purpose of the pit boring samples was to evaluate potential contamination in the pit areas. The qualitative goal to determine if metals exist above maximum background concentrations in B4-PB-1 was met. Concentrations of arsenic, barium, iron, lead, and mercury exceed USGS average and maximum background concentrations in B4-PB-1. Chromium concentrations in B4-PB-1 exceed maximum background concentrations. Iron concentrations in B4-PB-1 exceed USGS average concentrations. Lead and mercury concentrations in B3-PB-2 and lead in B3-PB-4 exceed maximum background concentrations and USGS average concentrations.

Antimony and chromium concentrations in B3-PB-2 exceed maximum background concentrations. USGS averages and native soil concentrations for metals in soil are shown in **Table 11**.

4.1.3.5 Groundwater VOC Analysis

Groundwater samples were collected from each pit boring and submitted to GTEL for analysis of VOCs by EPA Method 8010/8020. **Table 12** presents a summary of the laboratory results. Chlorinated VOCs were detected in groundwater from B4-PB-1 and B3-PB-2. Petroleum VOCs were detected in groundwater from B4-PB-1, B3-PB-2, and B3-PB-4. VOCs were not detected in groundwater from B4-PB-3.

Chlorinated VOCs detected in the samples from B4-PB-1 were vinyl chloride at 6.8 µg/l; chloroethane at 0.6 µg/l; 1,1-DCA at 1.0 µg/l; Trans-1,2-DCE at 0.2 µg/l; and 1,2-DCA at 0.2 µg/l. The sample from B3-PB-2 contained Trans-1,2-DCE at 3.3 µg/l and TCE at 3.2 µg/l. The vinyl chloride concentration in the sample from B4-PB-1 exceeds the Kansas Action Level (KAL) of 2 µg/l.

Petroleum compounds detected in the sample from B4-PB-1 were benzene at 7.3 µg/l, toluene at 0.4 µg/l, ethylbenzene at 5.0 µg/l, and total xylenes at 0.7 µg/l. The sample from B3-PB-2 contained benzene at 0.9 µg/l, toluene at 1.3 µg/l, ethylbenzene at 4.1 µg/l, and total xylenes at 2.1 µg/l. The sample from B3-PB-4 contained toluene at 0.6 µg/l and total xylenes at 2.6 µg/l. The benzene concentration in the sample from B4-PB-1 exceeds the KAL of 5 µg/l.

4.1.3.6 Groundwater BNA Analysis

Groundwater samples were collected from the borings at refinery pits and submitted to GTEL for analysis of BNAs by EPA Method 8270. Samples from B4-PB-1 and B4-PB-3 did not contain BNAs above practical quantitation limits. Bis(2-Ethylhexyl)phthalate was detected in the sample from B3-PB-2 at 19.4 µg/l and the sample from B3-PB-4 at 12 µg/l.

4.1.3.7 Groundwater Metals Analysis

Dissolved metals detected in filtered groundwater samples collected from the borings include arsenic, barium, lead, antimony, and iron. The laboratory analytical results for groundwater samples from the borings at refinery pits are summarized presented in **Table 13**.

Concentrations of arsenic in the groundwater samples ranged from non-detectable in B4-PB-1 and B4-PB-3 to 0.027 mg/l in B3-PB-2. Barium concentrations in samples ranged from 0.12 mg/l to 1.4 mg/l. The highest concentration of barium was detected in groundwater sample from B4-PB-1. Concentrations of lead in groundwater samples ranged from non-detectable in B3-PB-2 and B3-PB-4 to 0.006 mg/l in B4-PB-1 and B4-PB-3. Antimony was non-detectable in groundwater

samples except in the sample from B4-PB-3 at 0.01 mg/l. Iron concentrations in groundwater samples ranged from 0.10 mg/l to 34 mg/l. The highest concentration of iron was detected in the groundwater sample from B4-PB-1. The concentrations of barium and iron exceed the KALs in the groundwater sample from B4-PB-1. The KAL for iron was also exceeded in the samples from B3-PB-2 and B3-PB-4. The reported iron and barium concentrations are within the range of natural conditions for groundwater in this part of Kansas.

4.1.4 SURFACE SOIL SAMPLES

4.1.4.1 Soil Metals Analysis

Seven surface soil samples were collected and submitted to GTEL for analysis of antimony, iron, and RCRA metals. Results are summarized in **Table 14**. Metals detected in the surface soil samples were arsenic, barium, cadmium, chromium, lead, selenium, silver, and iron.

Arsenic concentrations in surface soil samples ranged from non-detectable at B4-SS-1a to 3.7 mg/kg at A5-SS-2a, which exceeds the background maximum. Barium concentrations in samples ranged from 39 mg/kg at B4-SS-1a to 160 mg/kg at B3-SS-7a, which exceeds the background maximum. Cadmium concentrations in samples ranged from non-detectable at B5-SS-3a to 6 mg/kg in B4-SS-1a. Chromium concentrations in samples ranged from 9 mg/kg at A5-SS-2a to 69 mg/kg at B4-SS-1a (all but the low value exceed the background maximum). Lead concentrations in samples ranged from 63 mg/kg, which exceeds the background maximum, at B5-SS-3a to 300 mg/kg at B3-SS-5a. Selenium concentrations in samples ranged from non-detectable to 2.8 mg/kg at B4-SS-1a. Silver was only detected in samples at B5-SS-3a and B3-SS-5a at 1 mg/kg. Iron concentrations in the surface soil samples ranged from 3700 mg/kg to 20000 mg/kg. The highest concentration of iron was detected at B3-SS-7a. Lead and selenium concentrations exceeded both the USGS average and native soil concentration ranges (see **Table 14**).

4.1.4.2 Soil PNA Analysis

Soil was collected at each surface soil location and submitted to GTEL for analysis of PNAs by EPA Method 8310. **Table 15** presents the results of the PNA analysis.

PNAs detected in the surface soil samples include the petroleum and coal constituents acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)fluoranthene, benzo(k)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, and indeno(1,2,3-cd)pyrene. Concentrations of total PNAs (per EPA Method 8310) in soil samples ranged from 165 ug/Kg to 19,170 μg/kg. The highest concentration of total PNAs was detected in the sample at B3-SS-7a.

TABLE 10
RESULTS OF PID ANALYSIS OF
PIT BORING SOIL SAMPLES
WNID - 29TH AND MEAD RI/FS

Boring #	Depth (ft.)	PID Reading (ppm)*
B4-PB-1	0 - 5 5 - 10	0.6 ND
B3-PB-2	0 - 5 5 - 10	3.2 0.6
B4-PB-3	0 - 5 5 - 10	ND ND
B3-PB-4	0 - 5 5 - 10	ND ND

*PID = HNU model 101 Photoionization detector with a hand held probe containing a 10.2 eV lamp, pump, ionization chamber, and aluminum sampling tube. The unit was calibrated using HNU Span Gas (#101-350) for a direct reading of benzene in ppm vol/vol from 0-20, 0-200, and 0-2000 with the span position at 9.8.

ppm = Parts per million

ND = Below detection limits

TABLE 11
RESULTS OF METALS ANALYSIS
FOR PIT BORING SOIL SAMPLES*
WNID - 29TH AND MEAD RI/FS
Concentrations in mg/Kg (ppm)

	B4-PB-1	B3-PB-2	B4-PB-3	B3-PB-4	USGS Average[1]	Native Soil Concentrations[2]	Background	
							Mean	Maximum
Antimony	<6.4	7.8	<6.5	<6.4	NA	0.6-10	ND	ND
Arsenic	22	0.68	2.1	1.9	7.0	10 - 40	1.5	3.2
Barium	810	73	58	100	670	100 - 3500	77	130
Chromium	37 N	14	<1.0	9.9	56	5-3000	5.2	10
Iron	49000	11000	14000	12000	26000	7000-55000	7900	140000
Lead	810 N	62	<11	950	20	20 - 200	13	37
Mercury	0.22	0.87	<0.13	<0.18	0.065	0.01-0.08	ND	ND
Silver	3.5 N	<1.2	<1.1	<1.1	NA	0.1 - 5.0	ND	ND
Cadmium	6.2	<0.58	<0.54	<0.53	NA	0/.01 - 7.0	ND	ND

* All samples collected at a depth of 0 - 5 feet.
N = Control limits for recovery in the matrix spike were not met. (Value reported as an estimate.)
NA = Not Available
ND = Not Detected

Note: Only those metals detected are listed above.

[1] Shacklette and Boerngen, 1984

[2] Dragun, 1988

C:WNID\TABLES2.nlm

GROUNDWATER TECHNOLOGY

TABLE 12
RESULTS OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES FROM PIT BORINGS BY EPA METHOD 8010/8020
WNID - 29TH AND MEAD RI/FS
Concentrations in μg/L (ppb)

	PQL	B4-PB-1	B3-PB-2	B4-PB-3	B3-PB-4	KAL
Vinyl Chloride	0.3	6.8	ND	ND	ND	2
Chloroethane	0.3	0.6	ND	ND	ND	37
1,1-Dichloroethane	0.2	1.0	ND	ND	ND	5
Trans-1,2-Dichloroethene	0.2	0.2	3.3	ND	ND	70
1,2-Dichloroethane	0.2	0.2	ND	ND	ND	5
Trichloroethene	0.2	ND	3.2	ND	ND	5
Benzene	0.2	7.3	0.9	ND	ND	5
Toluene	0.2	0.4	1.3	ND	0.6	2000
Ethylbenzene	0.2	5.0	4.1	ND	ND	680
Total Xylenes	0.2	0.7	2.1	ND	2.6	440

PQL = Practical quantitation limit
ug/L = micrograms per liter
ppb = Parts per billion
ND = Below practical quantitation limit
KAL = Kansas Action Level

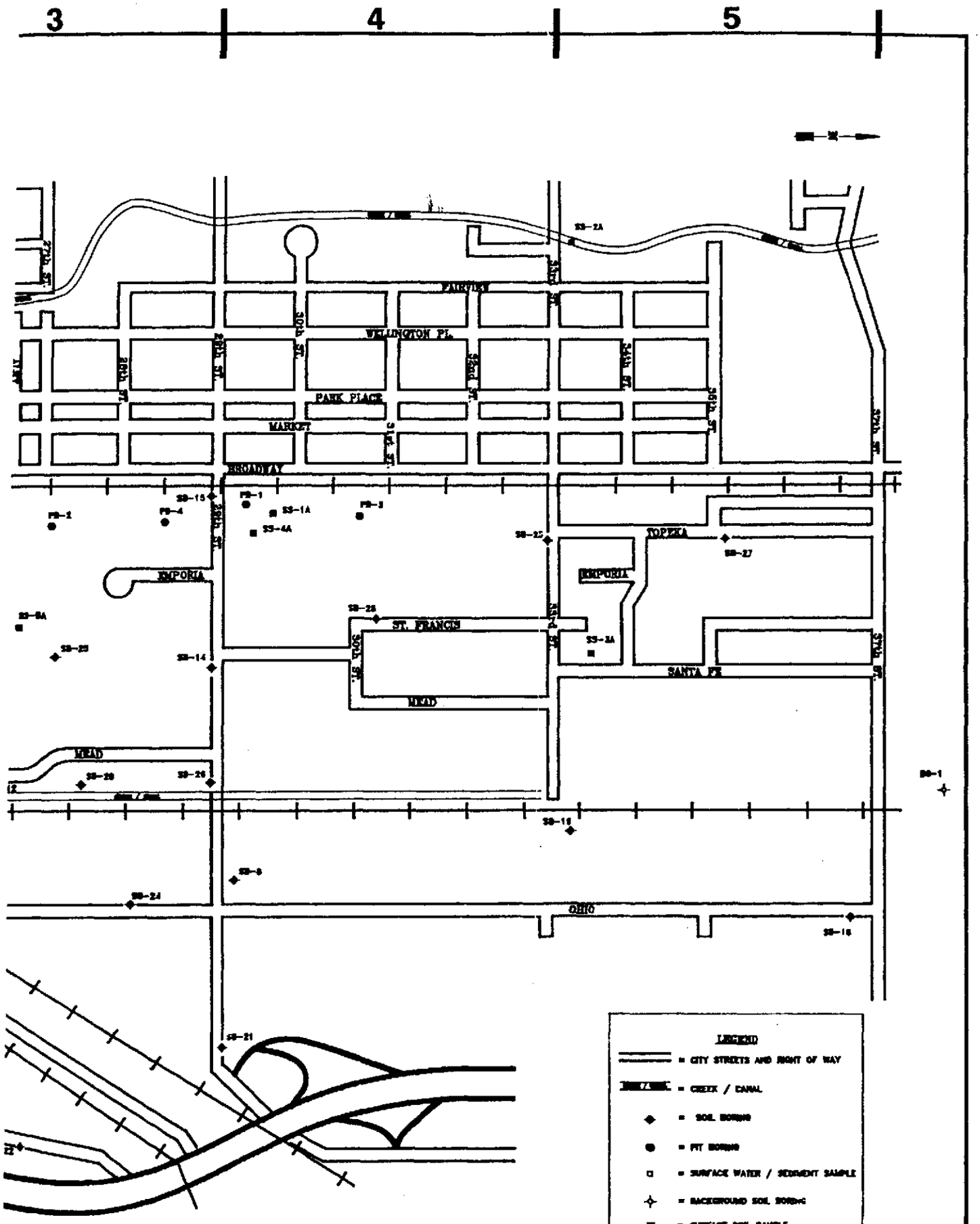
Note: Only those compounds detected are listed above

TABLE 13
RESULTS OF METALS ANALYSIS FOR
GROUNDWATER SAMPLES FROM PIT BORINGS
WNID - 29TH AND MEAD RI/FS
Concentrations in mg/L (ppm)

	PQL	B4-PB-1	B3-PB-2	B4-PB-3	B3-PB-4	KAL
Arsenic	0.005	ND	0.027	ND	0.022	0.05
Barium	0.01	1.4	0.99	0.12	0.44	1
Lead	0.005	0.006	ND	0.006	ND	0.05
Antimony	0.01	ND	ND	0.01	ND	0.143
Iron	0.01	34	14	0.10	1.5	0.3

PQL = Practical quantitation limit
ppm = Parts per million
mg/L = milligrams per liter
ND = Below practical quantitation limit
KAL = Kansas Action Level

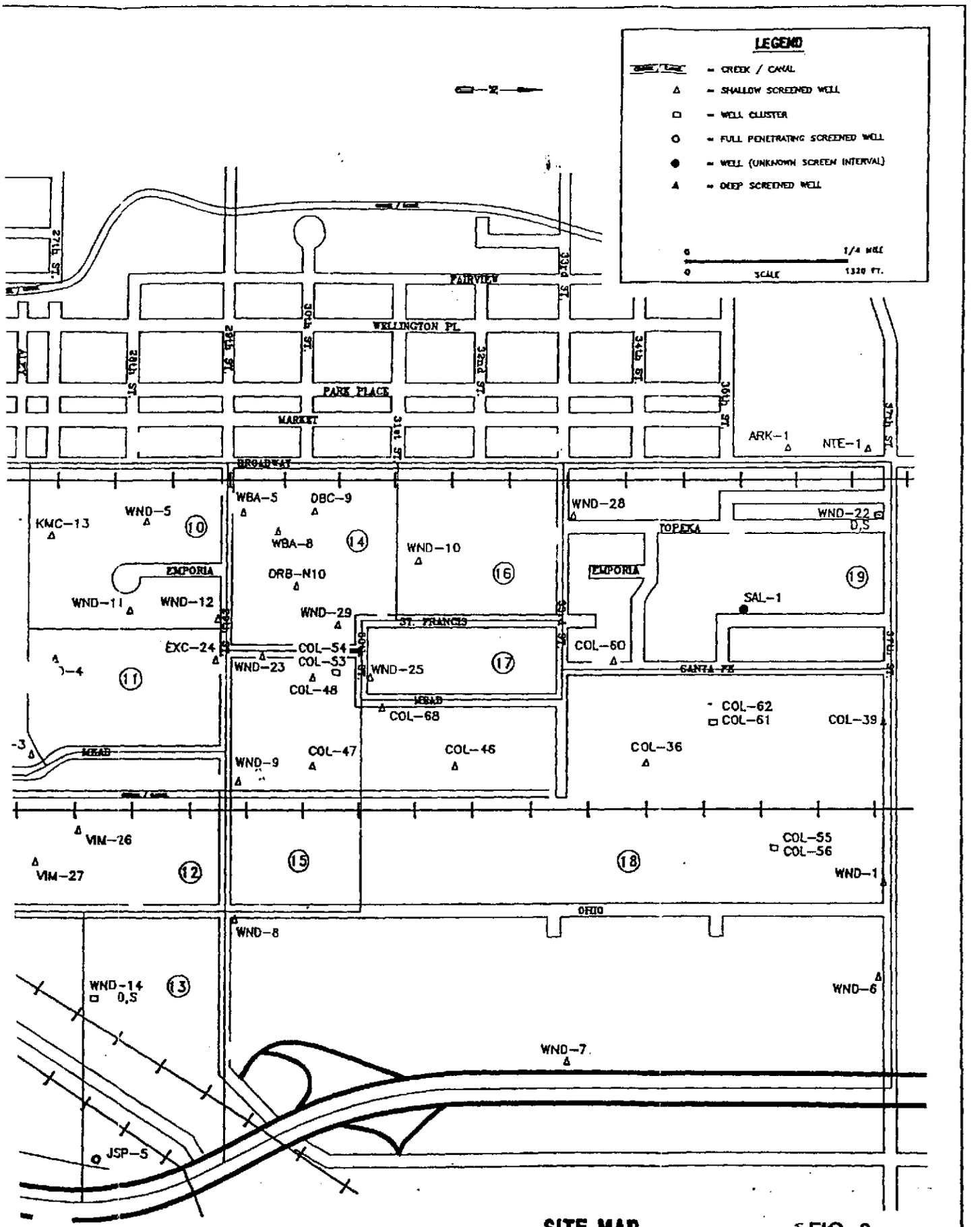
Note: Only those metals detected are listed above.



SAMPLE LOCATION MAP

29th & MEAD RI/FS

FIG. 5



SITE MAP

8/7/91

29th AND MEAD RI/FS

FIG. 8

042209670

CAD NO. FILE NO. 9670-SM

CHRONOLOGY TECHNOLOGY, INC.

GROUNDWATER TECHNOLOGY®

Groundwater Technology, Inc

1950 South Florence, Wichita, KS 67209 US.
Tel: (316) 943-3444 Fax: (316) 943-132

VOLUME V

PRELIMINARY RESULTS FROM INVESTIGATION OF THE 29TH AND MEAD AREA

Prepared For:

Wichita North Industrial District

Prepared By:

Fluor Daniel GTI
1950 S. Florence
Wichita, Kansas 67209

APPENDIX I

TELEPHONE LOGS

GROUNDWATER TECHNOLOGY

Groundwater Technology
TELEPHONE MEMO LOGS
WNID, 1990

Mark Thompson:

OCTOBER 8, 1990

RE: Barnsdahl, Golden Rule Refining
CONTACT: Mike Carter

- Golden Rule was located on WBA property

- Barnsdahl was located across the street

- No remediation at either refinery

- August - Solvent reclamation on NW corner of property in 1981; thinner was pumped out of barrels, 12,000 gallons; who barrels on top of ground.

- Summer of 1989, 135 barrels of paint sludge stored in tanks at WBA was transported by USPCI to Fredonia to be burned.

  No samples were taken on drums; visible signs of leaking were reported by USGS in 1985. Mr. Carter denies leakage.

- Oil sludge pits were covered at GR&R, Golden Rule. and Barnsdahl; before 1950 on Golden Rule; and in approximately 1965 on Barnsdahl. Pits further south covered in 1975 (land farmed). Sludge was redeposited in five smaller spots and covered up in 1965, to reclaim land where tank existed.

- From 1944 - 1946, the WBA property was leased then bought in 1946. WBA acquired rest of property in 1965.

- Golden Rule Refinery closed around 1940; Barnsdahl operated until approximately 1950

- A former solvent reclamation facility was located on the property. Mr. Carter didn't know where tanks were located above ground. He thought there was one big tank above ground; 4 - 10,000 gallon; one, smaller; only three had sludge.

GROUNDWATER TECHNOLOGY

OCTOBER 8, 1990

CONTACT: Paul Sheffert, Dolese

- Dolese property was acquired in 1949 from prior owner which was not refinery.
- Over a number of years, a pit on the property was filled with returned concrete by Dolese. Dates uncertain; filled to above ground level.

OCTOBER 8, 1990

CONTACT: Don Allen, Ferroloy

- Property was refinery, Barnsdahl.
- Acquired site November 18, 1968
- SunRay merged refinery with Barnsdahl, June 23, 1950; Bareco 1935 - 1958, marketing
- 1950 aerial photos showed tank, but tank had been removed by 1965.
- Everything dismantled by 1968
- Evidence of one pit located near Kansas Metals, south and west of Ferroloy One big pit was broken into smaller pits.
- Property Ownership:

June 2, 1917	-	Sterling Oil & Refinery
October 24, 1924	-	Waite Phillips Oil Company
April 1, 1926	-	Barnsdahl Refineries Inc.
August 5, 1935	-	Barnsdahl Oil Company
March 31, 1955	-	Bareco to Ind. Develop. Company
November 18, 1968	-	Ind. Develop. Company

OCTOBER 8, 1990

RE: Universal Oil
CONTACT: Kyle Parker, KDHE

- There is a report of a UST removal

- Aerial photos taken in 1960 show both pits still present on Barnsdahl.
  1960; L shaped pit, east of present southern pit
  1968; northern pit gone
  1974, March; southern pit still there (Kansas Metals)
  1977; southern pit gone

OCTOBER 8, 1990

CONTACT: Mike Carter, WBA

- WBA is located on property formerly occupied by the Golden Rule Refinery. Mr. Carter thought that the refinery had closed around 1940. WBA leased a portion of their current property from 1944 to 1946, which was then purchased in 1946. The remainder of the WBA property was purchased in 1965.

- Sludge pits were covered prior to 1960

- Pit on WBA was still evident in 1951 photo, but had been removed before the 1960 photo

- August 1981 - Under direction of the State, approximately 12,000 gallons of spent solvents were pumped from storage tanks and barrels by Reid Supply Company. Mr. Carter wasn't sure of final destination for solvents. There were four 10,000 gallon above ground storage tanks and one smaller tank of unknown size. Only three of the larger tanks contained spent solvent that was removed.

- Sludge from tanks was removed in 1987 and put in barrels.

- Summer 1989 - 135 barrels of paint sludge was removed by USPCI and taken to USPCI disposal facility in Fredonia

- Mr. Carter reported that no sampling occurred when the drums were removed. Visible signs of leakage was reported by USGS. Mr. Carter said there was no leakage.

- Dolese pit was blasted, resulting in rubble; some hauled for riprap

OCTOBER 9, 1990

CONTACT: Paul Sheffert, Dolese

- A pit from the former Golden Rule Refinery was located on the properly. Mr. Sheffert didn't know if it contained sludge or if it was dry.

OCTOBER 10, 1990

CONTACT: Dean Kline, Kansas Metals

- The Kansas Metals property (comprising 13 acres) is located on site of former Barnsdahl Refinery

- A former pit was located on Kansas Metals property, covered when they bought property in 1974.

- Has book of instructions for excavating.

- The pit was excavated under direction of city of Wichita, for flood control, in 1974.

- Sludge was removed from the pit and a portion was hauled to an unknown site. The remainder was landfarmed in an area south of the pit.

OCTOBER 10, 1990

CONTACT: Mike Carter, WBA

- Tanks were removed to Novick Iron & Metal
- Pit on the west was being filled when Mr. Carter was young (prior to 1950).
- Approximately 1,300 drums

NOVEMBER 5, 1990

CONTACT: Joe Laing, City Manager

- Mr. Laing wasn't aware of any further activity on City property other than Johns' Sludge Pond

NOVEMBER 5, 1990

RE: City of Wichita Property
CONTACT: Karl Kennedy, City Attorney

- The City of Wichita started acquiring property in mid 1960s south of 29th and north of
  25th
- Spot maintenance (removal) of trash dumpings was only remedial activities conducted by the City.
- Additional property between 33rd and 37th streets was acquired in the mid 1970s.

Groundwater Technology Contact Record

Date: 4-24-92 Time: 10:50 Copies To:

Caller: Mrs Osborn Project Name: WNED

Received By: Mike Everhart Project No.: 421-0-6896-673201

Boeing 526-7200

Comments:

Re: Information on former sludge pits KS metals (Barnsdahl Ref) Conversation will be back Monday

8:45 4-29-92

Mike stated that at that time he did not think that KDHE had any over sight in filling the sludge pits. He new nothing on specifics of site or who ever saw work. He stated that pits in area were gradually filled in by property owners and he knew that KS metal pits were lost to be completed.

FOLLOW-UP:

Page _____ of _____

Groundwater Technology Contact Record

Date: 5-14-92 Time: 9:20 Copies To:

Caller: ~~Tubby Knobb~~ Phil Osborn Project Name: WNED

Received By: Tubby Knebler Project No.: 04220-6896-630207

Knebler Const. 775-2205

Comments:

Re: Excavation of Sludge Ponds at Kansas Metals.
Removal + Distribution of Materials.

Law Co General contractor.
Knebler subcontractor.
~~nothing~~ Lawll off to his knowledge.
he remembers some agency on site and
assumes it was City.
Material was spread onsite following
instruction of the Law Co. Wichita KS.

FOLLOW-UP:

Page ____ of ____

SPECIFICATIONS

SCRAP IRON PREPARATION FACILITY

WICHITA, KANSAS

THE LAW COMPANY, INC

LAW/KINGDON, P.A. ARCHITECTS & ENGINEEF

(316) 265.8584 · 313 S. MARKET P.O. BOX 1138 WICHITA, KANSAS 672

D. GRADING ----------

1 SITE ENGINEERING WORK shall be done by this Subcontractor as necessary to stake to vertical elevations and horizontal controls shown on Drawings for grades, slopes, ridges, levels, cut, and fills. Stake and flag site, paving areas, and building corners.

2 ROUGH GRADING:

(a) ROUGH GRADING, CUTTING AND FILLING shall bring areas within site to proper subgrade levels to allow for placement of paving, and slabs, of thickness as shown or specified, including base course materials.

(b) EXCAVATION OF SLUDGE PONDS: Remove sludge from areas designated on the Drawings. Distribute materials on site and/or remove from site as directed by General Contractor and Soils Engineer.

3 DRAINAGE:

(a) NATURAL DRAINAGE: Site shall be maintained to drain naturally and to prevent ponding of water.

4 PROOF ROLLING: After stripping the site, areas underlying proposed paving and building floor slabs that require fill, shall be heavily proof rolled. Any soft, spongy, or otherwise objectionable soils found, shall be removed and replaced with approved fill, compacted and tested, as directed by General Contractor and/or Soils Engineer.

5 PLOWING OR SCARIFICATION: After site has been approved for commencement of fill operations, areas subject to fill shall first be plowed or scarified to a minimum depth of 6". Fills shall not be allowed on existing hard, dry, sparsely compacted surfaces without scarifying to insure a thorough bond between new fill and original surface.

6 PLACING FILL AND COMPACTION: Place fill in horizontal layers 6" to 8" in thickness. Compact each layer thoroughly.

(a) MOISTURE CONTROL: Water content of material to receive compaction shall be uniform throughout each layer of the material. Allowable ranges of moisture content shall be determined by Soil Test Inspector. Subcontractor may be directed to add necessary moisture to material, or manipulate and aerate to reduce excessive moisture.

(b) PROTECTION: Fill materials placed shall be protected from freezing. No materials shall be placed on top of frozen materials.

GTI 29M, ADD 1996

GROUNDWATER TECHNOLOGY

Groundwater Technology, Inc.
1950 South Florence, Wichita, KS 67209 USA
Tel: (316) 943-3444 Fax: (316) 943-1321

ADDENDUM I
PRELIMINARY RESULTS FROM THE INVESTIGATION OF
AREA 3 IN THE
29TH AND MEAD SITE
WICHITA, KANSAS

Project No. 040020138

September 1, 1992
Revised: June 13, 1996

Prepared For:

Wichita North Industrial District

Prepared By:

Fluor Daniel GTI, Inc.
1950 S. Florence
Wichita, Kansas 67209

APPENDIX C

BOREHOLE LOGS

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GROUNDWATER TECHNOLOGY

Well No. PB-1

DRILLING LOG

Project WNID

Owner WIC

Location WICHITA BRASS & ALUM

Project Number 042209670-03

Date Drilled 7/13/90

Total Depth 20'

Diameter 7.25"

Surface Elevation

Water depth (init.)

24-hrs.

TEMPORARY

Screen: Dia. 2"

Length 10'

Slot Size 0.01

Casing: Dia. 2"

Length 10'

Type PVC

Drilling Company GROUNDWATER TECH.

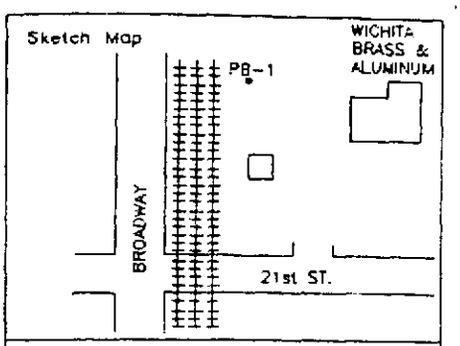
Drilling Method HOLLOW STEM

Driller G. Kurtz

Log by P. Osborn

Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	PID/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Light brown, dry, clayey, medium to fine grained SAND.
					Reddish brown, moist, rust and silty fill with broken glass.
5					Gray, moist to wet, medium stiff, plastic, fine grained sandy CLAY with slight oil odor.
10					Brown, wet, silty, fine grained SAND with some thin clay lenses.
15					Gray, saturated, silty, fine grained SAND with a trace of medium SAND. Oil odor.
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

Well No. PB-2

DRILLING LOG

Project WNID

Owner

Location KANSAS METALS

Project Number 042209670-03

Date Drilled 7/13/90

Total Depth 20'

Diameter 7.25"

Surface Elevation

Water depth (init.)

24-hrs.

TEMPORARY

Screen: Dia. 2"

Length 10'

Slot Size 0.01

Casing: Dia 2"

Length 10

Type PVC

Drilling Company GROUNDWATER TECH.

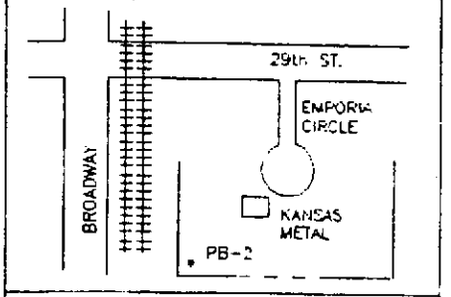
Drilling Method HOLLOW STEM

Driller G. Kurtz

Log by P Osborn

Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	HNU/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Dark brown/reddish brown, moist, stiff, plastic fine grained sandy CLAY, with petroleum odor.
5					Dark brown, oily, moist, medium stiff, plastic, fine grained sandy CLAY.
					Brown, moist, clayey, fine grained SAND.
10					Brown, moist to wet, silty, fine grained SAND.
15					Brown, saturated, medium to fine grained SAND
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

Well No. PB-3

DRILLING LOG

Project WNID

Owner

Location DOLESE

Project Number 042209670-03

Date Drilled 7/13/90

Total Depth 20'

Diameter 7.25"

Surface Elevation

Water depth (init.)

24-hrs.

TEMPORARY

Screen: Dia. 2"

Length 10'

Slot Size 0.01

Casing: Dia. 2"

Length 10'

Type PVC

Drilling Company GROUNDWATER TECH.

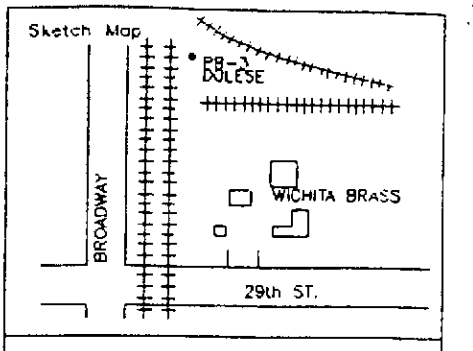
Drilling Method HOLLOW STEM

Driller G. Kurtz

Log by F. Osborn

Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	PID/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Crushed limestone fill
					Dark brown, moist, medium stiff, slightly plastic, fine sandy CLAY.
					Brown, same as above.
5					Light brown, moist, silty, fine grained SAND with a trace of medium grained SAND.
10					
					Light brown, saturated, medium to fine grained SAND with a trace of coarse SAND.
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

Well No. PB-4

DRILLING LOG

Project WNID

Owner

Location

Project Number 042209670-03

Date Drilled 7/13/90

Total Depth 20'

Diameter 7.25"

Surface Elevation

Water depth (init.)

24-hrs.

TEMPORARY
Screen: Dia. 2"

Length 10'

Slot Size 0.01

Casing: Dia. 2"

Length 10'

Type PVC

Drilling Company GROUNDWATER TECH.

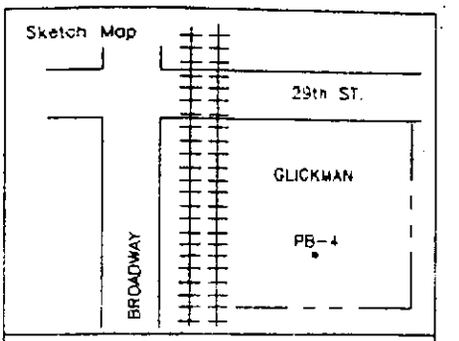
Drilling Method HOLLOW STEM

Driller G Kurtz

Log by P Osborn

Sampling Method CONTINUOUS

Sketch Map



Notes

Depth (ft)	Well Construction	Notes	PID/OVA (ppm)	Graphic Log	Description/Soil Classification (Color, Texture, Structure)
0					Dark brown, dry to moist, stiff, nonplastic, fine sandy CLAY.
					Brown, moist, medium stiff, slightly plastic, fine grained sandy CLAY.
5					Light brown, moist to wet, silty fine grained SAND with a trace of medium grained SAND.
10					
					Light gray, saturated, silty, medium to fine grained SAND with a slight petroleum odor.
15					
20					BOH=20'

GROUNDWATER TECHNOLOGY, INC.

Figure(s)
Aerial Photographs and Sample Location Map(s)

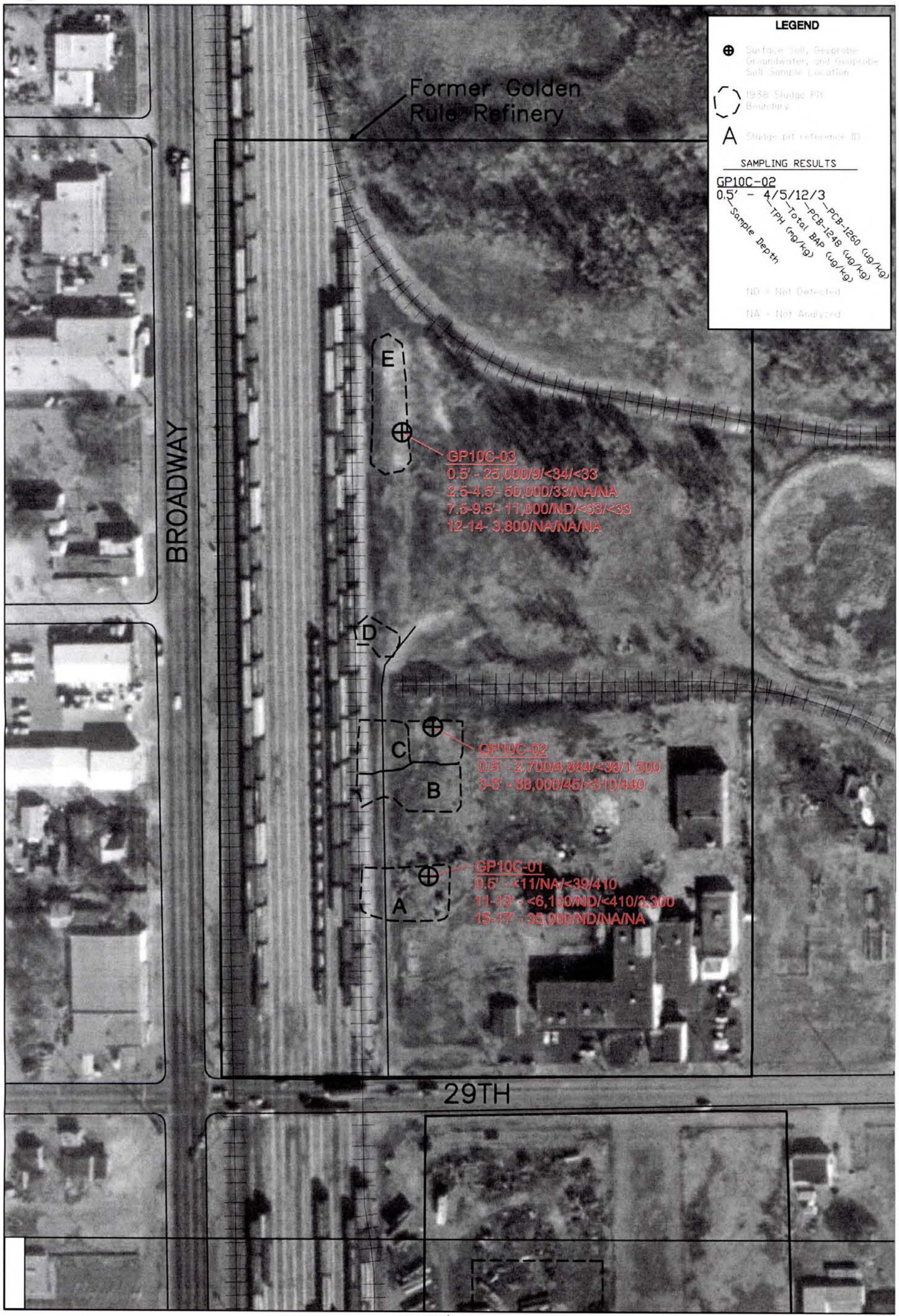
CDM

1" = 120'

60 0 120

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Golden Rule Refinery (10C)



CDM

1" = 120'

60 0 120

N

Figure 2
North Industrial Corridor (NIC) Site
Sludge Pit Sampling Results, Former Golden Rule Refinery

Table(s)
Analytical Data Table(s)

Table 1
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, VOCs by EPA Method 8260

Station	GP10C-01	GP10C-01	GP10C-02	GP10C-02	GP10C-03	GP10C-03
Sample Depth in Feet	0.5	2-4	0.5	3-5	0.5	7.5-9.5
Sample date	1/18/01	1/18/01	1/18/01	1/19/01	1/20/01	1/19/01
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
1,1,1-Trichloroethane	<6.1	<910	<5.8	<980	<660	<26
1,1,2,2-Tetrachloroethane	<6.1	<910	<5.8	<980	<660	<26
1,1,2-Trichloroethane	<6.1	<910	<5.8	<980	<660	<26
1,1-Dichloroethane	<6.1	<910	<5.8	<980	<660	<26
1,1-Dichloroethene	<6.1	<910	<5.8	<980	<660	<26
1,2-Dichlorobenzene	<6.1	<910	<5.8	<980	<660	<26
1,2-Dichloroethane	<6.1	<910	<5.8	<980	<660	<26
1,2-Dichloropropane	<6.1	<910	<5.8	<980	<660	<26
1,3-Dichlorobenzene	<6.1	<910	<5.8	<980	<660	<26
1,4-Dichlorobenzene	<6.1	<910	<5.8	<980	<660	<26
Benzene	<6.1	<910	<5.8	<980	<660	<26
Bromodichloromethane	<6.1	<910	<5.8	<980	<660	<26
Bromoform	<6.1	<910	<5.8	<980	<660	<26
Bromomethane	<6.1	<910	<5.8	<980	<660	<26
Carbon tetrachloride	<6.1	<910	<5.8	<980	<660	<26
Chlorobenzene	<6.1	<910	<5.8	<980	<660	<26
Chloroethane	<6.1	<910	<5.8	<980	<660	<26
Chloroform	<6.1	<910	<5.8	<980	<660	<26
Chloromethane	<6.1	<910	<5.8	<980	<660	<26
cis-1,2-Dichloroethene	<6.1	<910	<5.8	<980	<660	<26
cis-1,3-Dichloropropene	<6.1	<910	<5.8	<980	<660	<26
Dibromochloromethane	<6.1	<910	<5.8	<980	<660	<26
Ethylbenzene	<6.1	<910	<5.8	**5400**	<660	<26
m,p-Xylene	<6.1	<910	<5.8	**19000**	<660	**63**
Methylene chloride	<6.1	<910	<5.8	<980	<660	<26
o-Xylene	<6.1	<910	<5.8	**2900**	<660	<26
Tetrachloroethene	<6.1	<910	<5.8	<980	<660	<26
Toluene	<6.1	<910	<5.8	**1400**	<660	<26
trans-1,2-Dichloroethene	<6.1	<910	<5.8	<980	<660	<26
trans-1,3-Dichloropropene	<6.1	<910	<5.8	<980	<660	<26
Trichloroethene	<6.1	<910	<5.8	<980	<660	<26
Trichlorofluoromethane	<6.1	<910	<5.8	<980	<660	<26
Vinyl chloride	<6.1	<910	<5.8	<980	<660	<26

Bold text indicates results above analytical detection limits.
UB = Not detected; contained in method blank.

Table 2
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10C-01	GP10C-01	GP10C-01	GP10C-02	GP10C-02	GP10C-03	GP10C-03	GP10C-03	GP10C-03
Sample Depth in Feet	0.5	11-13	15-17	0.5	3-5	0.5	2.5-4.5	7.5-9.5	12-14
Sample date	1/18/01	1/18/01	1/18/01	1/18/01	1/19/01	1/20/01	1/19/01	1/19/01	1/19/01
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
1,2,4-Trichlorobenzene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
1,2-Dichlorobenzene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
1,3-Dichlorobenzene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
1,4-Dichlorobenzene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2,4,5-Trichlorophenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2,4,6-Trichlorophenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2,4-Dichlorophenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2,4-Dimethylphenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2,4-Dinitrophenol	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
2,4-Dinitrotoluene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2,6-Dinitrotoluene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2-Chloronaphthalene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2-Chlorophenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2-Methylnaphthalene	<400	<410	**3100**	<3800	**7900**	<1400	<4500	<3400	<3800
2-Methylphenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
2-Nitroaniline	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
2-Nitrophenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
3,3'-Dichlorobenzidine	<800	<830	<7600	<7600	<10000	<2800	<9000	<6700	<7700
3-Nitroaniline	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
4,6-Dinitro-2-methylphenol	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
4-Bromophenylphenyl ether	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
4-Chloro-3-methylphenol	<800	<830	<7600	<7600	<10000	<2800	<9000	<6700	<7700
4-Chloroaniline	<800	<830	<7600	<7600	<10000	<2800	<9000	<6700	<7700
4-Chlorophenylphenyl ether	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
4-Methylphenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
4-Nitroaniline	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
4-Nitrophenol	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
Acenaphthene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Acenaphthylene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Anthracene	<400	<410	<3800	<3800	**2800 J**	<1400	<4500	<3400	<3800
Benzo(a)anthracene	<400	<410	<3800	**1800**	<5200	<1400	<4500	<3400	<3800
Benzo(a)pyrene	<400	<410	<3800	**1800**	<5200	<1400	<4500	<3400	<3800
Benzo(b)fluoranthene	<400	<410	<3800	**3000**	<5200	<1400	<4500	<3400	<3800
Benzo(g,h,i)perylene	<400	<410	<3800	**2100**	<5200	<1400	<4500	<3400	<3800
Benzo(k)fluoranthene	<400	<410	<3800	**970**	<5200	<1400	<4500	<3400	<3800
Benzoic acid	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
Benzyl alcohol	<800	<830	<7600	<7600	<10000	<2800	<9000	<6700	<7700
bis(2-Chloroethoxy)methane	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
bis(2-Chloroethyl) ether	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
bis(2-Chloroisopropyl) ether	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
bis(2-Ethylhexyl)phthalate	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Butylbenzylphthalate	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Chrysene	<400	<410	<3800	**2200**	**4500 J**	**900**	**3300 J**	<3400	<3800
Di-n-butylphthalate	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Di-n-octylphthalate	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Dibenz(a,h)anthracene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Dibenzofuran	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Diethylphthalate	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Dimethylphthalate	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Fluoranthene	<400	<410	<3800	**2100**	<5200	<1400	<4500	<3400	<3800
Fluorene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Hexachloro-1,3-butadiene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Hexachlorobenzene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800

Table 2
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10C-01	GP10C-01	GP10C-01	GP10C-02	GP10C-02	GP10C-03	GP10C-03	GP10C-03	GP10C-03
Sample Depth in Feet	**0.5**	**11-13**	**15-17**	**0.5**	**3-5**	**0.5**	**2.5-4.5**	**7.5-9.5**	**12-14**
Sample date	**1/18/01**	**1/18/01**	**1/18/01**	**1/18/01**	**1/19/01**	**1/20/01**	**1/19/01**	**1/19/01**	**1/19/01**
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Hexachlorocyclopentadiene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Hexachloroethane	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Indeno(1,2,3-cd)pyrene	<400	<410	<3800	**1300**	<5200	<1400	<4500	<3400	<3800
Isophorone	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
N-Nitroso-di-n-propylamine	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
N-Nitrosodiphenylamine	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Naphthalene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Nitrobenzene	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Pentachlorophenol	<1900	<2000	<18000	<18000	<25000	<6700	<22000	<16000	<19000
Phenanthrene	<400	**1100**	**5000**	<3800	**14000**	**1800**	**11000**	**6200**	<3800
Phenol	<400	<410	<3800	<3800	<5200	<1400	<4500	<3400	<3800
Pyrene	<400	**520**	<3800	**3200**	**10000**	**1600**	**4200 J**	**1900 J**	<3800

Bold text indicates results above analytical detection limits.
J = Result estimated, value measured between the reporting limit and the detection limit

Table 3
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, Pesticides/PCBs by EPA Method 8080

Station	GP10C-01	GP10C-01	GP10C-02	GP10C-03	GP10C-02	GP10C-03
Sample Depth in Feet	0.5	11-13	0.5	0.5	3-5	7.5-9.5
Sample date	1/18/01	1/18/01	1/18/01	1/20/01	1/19/01	1/19/01
Compound	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
4,4'-DDD	<4.0	<42	<3.9	<35.	<52	<33
4,4'-DDE	<1.6	<17	<1.5	<14	<20	<13
4,4'-DDT	<4.7	<50	<4.6	<41	<61	<39
Aldrin	<1.6	<17	<1.5	<14	<20	<13
alpha-BHC	<1.2	<12	<1.1	<10	<15	<9.9
alpha-Chlordane	<2.0	<21	<2.0	<18	<26.	<17
beta-BHC	<2.4	<25	<2.3	<21	<31	<20
Chlordane (Technical)	<5.5	<58	<5.3	<48	<72	<46
delta-BHC	<3.5	<37	<3.4	<31	<46	<30
Dieldrin	<0.78	<8.3	<0.76	<6.9	<10	<6.6
Endosulfan I	<5.5	<58	<5.3	<48	<72	<46
Endosulfan II	<1.6	<17	<1.5	<14	<20	<13
Endosulfan sulfate	<26.	<270	<25	<230	<340	<220
Endrin	<2.4	<25	<2.3	<21	<31	<20
Endrin aldehyde	<9.0	<95	<8.8	<79	<120	<76
Endrin ketone	<3.9	<41	<3.8	<34	<51	<33
gamma-BHC	<1.6	<17	<1.5	<14	<20	<13
gamma-Chlordane	<2.0	<21	<2.0	<18	<26.	<17
Heptachlor	<1.2	<12	<1.1	<10	<15	<9.9
Heptachlor epoxide	<3.9	<41	<3.8	<34	<51	<33
Methoxychlor	<69	<730	<67	<600	<900	<580
Toxaphene	<94	<990	<91	<820	<1200	<790
PCB-1016	<39	<410	<38	<34	<510	<33
PCB-1221	<39	<410	<38	<34	<510	<33
PCB-1232	<39	<410	<38	<34	<510	<33
PCB-1242	<39	<410	<38	<34	<510	<33
PCB-1248	<39	<410	<38	<34	<510	<33
PCB-1254	<39	<410	<38	<34	<51	<33
PCB-1260	**410**	**3300**	**1500**	<34	**440**	<33

Bold text indicates results above analytical detection limits.
J = Result estimated, value mesured between the reporting limit and the detection limit

Table 4
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, Total Petroleum Hydrocarbons (TPH)

Station	GP10C-01	GP10C-01	GP10C-01	GP10C-01	GP10C-02	GP10C-02	GP10C-03	GP10C-03	GP10C-03	GP10C-03
Sample Depth in Feet	**0.5**	**2-4**	**11-13**	**15-17**	**0.5**	**3-5**	**0.5**	**2.5-4.5**	**7.5-9.5**	**12-14**
Sample date	**1/18/01**	**1/18/01**	**1/18/01**	**1/18/01**	**1/18/01**	**1/19/01**	**1/20/01**	**1/19/01**	**1/19/01**	**1/19/01**
Compound	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Fuel Oil	<11	--	<60	<100	<10	<1400	<92	<650	<89	<51
Jet Fuel	<11	--	<60	<100	<10	<1400	<92	<650	<89	<51
Kerosene	<11	--	<60	<100	<10	<1400	<92	<650	<89	<51
Mineral Spirits	<11	--	<60	<100	<10	<1400	<92	<650	<89	<51
Motor Oil	<11	--	<60	<100	**2700**	<1400	<92	<650	<89	<51
TPH as Diesel	<11	--	**6100**	**35000**	<10	**68000**	**25000**	**50000**	**11000**	**3800**
TPH as Gasoline	<6.1	**50**	--	**530**	<5.7	**870**	**48**	--	**14**	**21**

Bold text indicates results above analytical detection limits.

Table 5
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Soil Sample Analytical Results, Metals

Station	GP10C-01	GP10C-01	GP10C-02	GP10C-02	GP10C-03	GP10C-03
Sample Depth in Feet	0.5	11-13	0.5	3-5	0.5	7.5-9.5
Sample date	1/18/01	1/18/01	1/18/01	1/19/01	1/20/01	1/19/01
Compound	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	**15800**	**5280**	**6870**	**12500**	**3280**	**982**
Antimony	<1.15	**5.93**	<1.15	<1.48	<0.991	<1.00
Arsenic	**3.14**	**3.53**	**3.76**	<0.740	<0.495	<0.501
Barium	**130**	**232**	**115**	**102**	**57.9**	**17.2**
Beryllium	**0.675**	**0.182**	**0.328**	**0.599**	**0.207**	<0.100
Cadmium	**0.845**	**1.82**	**1.74**	<0.740	<0.495	<0.501
Calcium	**52700**	**12300**	**86300**	**5920**	**11800**	**649**
Chromium	**20.9**	**19.7**	**28.7**	**13.6**	**4.02**	**1.38**
Cobalt	**6.26**	**4.85**	**4.14**	**6.86**	**2.54**	**1.2**
Copper	**18.6**	**47.7**	**31.5**	**18.5**	**6.41**	**1.8**
Iron	**15000**	**19600**	**13900**	**18800**	**4730**	**2240**
Lead	**38.2**	**685**	**210**	**973**	**14.7**	**3.43**
Magnesium	**11300**	**1820**	**34600**	**3170**	**1150**	**332**
Manganese	**277**	**353**	**366**	**157**	**126**	**81.1**
Mercury	<0.188	<0.193	**0.391**	<0.241	<0.162	<0.157
Nickel	**15.4**	**8.9**	**11**	**14.3**	**5.2**	<3.01
Potassium	**3590**	**937**	**1600**	**2030**	**684**	**187**
Selenium	<0.575	**4.44**	<0.577	**2.87**	**0.5**	<0.501
Silver	<0.805	**1.36**	<0.808	<1.04	<0.694	<0.702
Sodium	**202**	**230**	**208**	**425**	**137**	**167**
Thallium	<1.84	<1.88	<1.85	<2.37	<1.59	<1.60
Vanadium	**28.3**	**10.9**	**18**	**27.4**	**10.4**	**4.2**
Zinc	**85.7**	**836**	**165**	**44.3**	**25.8**	**10.5**

Bold text indicates results above analytical detection limits.

CDM

O:/NIC/RI_Report/Tables/1-5 - GEOPROBE_SOIL_SLUDGE AREA-APPENDIX DATA-GoldenRule.xls

Table 6
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, VOCs by EPA Method 8260

Station	GP10C-01	GP10C-02	GP10C-03
Groundwater Depth Zone / Sample Depth in Feet	S/18	S/18	S/16
Sample date	01/18/01	01/18/01	01/18/01
Compound	(µg/L)	(µg/L)	(µg/L)
1,1,1-Trichloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	**1.8**	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	<1.0
Benzene	**17**	**11**	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	**12**	**2.1**	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	**2.4**	<1.0
m,p-Xylene	<1.3	**7.4**	<1.3
Methylene chloride	<1.0	<1.0	<1.0
o-Xylene	<1.1	**2.4**	<1.1
Tetrachloroethene	<1.0	<1.0	<1.0
Toluene	<1.0	**1.4**	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0
Trichlorofluoromethane	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0

Bold text indicates results above analytical detection limits.

Table 7
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10C-01	GP10C-02	GP10C-03
Groundwater Depth Zone / Sample Depth in Feet	S/18	S/18	S/16
Sample date	01/18/01	01/18/01	01/18/01
Compound	(µg/L)	(µg/L)	(µg/L)
1,2,4-Trichlorobenzene	<11	<110	<12
1,2-Dichlorobenzene	<11	<110	<12
1,3-Dichlorobenzene	<11	<110	<12
1,4-Dichlorobenzene	<11	<110	<12
2,4,5-Trichlorophenol	<53	<570	<58
2,4,6-Trichlorophenol	<11	<110	<12
2,4-Dichlorophenol	<11	<110	<12
2,4-Dimethylphenol	<11	<110	<12
2,4-Dinitrophenol	<53	<570	<58
2,4-Dinitrotoluene	<11	<110	<12
2,6-Dinitrotoluene	<11	<110	<12
2-Chloronaphthalene	<11	<110	<12
2-Chlorophenol	<11	<110	<12
2-Methylnaphthalene	**26**	<110	<12
2-Methylphenol	<11	<110	<12
2-Nitroaniline	<53	<570	<58
2-Nitrophenol	<11	<110	<12
3,3'-Dichlorobenzidine	<21	<230	<23
3-Nitroaniline	<53	<570	<58
4,6-Dinitro-2-methylphenol	<53	<570	<58
4-Bromophenylphenyl ether	<11	<110	<12
4-Chloro-3-methylphenol	<21	<230	<23
4-Chloroaniline	<21	<230	<23
4-Chlorophenylphenyl ether	<11	<110	<12
4-Methylphenol	<11	<110	<12
4-Nitroaniline	<53	<570	<58
4-Nitrophenol	<53	<570	<58
Acenaphthene	<11	<110	<12
Acenaphthylene	<11	<110	<12
Anthracene	<11	<110	<12
Benzo(a)anthracene	<11	<110	<12
Benzo(a)pyrene	<11	<110	<12
Benzo(b)fluoranthene	<11	<110	<12
Benzo(g,h,i)perylene	<11	<110	<12
Benzo(k)fluoranthene	<11	<110	<12
Benzoic acid	<53	<570	<58
Benzyl alcohol	<21	<230	<23

Table 7
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, SVOCs by EPA Method 8270

Station	GP10C-01	GP10C-02	GP10C-03
Groundwater Depth Zone / Sample Depth in Feet	S/18	S/18	S/16
Sample date	01/18/01	01/18/01	01/18/01
Compound	(µg/L)	(µg/L)	(µg/L)
bis(2-Chloroethoxy)methane	<11	<110	<12
bis(2-Chloroethyl) ether	<11	<110	<12
bis(2-Chloroisopropyl) ether	<11	<110	<12
bis(2-Ethylhexyl)phthalate	<11	<110	<12
Butylbenzylphthalate	<11	<110	<12
Chrysene	**11**	<110	<12
Di-n-butylphthalate	<11	<110	<12
Di-n-octylphthalate	<11	<110	<12
Dibenz(a,h)anthracene	<11	<110	<12
Dibenzofuran	<11	<110	<12
Diethylphthalate	<11	<110	<12
Dimethylphthalate	<11	<110	<12
Fluoranthene	<11	<110	<12
Fluorene	<11	<110	<12
Hexachloro-1,3-butadiene	<11	<110	<12
Hexachlorobenzene	<11	<110	<12
Hexachlorocyclopentadiene	<11	<110	<12
Hexachloroethane	<11	<110	<12
Indeno(1,2,3-cd)pyrene	<11	<110	<12
Isophorone	<11	<110	<12
N-Nitroso-di-n-propylamine	<11	<110	<12
N-Nitrosodiphenylamine	<11	<110	<12
Naphthalene	<11	<110	<12
Nitrobenzene	<11	<110	<12
Pentachlorophenol	<53	<570	<58
Phenanthrene	**33**	<110	<12
Phenol	<11	<110	<12
Pyrene	**21**	<110	<12

Bold text indicates results above analytical detection limits.

Table 8
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, Pesticides/PCBs by EPA Method 8080

Station	GP10C-01	GP10C-02	GP10C-03
Groundwater Depth Zone / Sample Depth in Feet	S/18	S/18	S/16
Sample date	01/18/01	01/18/01	01/18/01
Compound	(µg/L)	(µg/L)	(µg/L)
4,4'-DDD	<0.12	<1.1	<0.12
4,4'-DDE	<0.043	<0.40	<0.044
4,4'-DDT	<0.13	<1.2	<0.13
Aldrin	<0.043	<0.40	<0.044
alpha-BHC	<0.033	<0.30	<0.033
alpha-Chlordane	<0.054	<0.50	<0.055
beta-BHC	<0.065	<0.60	<0.066
Chlordane (Technical)	<0.15	<1.4	<0.15
delta-BHC	<0.098	<0.90	<0.099
Dieldrin	<0.022	<0.20	<0.022
Endosulfan I	<0.15	<1.4	<0.15
Endosulfan II	<0.043	<0.40	<0.044
Endosulfan sulfate	<0.72	<6.6	<0.73
Endrin	<0.065	<0.60	<0.066
Endrin aldehyde	<0.25	<2.3	<0.25
Endrin ketone	<0.11	<1.0	<0.11
gamma-BHC	<0.043	<0.40	<0.044
gamma-Chlordane	<0.054	<0.50	<0.055
Heptachlor	<0.033	<0.30	<0.033
Heptachlor epoxide	<0.11	<1.0	<0.11
Methoxychlor	<1.9	<18	<1.9
Toxaphene	<2.6	<24	<2.6
PCB-1016	<1.1	<10	<1.1
PCB-1221	<1.1	<10	<1.1
PCB-1232	<1.1	<10	<1.1
PCB-1242	<1.1	<10	<1.1
PCB-1248	<1.1	<10	<1.1
PCB-1254	<1.1	<10	<1.1
PCB-1260	<1.1	<10	<1.1

Table 9
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, Total Petroleum Hydrocarbons (TPH)

Station	**GP10C-01**	**GP10C-02**	**GP10C-03**
Groundwater Depth Zone / Sample Depth in Feet	**S/18**	**S/18**	**S/16**
Sample date	**01/18/01**	**01/18/01**	**01/18/01**
Compound	(mg/L)	(mg/L)	(mg/L)
Fuel Oil	<0.40	<20	<0.40
Jet Fuel	<0.40	<20	<0.40
Kerosene	<0.40	<20	<0.40
Mineral Spirits	<0.40	<20	<0.40
Motor Oil	<0.40	<20	<0.40
TPH as Diesel	**15**	**1200**	<0.40
TPH as Gasoline	**0.567**	**4.08**	<0.50

Bold text indicates results above analytical detection limits.

Table 10
Former Golden Rule Refinery
North Industrial Corridor (NIC) Site
Sludge Pit Groundwater Sample Analytical Results, Total Metals

Station	GP10C-01	GP10C-02	GP10C-03
Groundwater Depth Zone / Sample Depth in Feet	S/18	S/18	S/16
Sample date	01/18/01	01/18/01	01/18/01
Compound	(µg/L)	(µg/L)	(µg/L)
Aluminum	<75.0	**519**	<75.0
Antimony	<10.0	<10.0	<10.0
Arsenic	<5.00	<5.00	**9.94**
Barium	**1620**	**992**	**1070**
Beryllium	<1.00	<1.00	<1.00
Cadmium	<5.00	<5.00	<5.00
Calcium	**119000**	**150000**	**136000**
Chromium	<7.00	<7.00	<7.00
Cobalt	<7.00	<7.00	<7.00
Copper	<10.0	<10.0	<10.0
Iron	**36700**	**16900**	**5190**
Lead	**7.15**	**19.3**	**<5.00**
Magnesium	**53600**	**94000**	**31700**
Manganese	**1240**	**3770**	**2640**
Mercury	<0.200	<0.200	<0.200
Nickel	<30.0	<30.0	<30.0
Potassium	**16400**	**9670**	**8310**
Selenium	<10.0	<10.0	<10.0
Silver	**7.81**	<7.00	<7.00
Sodium	**88600**	**34200**	**63400**
Thallium	<5.00	<5.00	<5.00
Vanadium	<12.0	<12.0	<12.0
Zinc	**153**	**288**	**147**

Bold text indicates results above analytical detection limits.

Appendix L-3
HCI Advance Chemical Facility

PRP Evaluation Summary

HCI Advance Chemical Facility
1520 North Barwise (15th and Barwise)

Potential Source Area PRP and Work Plan Addendum Map ID - 03E

Contaminants of Concern - PCE, possibly TCA, and associated degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Degradation Pathways
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of HCI Advance Chemical Facility, Revised January 2002 to incorporate HCI sampling data.

PCE Contamination

Data indicate that the HCI Advance Chemical facility (HCI) is a significant active source of chlorinated VOC groundwater contamination. Groundwater sampling data have shown a marked increase in concentrations of Tetrachloroethene (PCE) along the groundwater flow path through this area. HCI conducts bulk chemical repackaging and distribution and routinely deals with chlorinated solvents.

Samples collected by the City during HCI's investigation are referred to as HCI-02, -05, -06, and -07 and correspond to the same sample numbers among HCI's sample locations GPAD-1 through GPAD-7. Only samples of the shallow aquifer were collected by the City during HCI's investigation. Samples collected by the City during the NIC Phase 1/1A investigation in 1997 and 1998 are identified by the prefix "GPA" or "GP#". Samples collected by the City during the NIC Phase 2 investigation in 1999 and 2000 are identified by the prefix "GP04E".

According to HCI sampling data, PCE and TCE were observed in soil at concentrations of 400 and 250 µg/kg, respectively in soil sample GPAD-02-2 (CJE 2001). PCE was detected in soil at concentrations between 5.5 and 68 µg/kg at five other samples collected from three other borings installed by HCI representatives.

Directly upgradient (north) of the HCI facility, PCE was not detected in the shallow aquifer at sample locations GP02G-01, GP02G-02, GP02G-08, and GPA24-2 when sampled in 1997 and 1999. At up- and cross-gradient sample location GP03E-01, 3.5 µg/L PCE was detected in the shallow aquifer in 1999. Downgradient of the facility's drum filling area, a split sample (HCI-06) collected in February, 2000 by the City's representatives during HCI's environmental investigation, yielded a groundwater PCE concentration of 1300 µg/L. Additionally, three other samples collected by the City's representatives, HCI-02, -05, and -07, yielded PCE concentrations of 15, 78, and 33 µg/L. According to HCI sampling data, PCE, TCE, and *cis*-1,2-DCE were observed in

groundwater at concentrations of 1,200, 100 and 190 μg/L, respectively at GPAD-6 (CJE 2001). While onsite during HCI's investigation, the City and its representative observed containers with labels indicating the contents as PCE. HCI's environmental investigation workplans (CJE 2000, CJE 2001) reference two chlorinated solvent storage areas, one in the eastern end of the facility's warehouse and one at the southeast portion of the site.

Though the localized groundwater flow direction in this area is not well defined and PCE has also been detected at low concentrations (< 10 μg/L) in groundwater up- and cross-gradient of HCI, enough evidence exists to indicate that the 1,300/1,200 μg/L dissolved PCE detected at HCI-06/GPAD-06 is derived from a release at the facility.

In review of data from the HCI investigation (CJE 2001) the reader should be aware that data posted on maps of the site might not match data provided in tables. In cases of conflicts, data tables from the HCI investigation are relied upon.

TCA Contamination

In addition to PCE, the chlorinated solvent 1,1,1-TCA and its degradation byproduct, 1,1-DCA, increase along the groundwater flow path across this area. Though these compounds were detected in many samples collected in the area, concentrations were highest at HCI-06. According to HCI sampling data, 1,1,1-TCA and 1,1-DCA were observed in soil sample GPAD-05-2 at concentrations of 170 and 1,100 μg/kg, respectively. HCI's investigation revealed 1,1,1-TCA in groundwater samples collected from GPAD-02 and GPAD-05 at concentrations of 9.3 and 6.3 μg/L, respectively. The City has no indication that TCA or its degradation products were used or stored at the HCI facility, but these compounds may be derived from impurities in the PCE suspected to have been released from the site.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area to be south-southeast but facility-specific groundwater flow is not well defined.

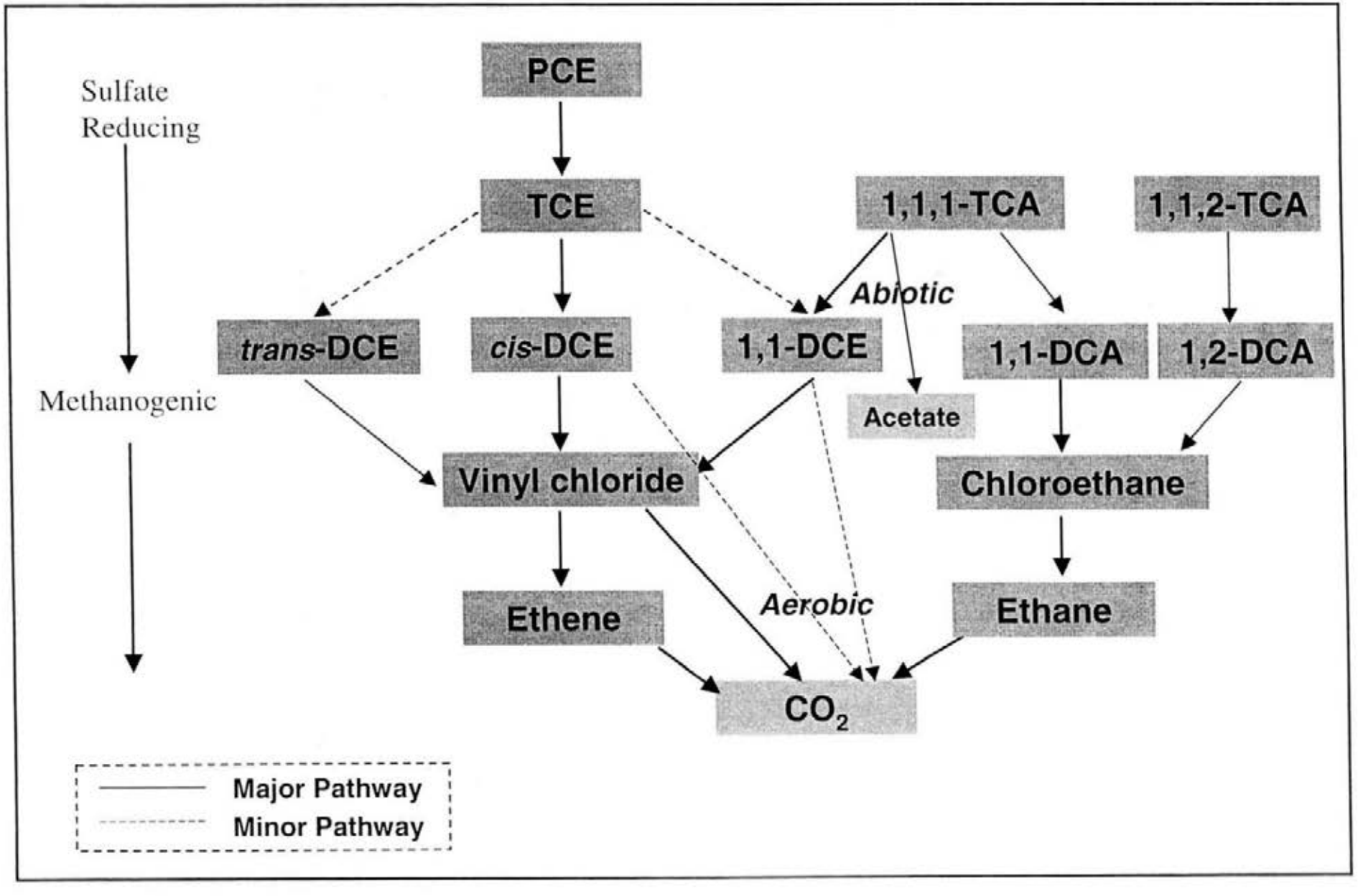
References

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

CJE 2000, *Workplan for the Advance Chemical, Inc. Site*, prepared by C. Johnson Environmental, Morgana, California. Submitted to City of Wichita February 7, 2000.

CJE 2001, *Workplan for the Advance Chemical, Inc. Site*, prepared by C. Johnson Environmental, Morgana, California. Submitted to City of Wichita February 7, 2000.

Degradation Pathways



North Industrial Corridor (NIC) Site
Degradation Pathways for Chlorinated Aliphatic Hydrocarbons

Polk Directory Review and RCRA Information Summary

Name of Company: Advance Chemical Co.

Name and/or Contact Person:

Street Address of Company: 1520 Barwise St.

City, State, and Zip Code: Wichita, Ks 67214

Regarding the Following Property:

Phone Number of Contact:

History:	1995	Advance Chemical Distributions
	1990	Service Chemical Supply Inc
	1984-5	Dodson Manufacturing Co, Inc
	1980	Same (Storage)
	1975	Same
	1970	Same
	1965	Same
	1961	Elec-Tron Inc

RCRA Info: No KDHE RCRA file

EVIDENTIARY SUMMARY
(ADVANCE)

COMPANY: SERVICE CHEMICAL SUPPLY

ADDRESS: 1520 N. BARWISE

BUSINESS:

ENFORCEMENT SUMMARY:

HISTORICAL INFORMATION: a container of 1,1,1- Trichloroethane was dropped off at the household hazardous waste center on April 4,1997 enclosed in a cardboard box. A Vulcan mailing label on the outside of the package listed :

Service Chemical Supply
Tim Mauer
1520 N. Barwise
Wichita, Kansas 62714

Alan Gremmel, Hazardous Waste Supervisor, confiscated the packaged for evidence.

SAMPLING DATA:

Excerpts from Report(s) Prepared by Others

JOHNSON ENVIRONMENTAL
57 Amberwood Court • Moraga, California 94556
(925) 376-2861 • FAX (925) 376-6883

February 7, 2000

Ms. Doris Leslie
Wichita-Sedgwick County Department of Health
1900 East Ninth Street
Wichita, Kansas 67214

Reference: Environmental investigation at the Advance Chemical site

Dear Ms. Leslie

Attached is a work plan for the Advance Chemical, Inc. site located at 1520 North Barwise in Wichita, Kansas. This plan describes the procedures which will be used to evaluate the potential for operations at that site to be a source of chlorinated solvents known to be present in the ground water in the area. The procedures and subcontractors have been selected to ensure that the results will be comparable to other environmental investigations in the area.

If you have any questions or comments on the work plan, please call me. I will provide any additional information you may require.

Sincerely yours,

Clarence Johnson

WORK PLAN FOR THE ADVANCE CHEMICAL, INC. SITE

1.0 INTRODUCTION

Advance Chemical, Inc. (Advance) has a facility located at 1520 North Barwise in Wichita, Kansas (see Figure 1). The site is used as a chemical storage and distribution center. The site is located within the Northern Industrial Corridor (NIC), an area known to have soil and ground water contaminated with chlorinated solvents. Because the Advance site has stored chlorinated solvents on site, the City of Wichita, which is leading the environmental investigation, has assumed that Advance may bear responsibility for part of the contamination. Previous investigations on site and off site have shown the ground water to be contaminated with chlorinated organic compounds. To determine the source of the contamination, Advance proposes to test the ground water under the site and downgradient of the site for chlorinated organic compounds.

The objectives of the investigation are to:

1. determine the concentrations of contamination under the site at the water table (approximately 20 feet below grade) and at the bottom of the unconfined aquifer (approximately 38 feet below grade); and

2. determine the concentrations of contamination at the same levels downgradient of the site.

To achieve these objectives, geoprobes will be drilled at the site and downgradient from the site to define the soil stratigraphy and collect water sample for analysis. This work plan has been prepared to describe the work that will be undertaken and to document the procedures which will be followed in conducting the work.

2.0 SITE DESCRIPTION

The site is located in an industrial area within the NIC in Wichita, Kansas. The site is used as a chemical storage and distribution facility (see Figure 2 for a site plan). Structures at the site include an office, warehouse, loading dock, and a warm room for storing chemicals which require temperatures above 50^0 F. The warehouse and warm room have cement floors and are constructed to contain spills. The north yard, which is unpaved, is used to receive and ship packaged chemicals from the warehouse and to store returned empty drums. The facility accepts only empty return drums from customers. No waste disposal or drum recycling is conducted on site. The south yard, which is paved, has above ground tanks for storing acids, caustic, and bleach. These chemicals are received in tank trucks and stored in the tanks on the south side of the facility. Chlorinated solvents are received in drums and by tank truck. The tank trucks containing chlorinated solvents are parked in the center of the south yard and the contents of the tanks are transferred to drums in the drumming area. The drums are stored in the southern portion of the site as the drumming proceeds, and then either shipped to customers or transferred to the warehouse for storage.

There are no manufacturing or chemical synthesis operations on site. The site does not generate hazardous wastes. There have been no known releases of reportable quantities of

chlorinated solvents at the site.

3.0 PREVIOUS INVESTIGATIONS

Camp Dresser McKee (CDM) has conducted a study of the groundwater contamination in the area of the Advance site. Geoprobe samples of ground water were collected at upgradient and downgradient sites. The concentrations of the chlorinated organic compounds in the samples are shown in Figure 3. The results show that tetrachloroethene (PCE) is found only in very low concentrations, the maximum concentration found being 5.4 parts per billion (ppb). Trichloroethene (TCE) is found in concentrations up to 830 ppb upgradient from Advance. TCE decreases in downgradient samples relative to the directly upgradient samples. Isomers of dichloroethene (DCE) and vinyl chloride (VC), which are degradation products of PCE and TCE also show a trend of decreasing concentrations downgradient.

Advance conducted a geoprobe study in 2000. The results of the study show that chlorinated compounds are found in the soil beneath the site (see Figure 4 and Table 1). The maximum concentrations are found at two feet below grade in sample GPAD-5-2 where the total concentration of chlorinated compounds is 3,962 ppb. However, the concentrations of the chemicals at this location decrease to 17 ppb at 10 feet below grade. The concentration of total chlorinated compounds in GPAD-4 decreases from 716 ppb at two feet below grade to 80 ppb at 10 feet below grade, the maximum contamination found at depth in the soil at the site.

Ground water is found approximately 19 feet below grade. Groundwater tested as part of the same investigation showed that the PCE is found at elevated levels beneath the site (see Figure 5 and Table 2). The groundwater sample collected GPAD-6 had PCE at a concentration of 1,200 ppb. The concentrations of the other chlorinated compounds were generally consistent with the decrease noted from upgradient to downgradient in the CDM samples. The exception to this is at GPAD-6 where concentrations of TCE and DCE appear to be elevated with respect to the surrounding area. This increase may be due to degradation of PCE rather than a release. Split groundwater samples collected and analyzed by Wichita-Sedgewick County Department of Environmental Health (WSC) personnel reportedly contained concentrations of chlorinated compounds consistent with the results of the
Advance study.

4.0 PROPOSED INVESTIGATION

The previous groundwater testing on site was limited to the shallow part of the upper aquifer. To test for the presence and distribution of chlorinated solvents in the ground water at depth under the site, two geoprobes will be advanced to approximately 39 feet below grade. The geoprobes will be located near GPAD-2 and GPAD-6 to test the upgradient and downgradient sides of the site (see Figure 6). In addition, two geoprobes will be advanced at offsite locations between the Advance site and the nearest CDM downgradient geoprobe locations.

Continuous soil cores will be collected from the geoprobes. The Standard Operating Procedures (SOP) for geoprobe soil sampling is given in SOP-009, which is attached to this work plan. The cores will be logged by a geologist. Observations on the color, grain size, layering,

fracturing, odor, and visible presence of chemicals will be made. Organic vapor meter (OVM) readings will be taken along the length of the cores as they are removed from the hole. The OVM will be calibrated and operated as described in SOP-020, which is attached to this work plan. The ambient air background for the OVM will be established by taking readings on the upwind and downwind boundaries of the site at the start of the day and after any significant wind shifts.

Soil from discrete zones will be tested using a field headspace technique. If head space analysis, visual observations, or odors indicate the presence of contamination, soil samples will be collected for analysis for volatile organic compounds using EPA Method 8260. Soil samples selected for analysis laboratory-supplied, precleaned glass jars with teflon lids.

Each geoprobe will be completed to the lower confining layer, which is at a depth of approximately 39 feet. A groundwater sample will be collected at 20 feet below grade and at the confining layer. The SOP for collecting groundwater samples is given in SOP-010, which is attached to this work plan. The sample will be submitted for analysis for volatile organic compounds using EPA Method 8260.

5.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

To ensure the validity of the data collected, quality assurance/quality control procedures will be followed throughout the project. All of the SOPs referenced above, along with SOP-028, Data Review Procedures, which is attached to this work plan, will be followed carefully. The locations of the geoprobes will be carefully noted in the field. All field notes and pictures will be placed in the permanent file for future reference, if necessary.

Quality control samples will include a trip blank supplied by the analytical laboratory, a field blank, an equipment blank, a duplicate soil sample, and a duplicate groundwater sample. The quality control samples will be recorded on a chain of custody record with all of the field samples collected. The chain of custody will be maintained through delivery to the analytical laboratory. All samples will be stored in a clean ice chest and maintained at a temperature of 4° C.

Any deviations from the work plan or the SOPs and any anomalous conditions observed in the field will be documented in writing. The data will be reviewed in accordance with SOP-028. Any discrepancies in the data will be referred to the laboratory for review, and a written description of the discrepancy and the results of the review will be placed in the permanent file.

6.0 REPORT

Following completion of the field work and the Quality Control/Quality assurance review of the data, the data will be submitted to the Wichita-Sedgewick County Department of Health (WSC). The need to prepare a written report will be determined at that time.

7.0 SCHEDULE

The field work will be scheduled for approximately two weeks after this work plan has been approved by WSC and KDEH. Data review and analysis will be completed approximately 30 days

after the field work has been completed.

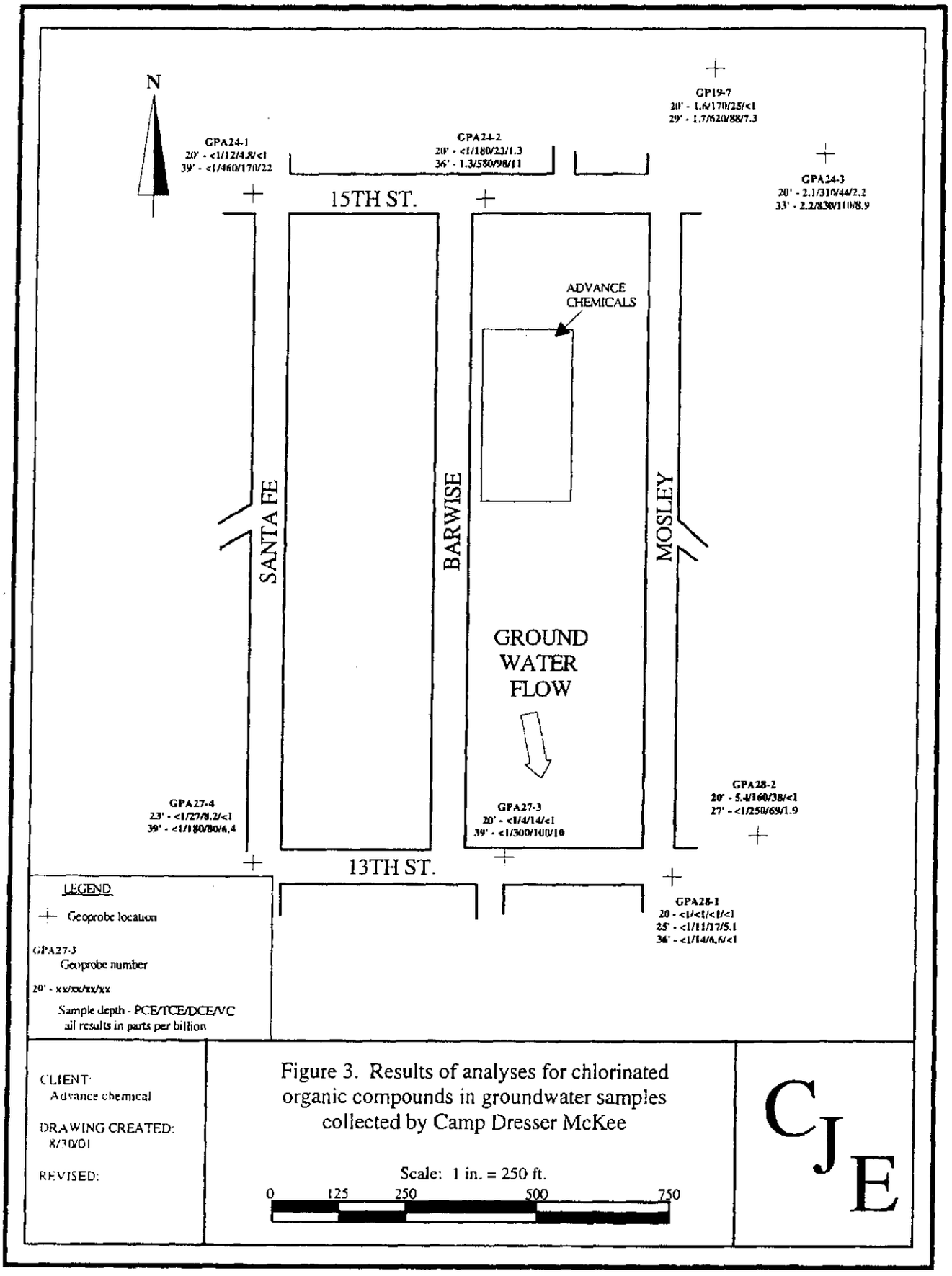
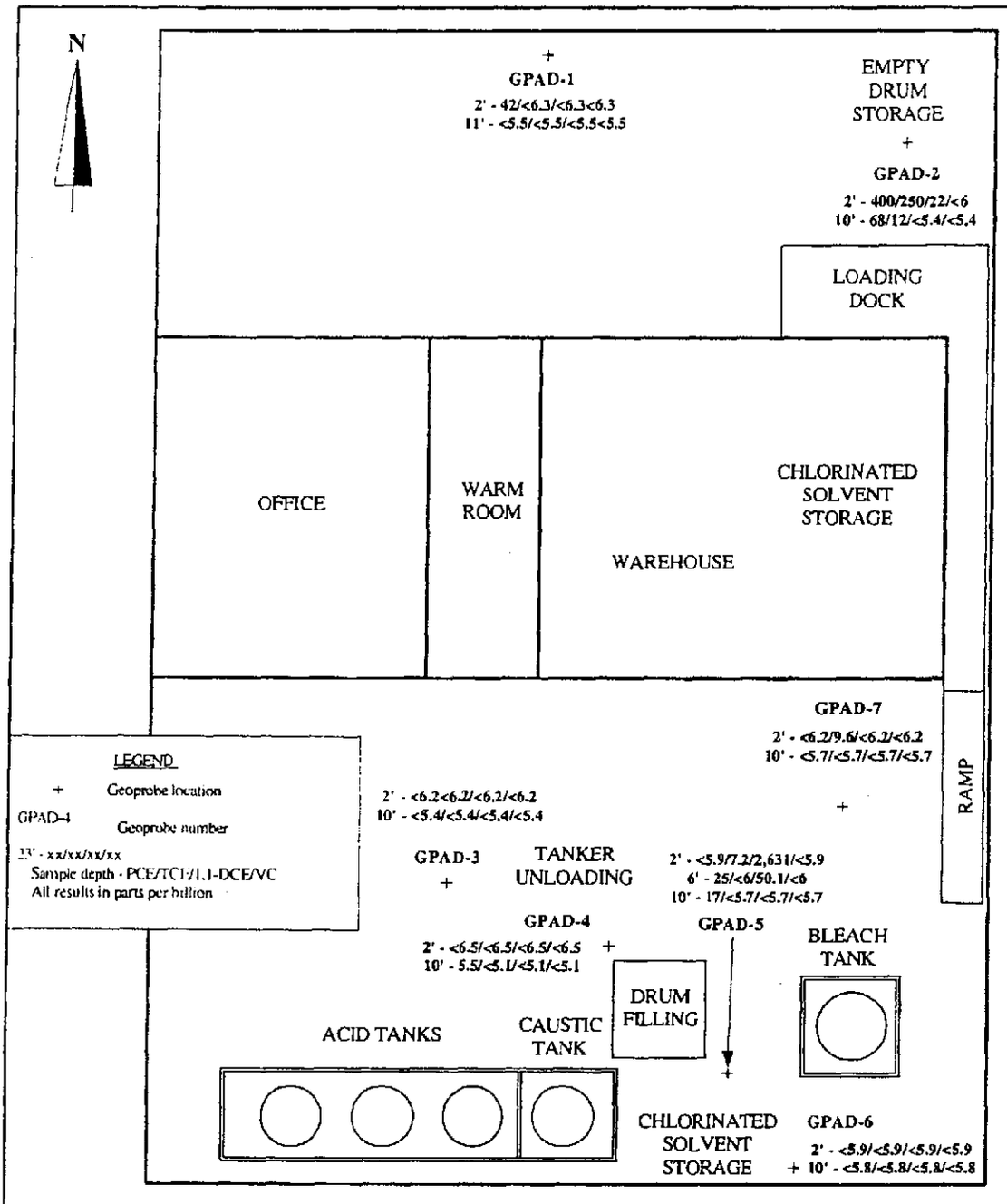


Figure 3. Results of analyses for chlorinated organic compounds in groundwater samples collected by Camp Dresser McKee



CLIENT:
Advance Chemicals

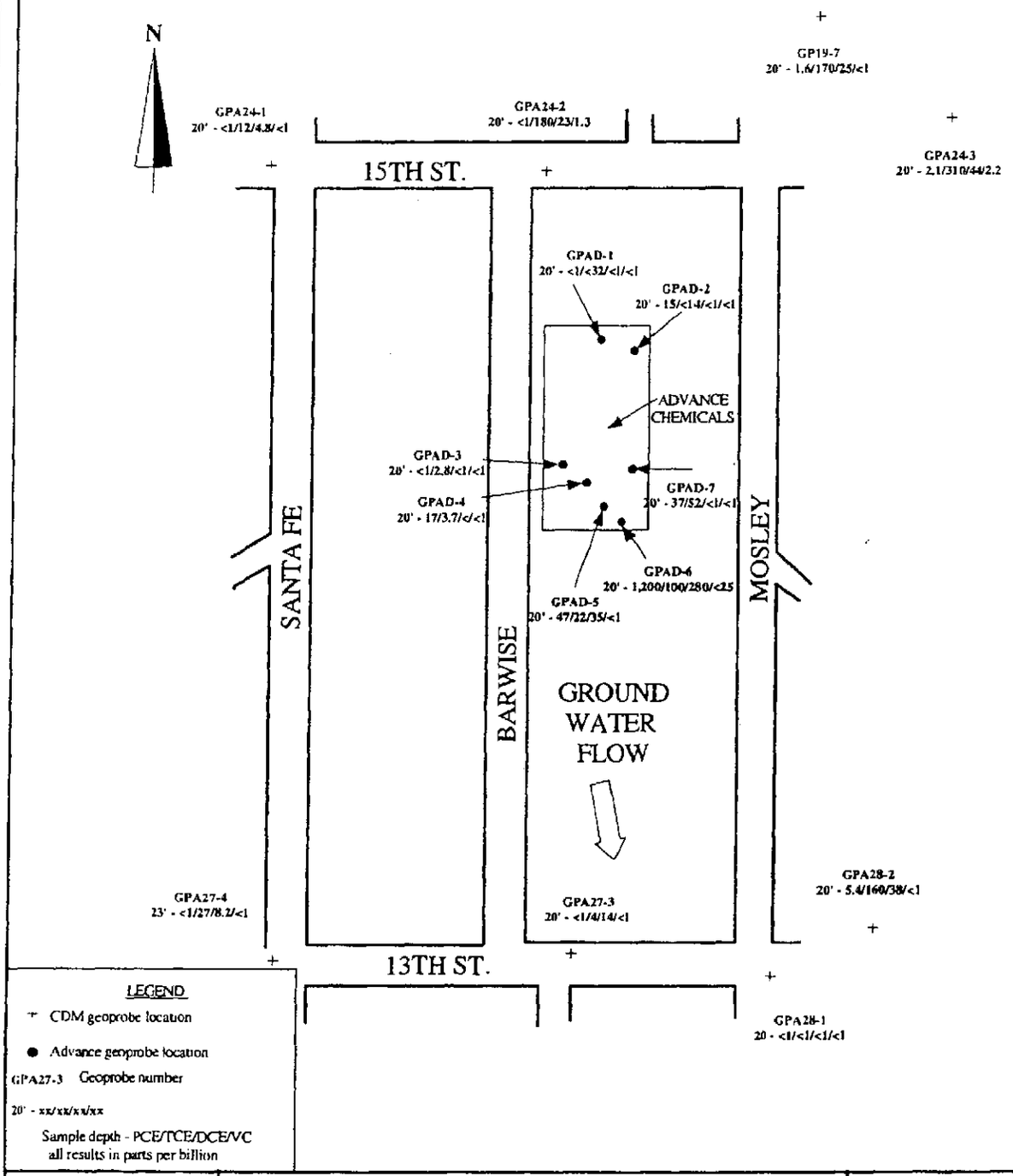
DRAWING CREATED:
2/5/00

REVISED:

Figure 4. Geoprobe sample locations and results of soil analyses at the Advance site

Not to scale

CJE



CLIENT:
Advance chemical

DRAWING CREATED:
8/30/01

REVISED:

Figure 5. Results of analyses for chlorinated organic compounds in shallow groundwater samples collected by Camp Dresser McKee and Advance

Scale: 1 in. = 250 ft.

0 125 250 500 750

CJE

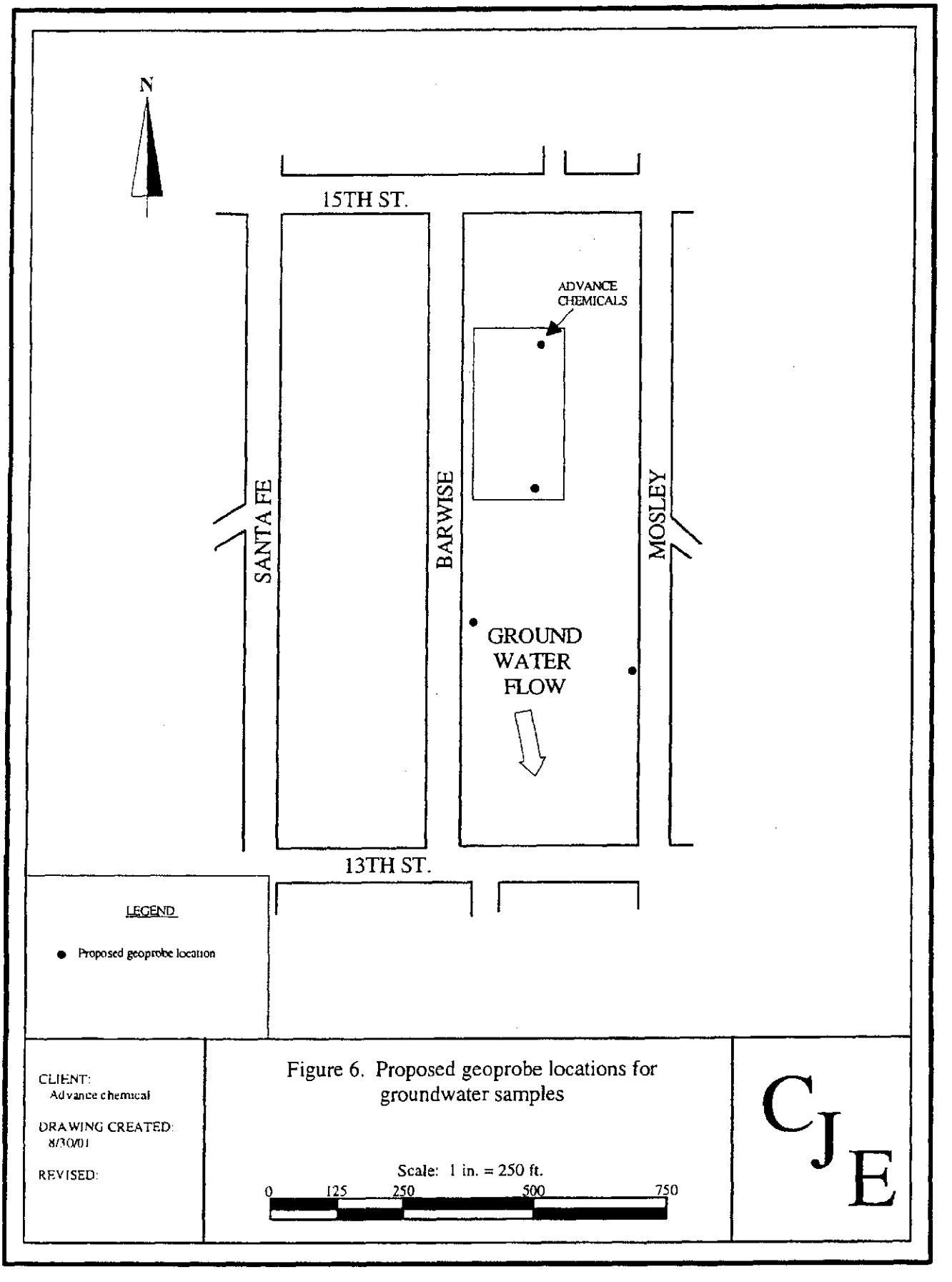


Figure 6. Proposed geoprobe locations for groundwater samples

TABLE 1
Soil Analytical Results EPA Method 8260
HCI Advance, Wichita, Kansas
February 2000

Sample ID	[redacted]	GP1-2	GP1-11	GP2-2	GP2-10	GP3-2	GP3-10	GP4-2	GP4-10	GP5-2	GP5-6	GP5-10	GP6-2	GP6-10	GP7-2	GP7-10	Dup#1
Chemical																	GP5-2
Vinyl chloride	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	<5.9	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
1,1-Dichloroethene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	**31**	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
trans-1,2-Dichloroethene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	<5.9	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
1,1-Dichloroethane	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	**1100**	**8.1**	<5.7	<5.9	<5.8	<6.2	<5.7	**21**
1,2-Dichloroethane	ug/Kg	<6.3	<5.5	**22**	<5.4	<6.2	<5.4	<6.5	<5.1	**14**	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
Benzene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	<5.9	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
Trichloroethene	ug/Kg	<6.3	<5.5	**250**	**12**	<6.2	<5.4	<6.5	<5.1	**7.2**	<6.0	<5.7	<5.9	<5.8	**9.6**	<5.7	<5.8
Toluene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	**15**	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
Tetrachloroethene	ug/Kg	**42**	<5.5	**400**	**68**	<6.2	<5.4	<6.5	**5.5**	<5.9	**25**	**17**	<5.9	<5.8	<6.2	<5.7	<5.8
1,1,1-Trichloroethane	ug/Kg	<6.3	<5.5	**37**	<5.4	<6.2	<5.4	<6.5	<5.1	**170**	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
Chlorobenzene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	<5.9	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
Ethylbenzene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	**230**	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	**23**
m&p Xylene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	**610**	**17**	<5.7	<5.9	<5.8	<6.2	<5.7	**88**
o-Xylene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	**260**	**8.4**	<5.7	<5.9	<5.8	<6.2	<5.7	**40**
cis-1,2-Dichloroethene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	**1500**	**42**	<5.7	<5.9	<5.8	<6.2	<5.7	**29**
1,2-Dichlorobenzene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	<5.9	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
1,4-Dichlorobenzene	ug/Kg	<6.3	<5.5	<6.0	<5.4	<6.2	<5.4	<6.5	<5.1	<5.9	<6.0	<5.7	<5.9	<5.8	<6.2	<5.7	<5.8
Methylene chloride	ug/Kg	<6.3	<5.5	**7.3**	<5.4	<6.2	<5.4	**7.7**	<5.1	**15**	<6.0	<5.7	<5.9	<5.8	**6.5**	<5.7	**5.9**

ug/Kg: micrograms per kilogram, equal to parts per billion

TABLE 2
Groundwater Analytical Results EPA Method 8260
HCI Advance, Wichita, Kansas
February 2000

Chemical		GP1	GP2	GP3	GP4	GP5	GP6	GP7	Dup GP5
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	<1.0
1,1-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	**1.8**
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	**1**
1,1-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	**14**	**90**	<1.0	**15**
1,2-Dichloroethane	ug/L	<1.0	**1.2**	<1.0	<1.0	<5	<25	<1.0	<1.0
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	<1.0
Trichloroethene	ug/L	**32**	**14**	**2.8**	**3.7**	**22**	**100**	**52**	**23**
Toluene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	<1.0
Tetrachloroethene	ug/L	<1.0	**15**	<1.0	**17**	**47**	**1200**	**37**	**42**
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	<1.0
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	<1.0
m&p Xylene	ug/L	<1.3	<1.3	<1.3	<1.3	<6.5	<32	<1.3	<1.3
o-Xylene	ug/L	<1.1	<1.1	<1.1	<1.1	<5.5	<25	<1.1	<1.1
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	**21**	**190**	<1.0	**23**
1,1,1-Trichloroethane	ug/L	<1.0	**9.3**	<1.0	<1.0	**6.3**	<25	**7.1**	**7.4**
Chloroform	ug/L	<1.0	**1.2**	<1.0	<1.0	<5	<25	**1.5**	<1.0
1,2-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	<1.0
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<5	<25	<1.0	<1.0

ug/L: micrograms per liter, equal to parts per billion

Figure(s)
Aerial Photographs and Sample Location Map(s)

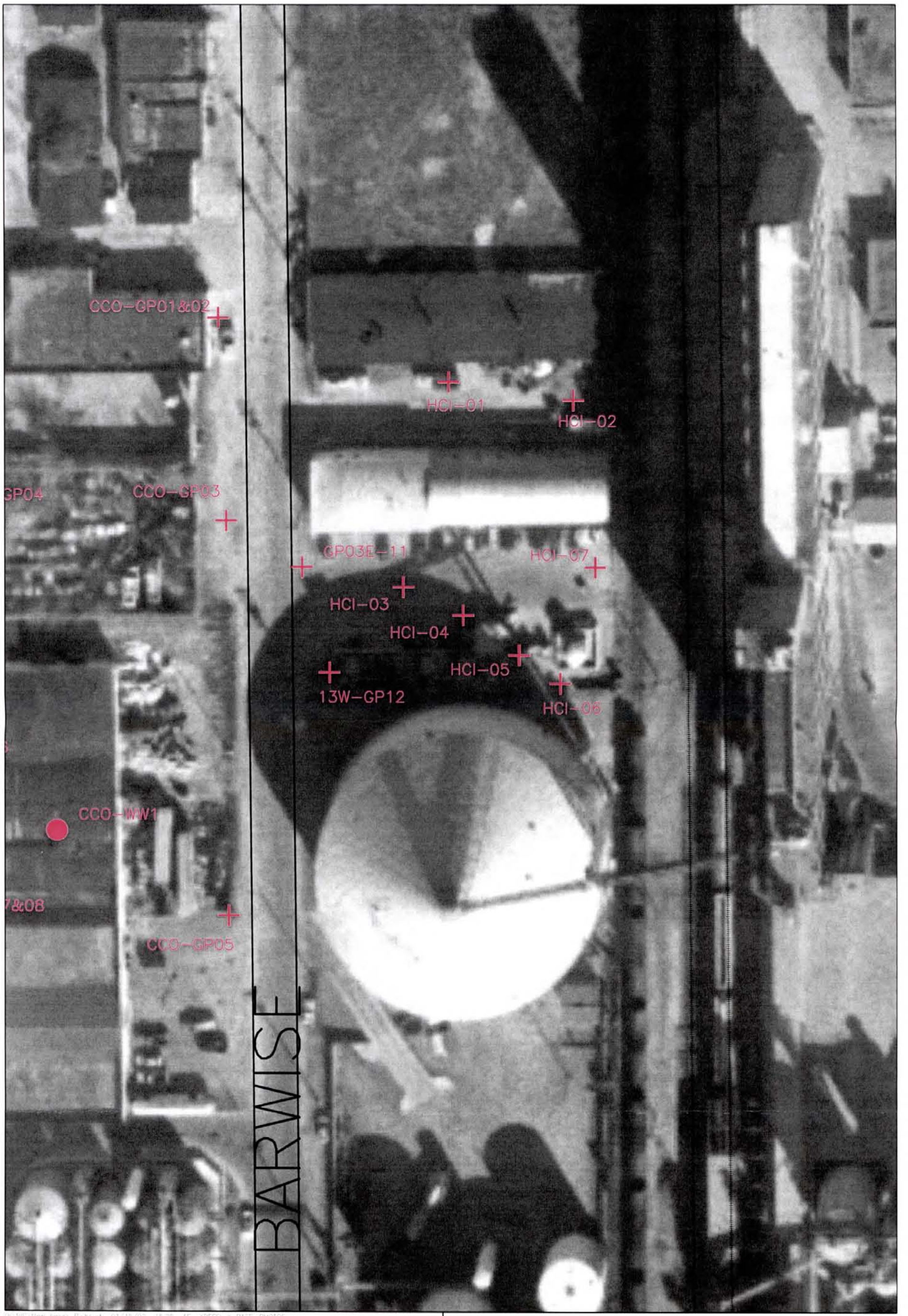
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, HCI Advance Chemical Facility



CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, HCI Advance Chemical Facility

Table(s)
Analytical Data Table(s)

HCI Advance Chemical
North Industrial Corridor (NIC) Site
Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP03E-11	S/17	11/22/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5
GP03E-11	D/35	11/22/99		µg/L	<1	**120**	**19**	<1	<1	<1	<1	<1	<1	<1	5
GP-HCI-02	S/17	02/14/00		µg/L	**15**	**14**	<1	<1	**11**	<1	<1	<1	**1.3**	<1	<5.4
GP-HCI-05	S/17	02/14/00		µg/L	**78**	**31**	**29**	<1	**7**	**18**	**2**	<1	<1	<1	<5.4
GP-HCI-06	S/17	02/14/00		µg/L	**1300**	**110**	**210**	<1	**14**	**98**	**7.6**	<1	<1	<1	<5.4
GP-HCI-07	S/17	02/14/00		µg/L	**33**	**69**	<1	<1	**8.5**	<1	<1	<1	**2.5**	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-4
Former Vim Trailer

PRP Evaluation Summary

Former Vim Trailer
2811 N. Ohio Street (NW of 26th and Ohio)

Potential Source Area PRP and Work Plan Addendum Map ID - 01G

Contaminants of Concern - TCE and TCA and their degradation products, Petroleum Hydrocarbons

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Former Vim Trailer

The former Vim Trailer facility (VIM) is located at 2811 North Ohio Street. This facility was involved in manufacturing and refurbishing tanker trailers. Solvents were used to clean tankers prior to assembly or painting. A 12,000-gallon underground storage tank located on the western end of the property was used to contain spent solvent and rinsate generated during the tanker cleaning and painting operations. The tank was removed in 1993 and a hole was observed in the tank during its removal. Vim Trailer is no longer in business. Two wells (VIM-MW26 and VIM-MW27) were installed prior to June 1991 with five-foot screen intervals. The screen intervals represent the upper middle portion of the aquifer with the top of the screen intervals located at 23 and 22 feet below ground surface. The monitoring wells were sampled during 1991 and had TCE detections of 42 and 66 mg/L, respectively.

Groundwater and soil investigations conducted in 1995 and 1997 identified a variety of chlorinated solvents in the soils and groundwater. CDM has acquired summary tables of the 1995 sampling effort but has not been able to acquire the original report providing the groundwater results.

The 1995 sampling effort indicated that a soil sample collected adjacent to the former TCE storage tank had in-field laboratory detections of TCE (2,371 mg/kg), 1,2-DCE (659 mg/kg), and 1,1,1-TCA (3,086 mg/kg). Groundwater detections of TCE (172 mg/L), 1,2-DCE (402 mg/L), and 1,1,1-TCA (2,131 mg/L) were reported.

The results of a 1997 investigation were presented in a report prepared by Allied Environmental Consultants (AEC) for Chance Coach, Inc., the current property occupant. The January 16, 1998 report is titled Chance Coach Inc. Site Environmental Evaluation - Report of Findings. No groundwater samples were collected during this investigation. Sixteen borings were installed with a shallow (less than 4 feet) and deep (generally between 10 and 14 feet) soil sample collected at each location. Two soil boring locations were located immediately adjacent to the former spent solvent and rinsate storage tank. Soil samples collected during the 1997 investigation included the following

chlorinated VOC detections: PCE (54,000 mg/kg), TCE (290,000 mg/kg), *cis*-1,2-DCE (85,000 mg/kg), vinyl chloride (1,400 mg/kg), and 1,1,1-TCA (1,900 mg/kg). Additionally, significant concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX) were observed in the same soil samples (total BTEX 96,700 mg/kg).

1995 and 1997 soil borings, groundwater sampling locations, and monitoring wells installed on this facility as part of this facility's environmental investigations are signified by the prefix "VIM." Relevant maps and data summary tables are provided in Appendix B-17.

Investigations conducted on this property during the City's RI investigation (1997 through 2000) reaffirmed the identification of this property as a source of chlorinated solvent contamination. Sample locations are shown on the attached figure. Two Geoprobe locations were placed upgradient of the VIM facility. TCE was detected at a concentration of 1.4 µg/L in the shallow groundwater sample collected north of the former UST location at Geoprobe location GP#63-2. TCE and *cis*-1,2-DCE were detected at a concentrations of 61 µg/L and 7.7 µg/L, respectively, in the shallow groundwater sample collected from Geoprobe location GP#63-1 to the northeast of the former UST location. No other VOCs were detected in the shallow groundwater samples at these upgradient Geoprobe locations. Shallow groundwater samples collected downgradient of the former UST location had numerous VOC detections. The shallow groundwater sample collected at monitoring well NMW-05S had detections of PCE (7.8 µg/L), TCE (250 µg/L), *cis*-1,2-DCE (500 µg/L), VC (86 µg/L), 1,1-DCA (10 µg/L), 1,1-DCE (3.7 µg/L), and benzene (1.9 µg/L). A shallow groundwater sample collected from Geoprobe location GP#62-1, located just south of the VIM property and south of NMW-05 had detections of PCE (1 µg/L), TCE (490 µg/L), *cis*-1,2-DCE (3,000 µg/L), VC (350 µg/L), TCA (7.5 µg/L), 1,1-DCA (39 µg/L), 1,1-DCE (11 µg/L), and benzene (8.2 µg/L).

Historical and recent data show definitive evidence that VIM's former UST location on the western portion of the property was and is a source of several chlorinated solvents and petroleum hydrocarbon contamination. Additional site characterization is necessary to determine whether any other locations on the property may be impacting groundwater.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area to be south-southwest.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 2811 N. Ohio

Current Owner/Business: Coach Property LC

Contact Person:

Mailing Address: 2811 N. Ohio
Wichita, KS 67219

Phone Number:

Other information:

Name of Company:		Former VIM Trailer
Name and/or Contact Person:		
Street Address of Company:		**2811 N. Ohio**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		2811 N. Ohio
Phone Number of Contact:		
History:	1951	Vacant
	1961	No Listing
	1965	Vacant
	1970	No Listing
	1975	Vim Trailer Mfg Inc.
	1980	Vim Trailer Mfg Inc.
	1984/5	Vim Trailer Mfg Inc.
	1990	Vim Trailer Mfg Inc. trailer equip-parts
	1995/6	Vim Trailer Mfg Inc. trailer equip-parts
	2000	Chance Coach mtr vhcl car body
RCRA Info:		

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -13281
Page: 1

Pin: 122040120200200A

Name COACH PROPERTY LC
Situs 2811 N OHIO
WICHITA KS 67219-4318

Phone
Mail PO BOX 19140
To WICHITA KS 67204-9140

Tax	22,663.93
Specials	9.45
Total	22,673.38

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 132969

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

VIM TRAILER MFG., INC.

2811 NORTH OHIO P. O. BOX 4148
WICHITA, KANSAS 67204
AREA CODE (316) 838-4233
FAX (316) 838-6783

MEMBER TIMA

RECEIVED
APR 24 1989
PREP SECTION

April 21, 1989

United States Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, Kansas 66101

Attn: Mr. David A. Wagoner CERTIFIED MAIL

Dear Sir:

Enclosed are the answers to your questions concerning our facility located in the 29th and Mead area.

As we discussed on the phone with Ken Rapplean, some of this information is not available at the present time due to the recent death of one of our major stockholders. As soon as we can get that from our Insurance Agents, C.P.A.s and Attorneys we will forward that information to you.

If you have any questions, please give me a call.

Sincerely,

VIM TRAILER MFG., INC.

Mike Barker,
Vice Pres.

MB/lm

Enclosures

CERTIFIED
P 734 340 054
MAIL

Excerpts from Report(s) Prepared by Others

Allied Environmental Consultants, Inc.

Site Prefix VIM

April 29, 1997

Camp Dresser and McKee, Inc.
1331 17th Street, Suite 1200
Denver, Colorado 80202

Attention: Mr. Darren Brown

Reference: VIM Trailer Mfg. Site, Wichita, Kansas

Dear Mr. Brown:

Mr. Jay Swanson, owner of the above referenced site, has requested that Allied Environmental Consultants, Inc. forward available ground water data for the VIM Trailer site to your office (see attachments). To assist you in your review of the analytical data, we have also included a map showing the location of each sample collection point. If you have any questions regarding the attached analytical data or map, please contact our office at your convenience.

Sincerely yours,

ALLIED ENVIRONMENTAL CONSULTANTS, INC.

Cole D. Knight

Cole D. Knight, C.P.G.
Environmental Geologist

Attachments

CDK:epd

Location: 349 Ida ■ Wichita, Kansas ■ Phone: (316) 262-5698
Mailing: P.O. Box 234 (67201-0234)

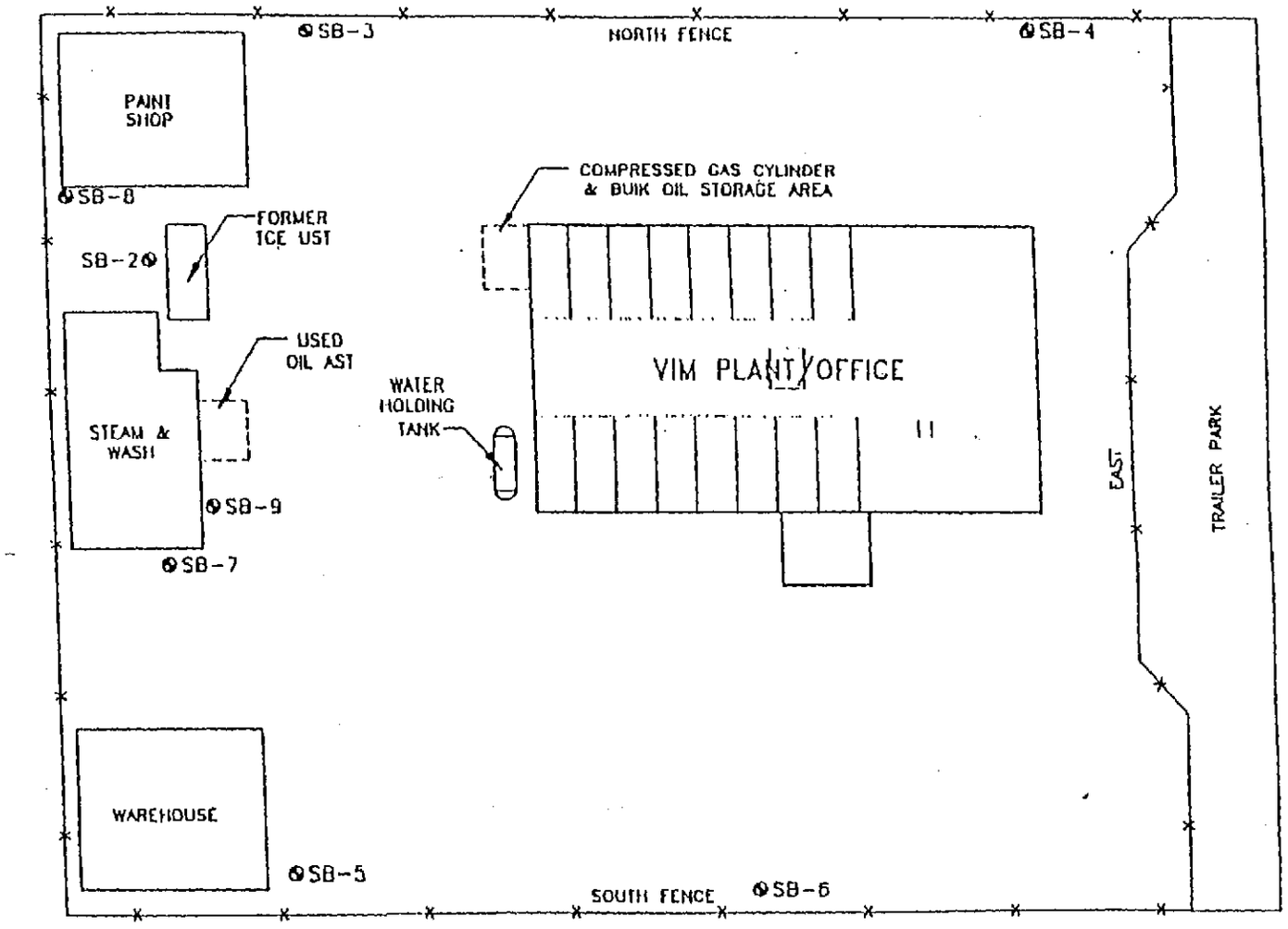
Table 1
Soil and Ground Water In-Field Laboratory Analytical Results
VIM Trailer Manufacturing, Inc.
Wichita, Kansas
14-Jul-95

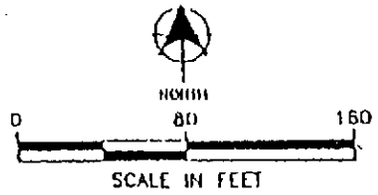
Parameter	SB-2(11-13) Soil	SB-3 Shallow Ground Water	SB-3 Deep Ground Water	SB-4 Shallow Ground Water	SB-4 Deep Ground Water	SB-5 Shallow Ground Water	SB-5 Deep Ground Water	SB-6 Shallow Ground Water	SB-6 Deep Ground Water	SB-7 Shallow Ground Water	SB-8 Shallow Ground Water	SB-9 Shallow Ground Water	Federal Maximum Contaminant Limit*
Trichloroethene	2371 µg/kg	1 µg/l	0.1 µg/l	3 µg/l	5 µg/l	100 µg/l	11 µg/l	29 µg/l	28 µg/l	172 µg/l	116 µg/l	139 µg/l	5 µg/l
1,2-Dichloroethene	659 µg/kg	5 µg/l	6 µg/l	4 µg/l	2 µg/l	37 µg/l	7 µg/l	9 µg/l	9 µg/l	281 µg/l	40 µg/l	402 µg/l	100 µg/l
Trichloroethane	3086 µg/kg	3 µg/l	3 µg/l	4 µg/l	3 µg/l	19 µg/l	4 µg/l	2 µg/l	3 µg/l	69 µg/l	4 µg/l	2131 µg/l	200 µg/l
Perchloroethene	BQL	ND	ND	ND	ND	BQL	ND	ND	ND	BQL	BQL	BQL	5 µg/kg

ND : Parameter Not Detected
BQL : Parameter Detected At Concentration Below Instrument Quantification Limit
µg/kg : Micrograms per Kilogram - Approximately Equivalent to Parts Per Billion
µg/l : Micrograms per Liter - Approximately Equivalent to Parts Per Billion
* : December 1992
: Shaded Area Exceeds Federal Maximum Contaminant Limit

Note: Shallow ground water samples were collected at a depth of approximately 16 feet to 18 feet below ground surface.
Deep ground water samples were collected at a depth of approximately 28 feet to 30 feet below ground surface.

DM 00832





LEGEND

SB-2 SOIL BORING LOCATION

VIM TRAILER MFG. INC.
WICHITA, KANSAS

FIGURE 3
SOIL BORING LOCATION MAP

DRN. BY LMS	PROJ. NO. 25697-005
DATE 24JUL95	DAMES & MOORE

FILE: C:\DATA\DWGS\BRENNER\SBLOC.DWG

DM 00842

TELEPHONE CONVERSATION MEMO

ate of Call: 12/1/87 Time of Call:

erson Asked For: Emily Roth Person Calling: Marian Messoth

ffice and/or Firm: BWM

ubject: VIM Trailer Mfg Wichita Ks.
Groundwater Contamination

iscussion: I called Emily to followup on Steve B.'s request to see if there was a discharge from the above referenced facility that needed a permit. Emily said this industry is in an area in Wichita which has wide spread groundwater contamination of TCE's. According to her VIM has a large underground tank used for storing solvents. The tank's contents had been analyzed & TCE was one of the constituents. However, another industry, Coleman, is thought to have caused extensive TCE groundwater contamination also. In 1986, Emily & Rick Bean were sampling well water of various industries in the area to determine the extent of the contamination. Where VOC contamination showed up in significant amounts, Emily said they informed the people the water shouldn't be used for drinking. During their survey, Emily found that VIM used their groundwater for testing tanks & then discharged it to a sewer. She was fairly sure it was going into an earthen ditch out the back (west) of the facility) & traveled South to a large concrete storm sewer. She said it is a very small operation but did not know the volume of water used.

VIM had been requested by KDHE to determine if their underground storage tank was leaking, but as far as Emily knew, it was not tested yet.

MM
12/3/87

VIM TRAILER MFG., INC.
2811 NORTH OHIO P.O. BOX 4148
WICHITA, KANSAS 67204
AREA CODE (316) 838-4233

MEMBER

September 2, 1987

RECEIVED
BUREAU OF
WASTE
MANAGEMENT

State of Kansas
Department of Health & Environment
Forbes Field
Topeka, Kansas 66620-0001

Attn: Dennis Murphey, Manager
Bureau of Environmental Remediation

Dear Sir:

In reply to your letter, dated August 4, 1987, on usage of ground water from wells identified as IN19; these two wells are piped together. In summer months when the temperature is above freezing, water is pumped either directly in tanks in shop for testing them or it is pumped into an above ground storage tank and then pumped into tanks for testing purposes only. After the tanks are checked, this water is either pumped back into our storage tank or released into sewer drains located in the shop. In the winter time this water is pumped directly into tanks in the shop for testing purposes and then released to sewer drains in the shop area.

storm sewers or sanitary sewer

If you have any further questions please give me a call.

Sincerely,

VIM TRAILER MFG., INC.

Mike Barker

Mike Barker
Vice Pres.

MB/lm

Marian
Came across this in one of my piles. I tried contacting Emily several times to no avail. Will you please check with her to get more specifics so we can look into. May need to acquire 8-4-87 letter from Murphy so we know what is going on. Emily is probably your best bet!
Thanks
SB
9-11-87

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
LABORATORY SERVICES AND RESEARCH
ENVIRONMENTAL ORGANIC LABORATORY
TOPEKA, KANSAS 66620

GC/MS ANALYSIS REPORT

REPORT TO: RICK BEAN
ADDRESS: FORBES BLDG. 740, TOPEKA, KS. 66620

LAB NUMBER: 70C471CC
REPORT DATE: 8-13-86

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION NUMBER: 00NWSWNE0427C1E
SAMPLE TYPE: WATER
COLLECTION SITE: VIM-IN-19 NORTH BROADWAY SEDGWICK CO.
COLLECTED BY: RICK BEAN/DALE ROBL
DATE: 8- 6-86
TIME: 1430

RESULTS OF ANALYSIS

PURGEABLE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	16.6	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.4
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	286	0.6
BENZENE	NOT DETECTED	0.4
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	3.6	1.1
TOLUENE	NOT DETECTED	0.4
CHLOROBENZENE	NOT DETECTED	0.4
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO &/OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2 &/OR 1,4-DICHLOROBENZENE	NOT DETECTED	1.0

ANALYST: RICHARD L. PIERCE RLP

ROGER H. CARLSON, PH.D., DIRECTOR

COPY TO: EMILY ROTH, FORBES BLDG 740

RECEIVED
AUG 15 1986
BUREAU OF
ENVIRONMENTAL
SENSITIVITY

State of Kansas
DEPARTMENT OF HEALTH AND ENVIRONMENT
Bureau of Water Protection

M E M O R A N D U M

Miscellaneous Industries 7.1 File
Wichita, Kansas

Marian Massoth MM

December 9, 1987

CT: VIM Trailer Manufacturing Inc.
Discharge of Well Water to the Sanitary Sewer

ecember 3, 1987 I called Mike Barker of VIM Trailer acturing to follow up on where the well water is being arged which is used to test tanks at this facility. ding to the September 2, 1987 letter from VIM to KDHE, this is discharged to the sewer after testing the tanks. Since ell water is contaminated with volatile organic chemicals), I called to verify that it was being directed to the ary sewer as opposed to the storm sewer.

arker said I would need to talk with his plant manager, ce. When I asked Maurice where the water was discharged he he thought it was to the sanitary sewer but would have to their plans to make sure. He said it may be a few days e he would get back to me. On December 8, 1987 Maurice d and said he contacted their architect and was informed the drains were connected to the sanitary sewer. I thanked or finding out this information and told him we would not re any other follow up on this matter.

BEFORE THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Landon Building - 900 S.W. Jackson
Suite 904
Topeka, Kansas 66612-1290

IN THE MATTER OF:	)	
	)	CONSENT ORDER
POLLUTION AT	)	Case No. @
VIM TRAILER	)	
MANUFACTURING, INC.,	)	
WICHITA, KANSAS.	)	

draft

PRELIMINARY STATEMENT

The parties hereto, the Kansas Department of Health and Environment ("KDHE"), and VIM Trailer Manufacturing, Inc. (hereinafter "Respondent"), having agreed that settlement of this matter is in the best interests of all parties and the public, hereby represent and state as follows:

1. KDHE is a duly authorized agency of the State of Kansas, created by act of the legislature.

2. KDHE has general jurisdiction of matters involving hazardous substance and hazardous substance cleanups under the authority of the Kansas Environmental Response Act (K.S.A. 65-3452a. et seq.), as well as hazardous waste and its clean-up (K.S.A. 65-3430 et seq.) and has general authority and responsibility to protect the waters and soils of the state under the authority of K.S.A. 65-161, et seq.

3. KDHE defines an operable unit (OU) for purposes of this Consent Order as a sub-site within the Wichita North Industrial Corridor (NIC) Site where elevated levels of hazardous substances and/or wastes are present and may potentially act as a source of

contamination. Coordinated, discrete response action(s) which are consistent with the final remediation may be implemented at an OU to expedite the overall response action for the NIC Site in order to eliminate, mitigate and/or monitor a release or threat of release from the sub-site. An OU response action may include source control measures, interim remedial measures, and/or removal actions.

4. The Respondent agrees to undertake all actions required by the terms and conditions of this Consent Order. In any action by KDHE to enforce the terms of this Consent Order, the Respondent agrees not to contest the authority or jurisdiction of the Secretary of Health and Environment to issue this Consent Order.

5. This Consent Order shall apply to and be binding upon KDHE and the Respondent, its agents, successors, and assigns. The signatories to this Consent Order certify that they are authorized to execute and legally bind the parties they represent to this Consent Order. No change in the ownership or corporate status of the Respondent shall alter its responsibilities under this Consent Order.

6. The Respondent shall provide a copy of this Consent Order to any subsequent owners or successors before ownership rights are transferred. The Respondent shall provide a copy of this Consent Order to all contractors, sub-contractors, laboratories, and consultants which are retained to conduct any work performed under this Consent Order, within 14 days after the effective date of this Consent Order or the date of retaining their services. Notwithstanding the terms of any contract, Respondent is responsible for compliance with this Consent Order and for ensuring that its contractors and agents comply with this Consent Order.

7. While the Respondent to this Consent Order does not admit liability for the

contamination at the Site and the surrounding environment, nevertheless it agrees to enter into this Consent Order to prepare a Work Plan as described in paragraph 22 below, to be attached hereto marked Exhibit 4 and incorporated herein upon approval by KDHE.

FINDINGS OF FACT

8. The VIM Trailer Manufacturing, Inc. facility (VIM) is located at 2811 North Ohio Street Wichita, Kansas, within the boundaries of the North Industrial Corridor (NIC) Site.

9. Based on an information request response dated April 21, 1989, VIM operated asphalt tank degreasing operations at 2811 North Ohio until 1985. These operations used Trichloroethene and Barton Solvents.

10. Documentation on file indicates that a pipe carrying the product corroded and released an unknown amount of TCE into the soil, and that the 12,000 gallon tank which collected the wash water and solvents failed a tightness test in 1988.

11. During removal of the 12,000 gallon tank in 1993, the tank was ruptured, releasing sludge and liquid from the tank back into the basin.

12. Environmental sampling conducted between 1983 and 1993 by the U.S. EPA, U.S. Geological Survey, KDHE, HWS Consulting Group, Inc., and Ground Water Technology, Inc., indicate that soil and ground water at 2811 North Ohio Street have been impacted by chlorinated solvents, including but not limited to trichloroethene (TCE), tetrachloroethene (PCE), 1,2-Dichloroethene (1,2 DCE), benzene, and toluene.

13. Based upon the data volunteered by VIM in their response to an information request, and from analytical data collected at 2811 North Ohio by various parties, KDHE believes that the environmental contamination identified at the VIM Trailer Manufacturing,

INC. facility at 2811 North Ohio Ave. is causing or threatens to cause pollution of the waters of the State or is or threatens to become a hazard to persons, public health, or safety.

CONCLUSIONS OF LAW

14. Respondent is a "person" within the meaning of K.S.A. 65-164, et seq., K.S.A. 65-3430, et seq., and K.S.A. 65-3452a, et seq.

15. The presence of the contaminants identified in the groundwater underlying the OU constitutes "pollution" as defined by K.S.A. 65-171d.

16. The area defined in paragraph 8 and identified as the OU constitutes a "site" within the meaning of K.S.A. 65-3453.

17. Some of the contaminants identified in the groundwater underlying the OU are "hazardous substances" as defined by K.S.A. 65-3452a and "hazardous wastes" as defined by K.S.A. 65-3430.

18. The facts above constitute:

a) the discharge, abandonment, or disposal of hazardous substances or hazardous wastes;

b) the pollution of the land or waters of the state or the threat of pollution of the land or waters of the state;

c) a hazard to persons, property or public health or threatens to become a hazard to persons, property or public health.

19. Under the facts as shown above, the Kansas Department of Health and Environment has concluded, and the Secretary has confirmed, that there is a need for a response action to eliminate and/or mitigate the continuing release or threat of release of

Vim Trailer

24th Mead
PRP File

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: STAN MARCOTTE
Address: SCD-WICHITA

Lab Number: 3029720C
Report Date: 4-12-93

SAMPLE COLLECTION INFORMATION

Site ID No.:
Sample Type: SOIL
Program Code: ER
Collection Site: VIM TRAILER MIDDLE 14'
Collected By: MARCOTTE
Date: 4- 2-93
Time: ****

RESULTS OF ANALYSIS

PURGABLE ORGANICS	CONCENTRATION (MG/KG)	REPORTING LIMIT (MG/KG)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	1.5	0.6
1,1-DICHLOROETHANE	2.4	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	97.0	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
,1-TRICHLOROETHANE	16.6	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	3.1	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	7.4	1.1
TOLUENE	205	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	22.2	0.7
META-XYLENE	76.9	0.6
ORTHO &/OR PARA-XYLENE	62.9	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

Comment: MANY PETROLEUM TYPE HYDROCARBONS WERE INDICATED.

RECEIVED
APR 13 1993

Analyst: Richard L. Pierce

Roger H. Carlson, Ph.D., Director

Copy To: RICK BEAN-BER

BUREAU OF ENVIRONMENTAL REMEDIATION

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: STAN MARCOTTE
Address: SCD-WICHITA

Lab Number: 3029710C
Report Date: 4-12-93

SAMPLE COLLECTION INFORMATION

Site ID No.:
Sample Type: SOIL
Program Code: ER
Collection Site: VIM TRAILER S END 11'
Collected By: MARCOTTE
Date: 4- 2-93
Time: ****

RESULTS OF ANALYSIS

PURGABLE ORGANICS	CONCENTRATION (MG/KG)	REPORTING LIMIT (MG/KG)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	6.2	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
,1-TRICHLOROETHANE	NOT DETECTED	0.7
RACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	0.7	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	0.8	0.6
ORTHO &/OR PARA-XYLENE	4.5	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

RECEIVED
APR 13 1993
BUREAU OF ENVIRONMENTAL REMEDIATION

Comment: SEVERAL PETROLEUM TYPE HYDROCARBONS WERE INDICATED.

Analyst: Richard L. Pierce

Roger H. Carlson, Ph.D., Director

Copy To: RICK BEAN-BER

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: STAN MARCOTTE
Address: SCD-WICHITA

Lab Number: 3029730C
Report Date: 4-12-93

SAMPLE COLLECTION INFORMATION

Site ID No.:
Sample Type: SOIL
Program Code: ER
Collection Site: VIM TRAILER SE 11'
Collected By: MARCOTTE
Date: 4- 2-93
Time: ****

RESULTS OF ANALYSIS

PURGABLE ORGANICS	CONCENTRATION (MG/KG)	REPORTING LIMIT (MG/KG)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	0.8	0.6
1,1-DICHLOROETHANE	1.9	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	113	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1-TRICHLOROETHANE	2.9	0.7
TRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	0.6	0.6
BENZENE	2.4	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	2.5	1.1
TOLUENE	136	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	21.2	0.7
META-XYLENE	71.3	0.6
ORTHO &/OR PARA-XYLENE	59.1	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0

RECEIVED
APR 13 1993
BUREAU OF ENVIRONMENTAL REMEDIATION

Comment: MANY PETROLEUM TYPE HYDROCARBONS WERE INDICATED.

Analyst: Richard L. Pierce

Roger H. Carlson, Ph.D., Director

Copy To: RICK BEAN-BER

CHANCE COACH INC. SITE ENVIRONMENTAL EVALUATION REPORT OF FINDINGS

Prepared For:

Chance Coach, Inc.

Prepared By:

ALLIED ENVIRONMENTAL CONSULTANTS, INC.

AEC File No. 97A56:0022

January 16, 1998

CONFIDENTIAL

1. INTRODUCTION

1.1 PURPOSE OF REPORT

This report presents the findings of a subsurface investigation conducted at 2811 North Ohio Street, in Wichita, Kansas, as shown in Appendix A Figure 1 (hereafter "site"). The site was formerly known as the VIM Trailer Manufacturing facility, where tanker trailers were refurbished and assembled, and is now owned by Chance Coach, Inc. The facility consists of four slab-on-grade buildings, as shown in Appendix A, Figure 2. Building 1 contained the main assembly operations and Building 2 house a warehouse. Buildings 3 and 4 housed tanker cleaning and painting, respectively. The cleaning operations included the usage of a chemical solvent applied under pressure to the tankers prior to assembly or painting activities. The solvent and rinsate was contained in Building 3 and routed by floor drains to a 12,000-gallon underground storage tank (UST). See former location in Appendix A, Figure 3. The UST was reportedly failed a leak test in 1988 and was subsequently removed in 1993 (data on file with the Wichita/Sedgwick County Health Department). The 1993 report indicates that soil contamination remained in the side walls and floor of the tank basin. VIM Trailer operations were discontinued in 1996.

In addition to considerations of the UST, the facility is located in North Industrial Corridor (NIC), an area of known groundwater contamination. The City of Wichita, Kansas, (City) has taken responsibility for investigating the nature and extent of contamination in the NIC under an agreement with the Kansas Department of Health and Environment (KDHE). One of the City's obligations under the NIC program is to establish third party responsibility for the contamination. Entities demonstrating that they have not or could not contribute to the NIC contamination, as is the case with new owners, are provided a Certificate of Release. The VIM facility recently changed ownership and the new owners have obtained a Certificate of Release. However, the new owners also desired to establish the conditions of the site upon taking possession of the facility and retained Allied Environmental Consultants (AEC) for this purpose.

1.2 SCOPE OF INVESTIGATION

This investigation evaluated the impact of past manufacturing operations on the soil at the VIM facility. The findings of this report serve to benchmark the subsurface conditions when the site was idle following VIM Trailer manufacturing activity. No manufacturing operations occurred immediately prior to or during the site investigation.

The investigation was conducted October 21 and 22, 1997, prior to new owner operations. New owner operations began on December 15, 1997. The investigation was limited to collecting near-surface soil at the locations shown in Figures 4 and 5 for chemical analysis. Groundwater in the NIC is known to be contaminated, and groundwater sampling would not necessarily account for past site activities. Given the scope of this investigation, two zones of soil were targeted for sampling; an upper, or shallow zone occurring between 1 and 5 feet below grade, and a lower, saturated zone occurring between 5 and 15 feet below grade. The upper zone samples would indicate near surface contamination while the lower zone would provide and indication of downward migration of contamination (if present) and possible impacts to groundwater beneath the site. Groundwater has been reported to occur within 12 feet of the ground surface in the site's vicinity, based on drilling logs prepared by Groundwater Technology, Inc (see Appendix B).

--*-*

2. INVESTIGATION METHODS AND FINDINGS

2.1 SOIL SAMPLING

Soil samples were collected at the relative depths shown in Table 1 using dry rotary drilling methods. Allied Laboratories, of Wichita, Kansas, provided the drilling services for this investigation. Each of the 16 borings were advanced using 4-inch diameter, continuous fight auger. Soil samples were collected by pushing decontaminated split spoon samplers. The samples were screened in the field using a Hnu-brand P101 photoionization detector (PID) for volatile organic compounds. The samples were placed in pre-cleaned sample containers furnished by the laboratory and placed immediately on ice in sample coolers.

Table 1
Soil Borings and Sampling Depths
In Feet Below Grade

Boring No.	B97-1	B97-2	B97-3	B97-4	B97-5	B97-6	B97-7	B97-8
Upper Sample (S)	1	5	4.5	1.5	3	3	3	3
Lower Sample (D)	16.5	14	14	5.5	13	13	13	13

Boring No.	B97-9	B97-10	B97-11	B97-12	B97-13	B97-14	B97-15	B97-16
Upper Sample (S)	3	3	3	3	3	3	3	3
Lower Sample (D)	13	12.5	12.5	12	10	11	13	7

Each of the borings were back filled with bentonite chips and capped with a 1-foot layer of concrete. The samples were labeled and packaged for shipment to the analytical laboratory via overnight courier.

Drilling logs were prepared by a field geologist for the sixteen soil borings to record the lithology and depth of each sample. The logs are present in Appendix B of this report. The sixteen soil borings were surveyed for horizontal location relative to a site baseline. The vertical position of each boring was established relative to mean sea level.

2.2 SITE GEOLOGY

The site is underlain by a sequence of unconsolidated materials that vary in lithology and thickness (see drilling logs in Appendix B). The general sequence encountered at the site includes sand or clay fill lying near the ground surface followed by layers of clay and sand at depth. The material found at the ground surface consisted of concrete inside the buildings and limestone gravel or soil at the exterior drilling locations.

The fill sand and clay ranged in thickness from less than one foot in B97-1 to 12.5 feet in borings B97-11 and B97-13 which were located in the former tank basin. The auger refused to penetrate below 12.5 feet in the former tank basin and may have struck a concrete object. The object may be the tank tie-down pad left in place following the tank's removal in 1993. An odor and oily sheen was noted to be associated with the fill from the former tank basin. No odor or discoloration were recorded in any of the remaining borings.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

The chemical analyses of the samples submitted during this investigation indicate that soil contamination is present in the former location of the UST. Values for total volatile organic compounds ranged from a low of 0 ppb to over 545,000 ppb for both the shallow and lower soil zones. Minor contamination may occur in the soil beneath the former Paint Building.

Auger refusal encountered in Borings B97-11 and B97-13 indicates a buried concrete object. This object, possibly the tie-down for the UST, may serve to retain contamination in the soil column of the former tank basin. Considering that contamination was observed in the deeper, water saturated soil samples, groundwater contamination likely occurs beneath the site.

Soil beneath the manufacturing and warehouse buildings appear to be free from contamination in the areas were samples were collected.

3.2 RECOMMENDATIONS

The City of Wichita and the KDHE should be notified that past VIM Trailer Manufacturing operations have resulted in the contamination of soils and potentially groundwater at this site. This report, which serves to establish a baseline of the contamination at the time Chance Coach acquired control of the property, may also be submitted as part of the notification process.

Chance Coach, as a matter of prudence, may wish to collect an additional soil sample from beneath the former Paint Building to confirm the presence of methylene chloride. Additionally, care should be taken during any work with the utility trenches shown in Figure 3, as these may serve as a migration pathway for contamination.

--*-*

4. LIMITATIONS

This report has been prepared on behalf of and for the exclusive use of Chance Coach, Inc., solely for use in an environmental evaluation of the subject site. The work is based on the proposed scope of services dated October 14, 1997. As a mutual protection to you, as our client, the public, and ourselves, authorization for publication of statements, conclusions or extracts from or regarding this report is reserved pending our written approval. Allied Environmental Consultants, Inc., acknowledges and agrees, however, that the report may be conveyed to legal counsel and regulatory agencies at the discretion of Chance Coach, Inc.

Conclusions stated herein refer only to the specific site at the time of the investigation. Allied Environmental Consultants, Inc., assumes that the data obtained and the inferences made in the course of the investigation are reasonably representative of the property. We make no warranty, expressed or implied, except that our services have been performed in accordance with generally accepted existing environmental engineering, health and safety principles, and applicable regulations at the time and location of the study. Allied Environmental Consultants, Inc., has analyzed the available information using what we believe to be current applicable engineering techniques.

*_*_*_*

Table 2
Detected Chemical Constituents[1]
VIM Trailer Manufacturing Site

CHEMICAL PARAMETER	CAS NO.[2]	NR IRG[3] (ug/kg)	MCL[4] (ug/L)	B97-4S	B97-5S	B97-5D	B97-6D	B97-7S	B97-9S	B97-10S	B97-10D	B97-11S	B97-11D	B97-12S	B97-13S	B97-13D	B97-14S	B97-14D	B97-15S
Benzene (ug/kg)	71-43-2	2,000	5	<5	<49	<50	<51	<50	<50	<51	<50	<620	1,000	<50	<620	<620	<50	<48	<49
Bromomethane (ug/kg)	74-83-9	12,000		<5	<75	<76	<78	<76	<76	<77	<76	<620	1,300	<75	660	680	<76	<74	<74
n-Butylbenzene (ug/kg)	104-51-8			<5	NA	NA	NA	NA	NA	NA	NA	2,000	3,500	NA	1,200	1,700	NA	NA	NA
sec-Butylbenzene (ug/kg)	135-98-8			<5	NA	NA	NA	NA	NA	NA	NA	1,200	2,400	NA	730	1,400	NA	NA	NA
1,3-Dichlorobenzene (ug/kg)	541-73-1			<5	<26	<26	<27	<26	<26	<26	26	<620	<620	<26	<620	<620	<26	<25	<25
cis-1,2-Dichloroethene (ug/kg)	156-59-2	55,000[5]	70	1,400	<13	<13	<13	<13	<13	<13	<13	10,000	85,000	25	1,900	1,000	30	22	190
trans-1,2 Dichloroethene (ug/kg)	156-60-5	55,000[5]	100	10	<26	<26	<27	<26	<26	<26	<26	<620	<620	<26	<620	<620	<26	<25	<25
Ethylbenzene (ug/kg)	100-41-4	19,800,000[6]	700	<5	<49	<50	<51	<50	<50	<51	<50	4,800	9,700	<50	2,800	4,800	<50	<48	<49
Isopropylbenzene (ug/kg)	98-82-8			<5	NA	NA	NA	NA	NA	NA	NA	1,000	<620	NA	<620	990	NA	NA	NA
p-Isopropyltoluene (ug/kg)	99-87-6			<5	NA	NA	NA	NA	NA	NA	NA	1,100	1,700	NA	630	1,100	NA	NA	NA
Methylene chloride (ug/kg)	75-09-2	16,000		<5	71	72	78	79	<64	<65	<64	1,300	2,000	<64	5,600	<620	<64	<62	<62
Naphthalene (ug/kg)	91-20-3	500,000[6]		<5	NA	NA	NA	NA	NA	NA	NA	3,200	5,800	NA	2,200	3,100	NA	NA	NA
n-Propylbenzene (ug/kg)	103-65-1			<5	NA	NA	NA	NA	NA	NA	NA	2,800	<620	NA	1,600	2,400	NA	NA	NA
Styrene (ug/kg)	100-42-5	1,385,000[6]	100	<5	NA	NA	NA	NA	NA	NA	NA	<620	5,500	NA	<620	<620	NA	NA	NA
Tetrachloroethene (ug/kg)	127-18-4	50,000	5	<5	<13	<13	<13	<13	<13	<13	<13	<620	11,000	<13	<620	<620	<13	<13	<13
Toluene (ug/kg)	108-88-3	1,500,000	1000	30	<49	<50	<51	<50	<50	<51	<50	2,600	54,000	<50	3,200	22,000	<50	<48	<49
1,1,1-Trichloroethane (ug/kg)	71-55-6	1,900,000[6]	200	<5	<13	<13	<13	<13	<13	<13	<13	<620	1,900	<13	<620	<620	<13	<13	<13
Trichloroethene (ug/kg)	79-01-6	11,000	5	<5	<29	<30	<31	<30	160	420	73	<620	290,000	46	1,800	<620	<30	<29	74
1,2-4-Trimethylbenzene (ug/kg)	95-63-6			<5	NA	NA	NA	NA	NA	NA	NA	8,500	28,000	NA	3,900	17,000	NA	NA	NA
1,3,5-Trimethylbenzene (ug/kg)	108-67-8			<5	NA	NA	NA	NA	NA	NA	NA	5,900	9,500	NA	3,800	5,600	NA	NA	NA
Vinyl chloride (ug/kg)	75-01-4	4	2	23	<45	<46	<47	<46	<46	<47	<46	<620	1,400	<46	<620	1,100	<46	<45	<45
m,p-Xylene (ug/kg)	108-38-3	Note 7	Note 7	5.3	NA	NA	NA	NA	NA	NA	NA	1,000	18,000	NA	680	12,000	NA	NA	NA
o-Xylene (ug/kg)	95-47-6	Note 7	Note 7	<5	NA	NA	NA	NA	NA	NA	NA	6,900	14,000	NA	4,000	8,300	NA	NA	NA
Aggregate VOCs				1,468	71	72	78	79	160	420	99	52,300	545,700	71	34,700	83,170	30	22	264

Note 1 – From chemical analytical reports provided at the end of this report. A "<" and number indicate parameter not detected above the laboratory's reporting limit. NA = Not Analyzed, due to differences in laboratory reporting.
Note 2 – CAS = Chemical Abstract Service registry number
Note 3 – NR IRG = Non-Residential Interim Remedial Guideline value taken from Interim Remedial Guidelines For Contaminated Soil dated August 1995 and published by the KDHE.
Note 4 – MCL = Maximum Contaminant Level taken from Drinking Water Regulation and Health Advisories, EPA 822-B-96-002 dated October 1996.
Note 5 – As mixture.
Note 6 – Soil saturation concentration value.
Note 7 – NR IRG for mix xylene is 630,000 ug/kg and the MCL for total xylene (mix) is 10,000 ug/L.

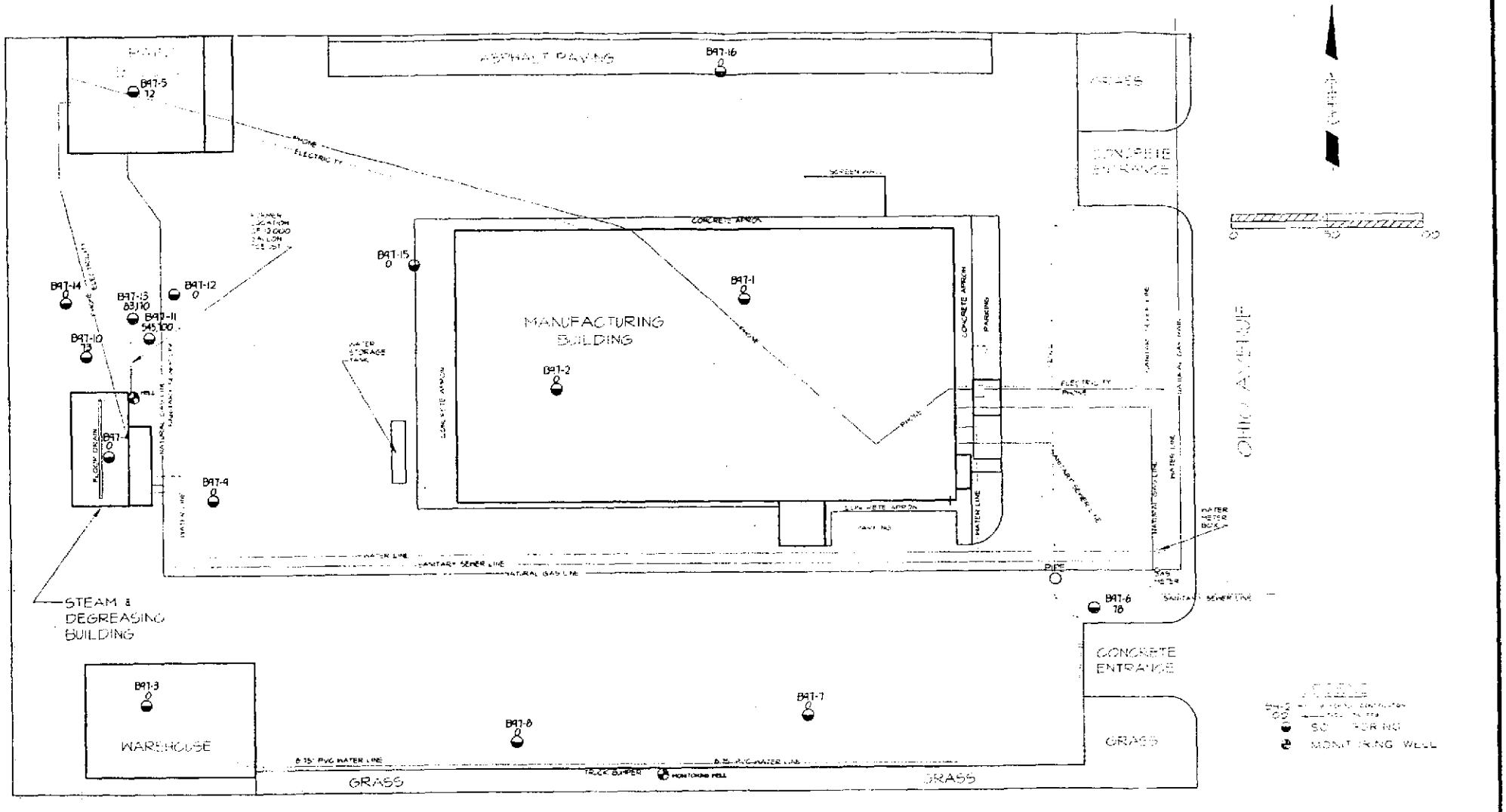


FIGURE 5

AGGREGATE OF DETECTED VOCS - DEEP

CHANCE ROACH
ALBION, ARKANSAS

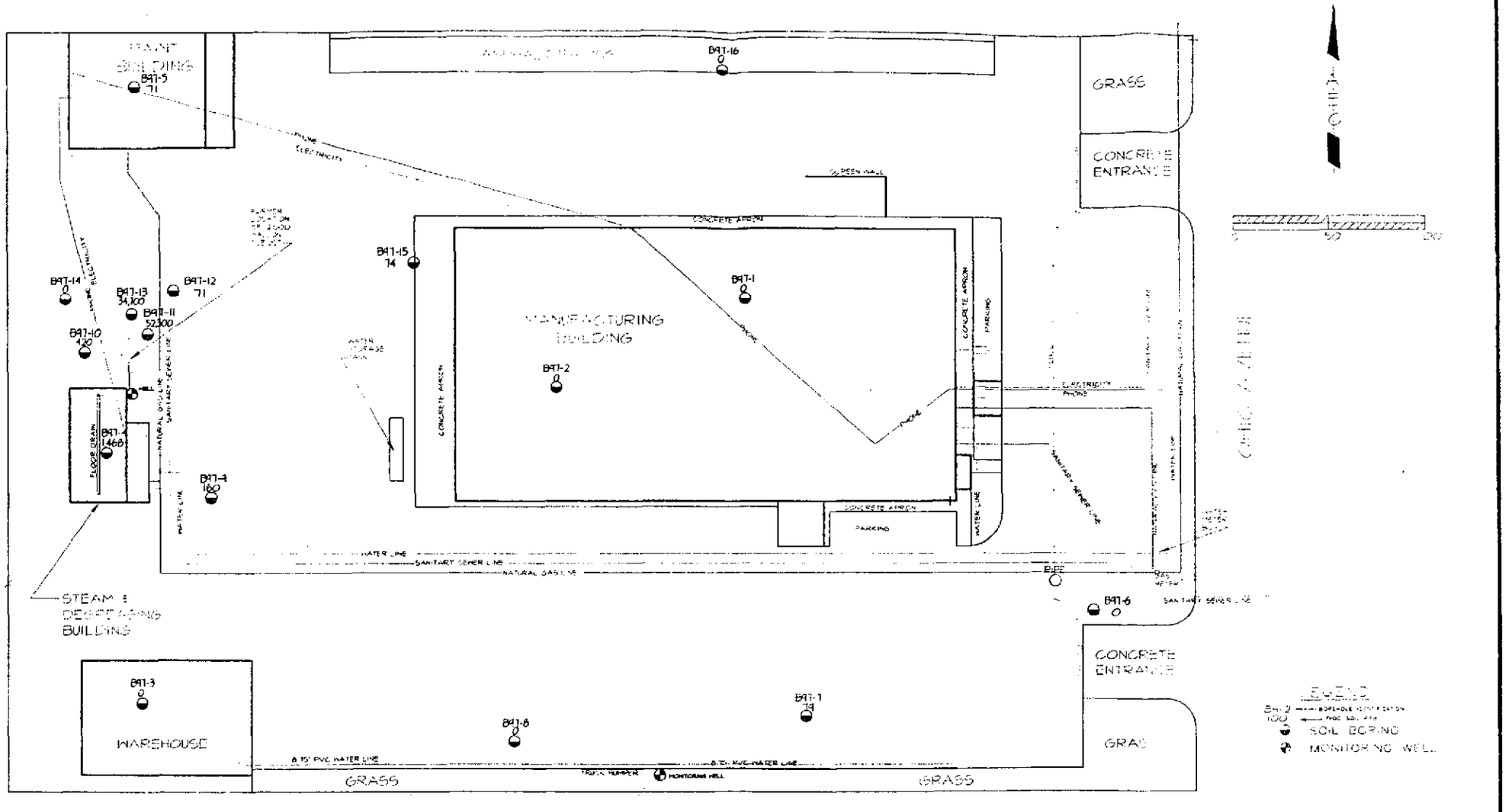


FIGURE 4

AGGREGATE OF DETECTED VOC'S - SHALLOW

CHANUTE COACH
WICHITA, KANSAS

Figure(s)
Aerial Photographs and Sample Location Map(s)

CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former VIM Trailer

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former VIM Trailer

Table(s)
Analytical Data Table(s)

VIM Trailer
North Industrial Corridor (NIC) Site
Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#62-1	S/20	01/14/98		µg/L	**1**	**490**	**3000**	**350**	**7.5**	**39**	**11**	<1	<1	**8.2**	12.6
GP#62-1	D/42	01/14/98		µg/L	<1	**41**	**50**	**6.9**	<1	**1.6**	**1.1**	<1	<1	<1	<5.4
GP#62-1	D/42	01/14/98	DUP	µg/L	<1	**40**	**48**	**5**	<1	**1.4**	<1	<1	<1	<1	<5.4
GP#62-2	S/20	01/14/98		µg/L	<1	**35**	**20**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#62-2	D/36	01/14/98		µg/L	<1	**130**	**21**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#62-3	S/20	01/14/98		µg/L	**2.4**	**230**	**690**	**80**	**3**	**6.4**	**2.8**	<1	<1	**1.2**	5.6
GP#62-3	S/20	11/05/99		µg/L	<1	**480 JH**	**790 JH**	**19**	<1	**5.5**	**2.9**	<1	<1	<1	<5.4
GP#62-3	D/32	01/14/98		µg/L	<1	**35**	**46**	**5.9**	<1	**1.1**	**1**	<1	<1	<1	<5.4
GP#62-4	S/20	01/14/98		µg/L	<1	**54**	**9.9**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#62-4	D/33	01/14/98		µg/L	<1	**220**	**41**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#63-1	S/20	01/12/98		µg/L	<1	**61**	**7.7**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#63-1	D/30	01/12/98		µg/L	<1	**42**	**7.1**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#63-2	S/20	01/12/98		µg/L	<1	**1.4**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#63-2	D/33	01/12/98		µg/L	<1	**40**	**13**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP05B-01	S/17	12/09/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP05B-01	D/35	12/09/99		µg/L	<1	**5.1**	**4.3**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP05B-02	S/17	11/05/99		µg/L	<1	<1	**40**	**9.3**	<1	<1	<1	<1	<1	**1.6**	6
GP05B-02	D/35	11/05/99		µg/L	<1	**11**	**7.2**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP05B-03	S/20	11/05/99		µg/L	<1	**41**	**32**	**1.4**	<1	<1	<1	<1	<1	<1	<5.4
GP05B-03	D/35	11/05/99		µg/L	<1	**90 JH**	**16**	<1	<1	<1	<1	<1	<1	<1	<5.4
NMW-05D	D	05/09/01	CV	µg/L	<1.0	14	20	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.4
NMW-05D	D	05/09/01	CP	µg/L	<1.0	16	23	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.4
NMW-05S	S	05/09/01	CV	µg/L	7.8	250	500	86	<1.0	10	3.7	<1.0	<1.0	1.9	1.9
NMW-05S	S	05/09/01	CP	µg/L	6.0	140	220	47	<1.0	2.9	1.1	<1.0	<1.0	<1.0	<5.4

J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.
CV = Sampled from bottom of tubing after purging via check valve.
CP = Sampled via gravity drainage from bottom of peristaltic tubing after purging with peristaltic pump, followed by crimping and pulling the tubing

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane

CDM

Appendix L-5
A&A Auto and Truck Salvage Facility

PRP Evaluation Summary

A&A Auto and Truck Salvage Facility
700 E. 21st St. North (NW of 21st and Mead)

Potential Source Area PRP and Work Plan Addendum Map ID - 05C

Contaminants of Concern – TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Application for Certification and Release
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of A&A Auto and Truck Salvage Facility

TCE Contamination

Data indicate that TCE increases along the groundwater flowpath (north to south) across this facility. Groundwater samples collected from shallow (20 feet bgs) upgradient locations GP05C-03, and -05 have TCE concentrations of 50 and 10 µg/L, respectively. Lithologic interference (apparently, low permeability material) prevented the Geoprobe collection of groundwater samples at these locations from shallower depths. Downgradient groundwater samples collected from GP05C-06, -07, and -08 (17 feet bgs) contained 130, 68, and 150 µg/L respectively. The lower concentration of TCE at GP05C-07 is interpreted as an indication that two separate contaminant sources may be present. One contaminant source would be located on the west side of the building and north of GP05C-06 and the second contaminant source area would be located on the east side of the building and north of GP05C-08. The available data indicate that the source areas are moderately active source areas. Additional sampling and monitoring is necessary to identify the precise locations of the apparent source areas as well as determine their degree of on-going contribution to the groundwater.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area to be south-southeast.

Polk Directory Review and RCRA Information Summary

Name of Company: A & A Auto & Truck Salvage

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, Ks

Regarding Property at Address: 700 E. 21st N.

History: 1998 to current

RCRA Info:

Name of Company: Kan Co. Dist Inc. (whol power lawn equip)

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, Ks

Regarding Property at Address: 700 E. 21st N.

History: 1990 to 1997

RCRA Info: *RCRA has not been completed*

Name of Company: Livestock Exchange Bldg.

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, Ks

Regarding Property at Address: 702 E. 21st N.

History: --- to 1988

RCRA Info: NO FILE

Name of Company: Sventy-first Street Program (human resources)

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, Ks

Regarding Property at Address: 702 E. 21st N.

History: 1998

RCRA Info:

Name of Company: Holloway Cattle Co.

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, Ks

Regarding Property at Address: 702 E. 21st N.

History: 1999 to 2000

RCRA Info: No RCRA File

Application for Certification and Release

JUL 30 1996

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, March Oil Company

(insert legal name(s) of party seeking certificate)

P.O. Box 782257
Wichita, Kansas 67278

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at: 702 E. 21st Street, Wichita, Kansas

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: same as above

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third-party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: _____
(signature)

Name: Johnny W. Stevens
(print or type)

P.O. Box 782257

Wichita, KS 67278
Address (print or type)

Date: July 29, 1996

Subscribed and sworn to before me this 29th day of July, 19 96.

SANDRA M. STEVENS
Notary Public - State of Kansas
My Appt. Expires 9-20-98

_____
Notary Public

My appointment expires: September 20, 1998

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for Commercial/Industrial property only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant March Oil Company Date 7/29/96

Business Phone 316-636-2100 Home Phone 316-634-1899

Legal Description see attached

Property Tax Key # B-00140-00UP

Street Address of Property 702 E. 21st Street, Wichita, KS

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER		DATES	TYPE OF BUSINESS/SITE USE
March Oil Company	From: 1982 To: Present		Office/Warehouse space
Sierra Petroleum Co, Inc.	From: ____ To: 1982		Office/Warehouse space
	From: ____ To: ____		
	From: ____ To: ____		

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES	DATES	TYPE OF BUSINESS/SITE USE
Kanco	From: 1983 To: Present	office/warehouse
Behavioral Consultants	From: 1995 To: Presnt	offices
Pumping Services, Inc.	From: 1993 To: Present	non hazardous sludge accumulation & removal
Sutherlands	From: 1973 To: Present	Lumber storage

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☒Yes ☐No ☐Unknown

see attached

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☒Yes ☐No ☐Unknown see attached

(d) Has any type of environmental study been performed on this property? ☒Yes ☐No ☐Unknown
If yes, please identify and include a copy of the report.

see attached

(2) Disposal of Wastes.

(a) Are liquid or sludge wastes generated and/or stored on property? ☒Yes ☐No ☐Unknown

(b) What do the liquid wastes consist of? non hazardous autowash sludges

(c) Has any type of characterization of these liquid wastes been conducted? ☒Yes ☐No ☐Unknown
If yes, include copy of results.

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☒No ☐Unknown

(b) Has the property even been owned by any entity that used hazardous substances on the site?
☐Yes ☒No ☐Unknown

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant.

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☐Yes ☒No ☐Unknown

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☐No ☐Unknown

NONE

If yes, give name, phone number and contact person, for each transporter utilized.

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.

NONE

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property? ☒Yes ☐No ☐Unknown If yes, include copy of results. see enclosed

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☒No ☐Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☒No ☐Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored on the property?
☐Yes ☒No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.

(b) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☐Yes ☐No ☐Unknown

N/A

(c) If such reports were filed, do they meet federal, state and local requirements?
☐Yes ☐No ☐Unknown State the names of individuals familiar with the filings and the location of the files.

N/A

(5) Status of Water Pollution Control.
(a) Does the facility have any wastewater? ☒Yes ☐No ☐Unknown

How is it managed or treated at present? In past?
discharged by permit at city treatment plant

(b) Are there any pits, ponds, lagoons, tanks? ☒Yes ☐No ☐Unknown

If yes, indicate how and when the structures were used, and what compounds have been stored in them.

steel and plastic above ground tanks for water storage.

(c) Is the property connected to the City sewage treatment system? ☒Yes ☐No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☒No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☒No ☐Unknown
State the location of such records and the individuals familiar with them.

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☐Yes ☒No ☐Unknown
If yes, where?

6) Status of Compliance with Requirements Relating to Petroleum Products.
(a) Are any petroleum products stored at the facility? ☐Yes ☒No ☐Unknown
If yes, how much and where are they stored?

(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown

Have they been registered with the Kansas Department of Health and Environment of other state, federal, or local agency?
☐Yes ☐No If registered, please attach a copy of the State Certificate.

N/A

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.
N/A

(d) Have the tanks been tested? ☐Yes ☐No ☐Unknown Results?
N/A

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property? ☐Yes ☒No ☐Unknown If yes, please describe.

(f) Have any tanks presently or previously located at the property leaked or spilled?
☐Yes ☐No ☐Unknown If yes, please describe.

NONE

(7) Are there any water-wells on the property? ☐Yes ☒No If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☐Unknown If yes, please explain.

N/A

(a) If known, what was the water-well used for in the past?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

N/A

(b) What is the water-well used for currently?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

N/A

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☐Unknown

N/A

(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results.

N/A

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes ☒No
If yes, list those corporate predecessors.

(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes ☒No
Is there a sale pending the Release for Environmental Conditions? ☐Yes ☒No
If yes, please indicate closing date _____.

Other comments:

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
Robert C. Harder, *Secretary*

March 28, 1993

Reply to: South Central District Office
1919 N. Amidon, Suite 130
Wichita, Kansas 67203
Phone: (316) 838-1071
Fax: (316) 838-0042

Mr. Charlie Thomas
Johnny on the Spot
Pumping Services, Inc.
P.O. Box 12091
Wichita, KS 67277

MAR 1994
RECEIVED
City of Wichita
Water and Sewer

Re: Complaint Investigation
Facility behind 750 East 21st St. North

Mr. Thomas:

On March 21, 1994, I investigated a complaint against your facility located behind 750 East 21st St. North, Wichita, Kansas. Mr. Bill Tucker, District Engineer, also attended this investigation. The complaint alleges illegal open dumping of car wash muds and industrial type sludge wastes. The investigation substantiates the complaint.

During the investigation you stated that you had dumped car wash muds onto the ground approximately 10 meters west by northwest of the building. This was verified by Mr. Tucker and myself as a recently graded area of what appeared to be sandy dirt with car wash brush bristles imbedded in the piles.

In addition, there is a low area, with pooled run-off, approximately 50 meters northwest of the building which, when sampled by the City of Wichita, was analyzed to have an unusually high "pH of 12.4." This may be the result of the lime applications you said you apply to certain sludge loads to control odors. I sampled the soil in this low area and when test results are received from the KDHE laboratory in Topeka there may be a necessity for some contaminated soil excavations at that location.

During the on-site investigation I noted 11 (55 gallon capacity) drums and 31 (20 gallon capacity) drums of waste sludges/liquids stored north of the building. After opening and inspecting the contents of the larger drums, I concluded the drums contain mostly waste antifreeze with varying amounts of waste oil(s) atop the antifreeze layer. The contents of the smaller drums appeared to be typical industrial pit sludges with floating layers of water and/or oil. I sampled the antifreeze layer and took a composite sample of sludge from several of the smaller containers. Proper disposal of all phases of this waste will be necessary. This may require further segregation of the wastes, and, if portions of the wastes are analyzed as "hazardous waste," the disposal will require you to submit a Notification of Regulated Waste Activity form to the department which identifies the hazardous constituents present in this waste.

Inside the building you have constructed a series of concrete pits which will serve to physically separate the solid and liquid phases of the wastes you pick up for disposal. You said you were planning to pump off the water phase to an on-site tanker which would then be used to transport the wastewater to the City of Wichita POTW. You must comply with the acceptance criteria set by the City for this wastewater. The sludge portion must be routed to a sanitary landfill. The floating oil(s) portion must be routed to an approved waste oil reclaimer/recycler.

The following actions must be taken by you correct the violation of Kansas Statutes Annotated 65-3409 :

1. All illegal open dumping of industrial sludges/muds by your company at this location, or any other location in Kansas, must cease immediately.

2. If the illegally dumped waste is non-hazardous, you must begin the removal and transport of the sludges/muds dumped at this location to a permitted sanitary landfill. Attached is an information sheet which explains the process of applying for a Special Waste Authorization permit number for acceptance of your wastes sludge by a permitted sanitary landfill. We suggest you contact the landfill first, to determine what analytical sampling results they may require.

3. Do not remove, return, or dispose of the drummed wastes until further direction from the department is received. Pending analytical results, you may be improperly storing hazardous wastes, in which case, you will be responsible for managing these drums per Kansas Administrative Regulations, Article 31.--Hazardous Waste Management Standards and Regulations (Copy attached).

4. You must submit a specific plan to the department which details the procedures you will implement to assure proper disposal of all effluents from your facility, including waste sludges, wastewaters, and waste oils.

5. You must submit a brief summary of waste segregation procedures which will be implemented at your facility in the future (ie. how will the waste oils be separated from the wastewater, how will you effect the adequate separation of the wastewater portion from the "solids" portion in order for the landfill to accept the de-watered waste).

Please provide our department, by April 28, 1994, documented proof of corrective action(s) taken and a written summary of proper waste management procedures planned for the facility.

Your cooperation with the solid waste management program is appreciated. If you have any questions concerning this letter or the investigation, call me at (316) 838-1071.

Respectfully,

Gilbert L. Perez
Waste Management Programs
Bureau of District Operations

GLP:JOS.94

pc: Tom Gross, BWM, Topeka
Ron Smith, BWM, Topeka
Becky Gagnon, City of Wichita
SCD File

Attachments

MARCH OIL

APR 0 1 1997

March 31, 1997

John Davis
Health Department
1900 E. 9th
Wichita, KS 67214

RE: E. 21st Street property commonly known as "Stockyards"
Wichita, Kansas

Dear John:

March Oil Company is strictly a real estate development company. We do hold working interest in some oil and gas wells, but we have never been an operator of wells and certainly not on or near this property.

March Oil Company has always held the 21st street property as investment property only.

If you have any questions or need any additional information, please call me at 636-2100.

Sincerely,

Johnny W. Stevens

1223 N. Rock Road • Building H, Suite 200 • Wichita, KS 67206
P.O. Box 782257 • Wichita, KS 67278
(316) 636-2100 • Fax (316) 636-2102

[B-2] Lessees of March Oil Properties 12/99

March Oil Company

Tenant	Address	Type of Business
Auto Inn	515 E. 21st Street N.	Wrecker Service –
CenKan Tower	North of 825 E. 25th St.	Phone Tower
KanCo	700 E. 21st Street N.	Office Space –
Pearson Excavating	825 E. 25th Street N.	Office Space –
National By Products		Animal Rendering
Novick Iron	South of 702 E. 21st	Steel Storage –
SER	703 E. 21st Street N.	Office Space
Southwestern Bell	North of 825 E. 25th St.	Phone Tower
Squeeks	705 E. 21st Street N.	Donut Store
Sutherland Lumber	502 E. 21st Street N.	Warehouse

SCIENTIFIC INVESTIGATIONS CO.

December 19, 1994

Ms. Cheryle Micinski
Senior Associate Regional Counsel
United States Environmental Protection Agency
Region VII, 726 Minnesota Ave.
Kansas City, Kansas 66101

Dear Ms. Micinski:

We have been in contact with you concerning application by March Oil Co., Wichita, Kansas, for de-minimis landowner settlement at the 29th and Mead Superfund Site in Wichita. Subsequently, we received your letter (11/1/94) requesting information relevant to our application. In response to your letter we are providing the following documents and exhibits:

1. Addresses and legal descriptions of the properties and diagrams showing these locations within the 29th and Mead site (attachments here plus maps and diagrams in reports).

2. Identification of Property Use

The properties are commercial and industrial. March Oil Co. does not itself occupy the properties. A list of present tenants is attached.

3. Historical Use of Property; Circumstances of Acquisition

The properties were all engaged in stockyard activities (cattle) from 1902-1977. There was a hotel on the south of 21st St. across from the stockyards building during the 1970s. Sierra Petroleum Co. bought the stockyards in 1965 and in 1982 divided assets. March Oil Co. received the properties from this division of assets in 1982. March Oil Co. (a partnership) had inspected the properties numerous times in the course of business prior to the acquisition.

Central Office: Wichita, KS
Box 3243, 67201
316-651-0485

Associate Offices: Washington, D.C.
Philadelphia, PA

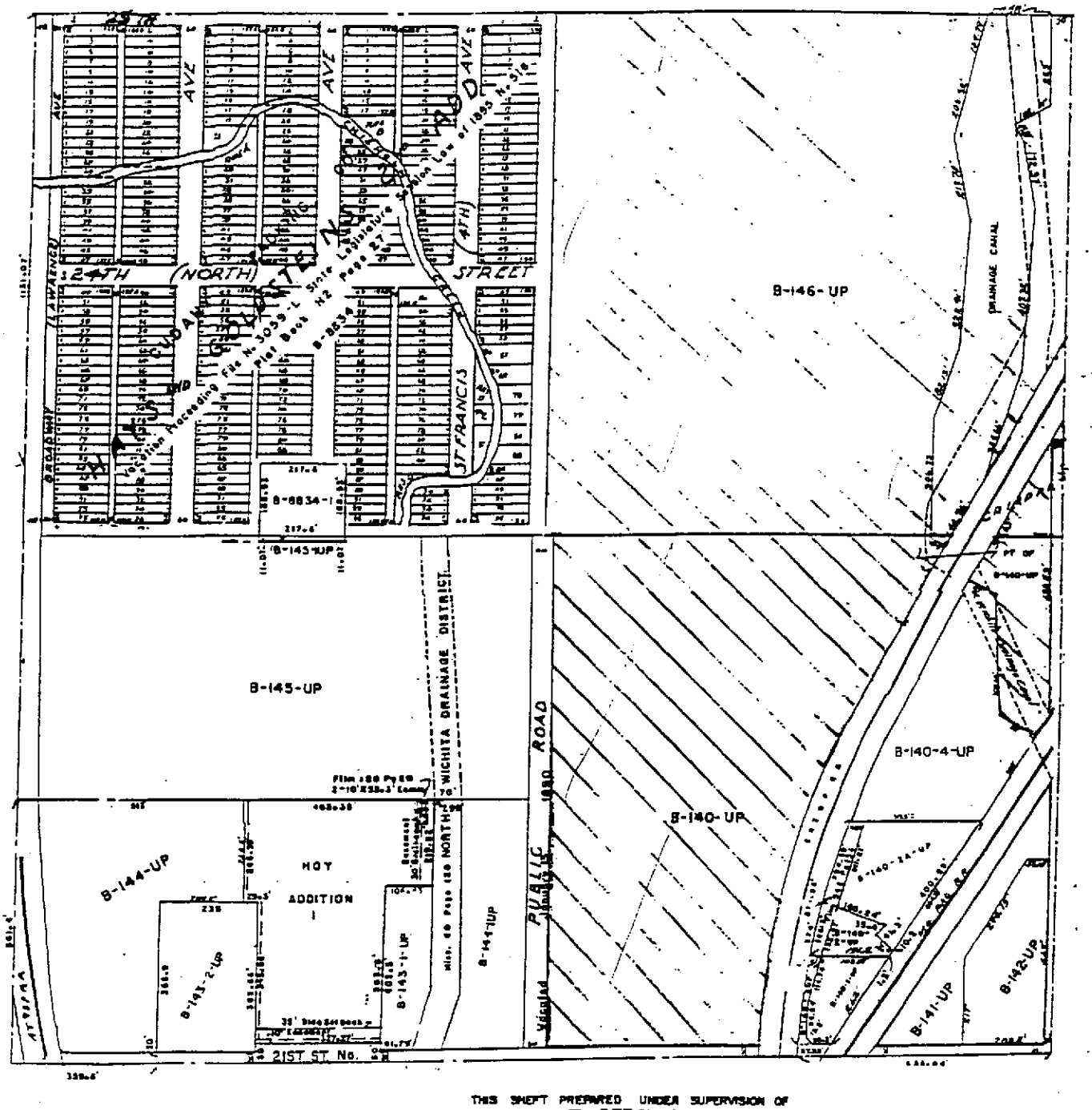
(3)

(A)

[MARCH CIL PROPERTIES - NORTH OF 21ST ST.]

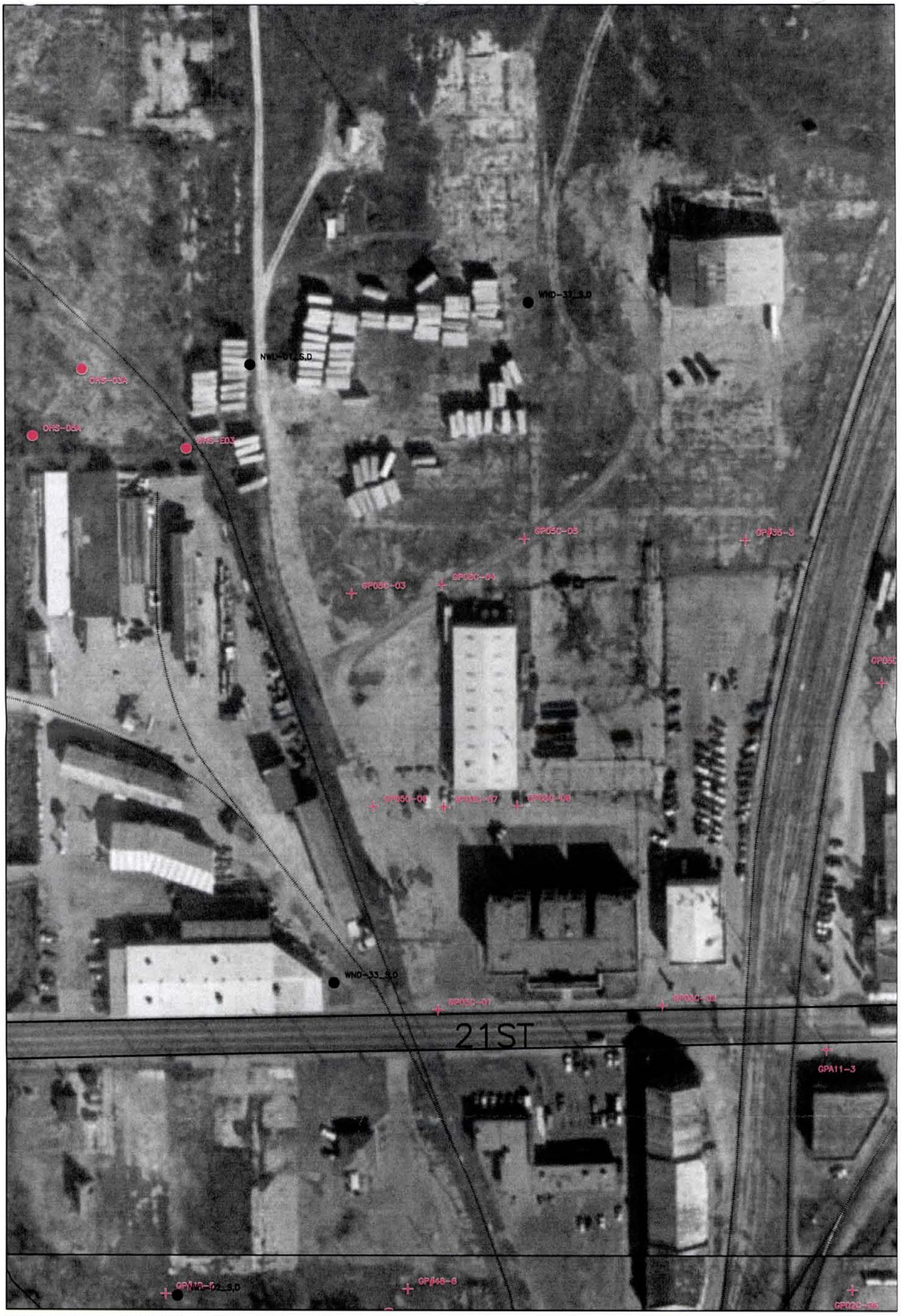
S.W.¼ SEC. 4, TWP. 27, R. 1 E.

WJ 16



THIS SHEET PREPARED UNDER SUPERVISION OF
DON WRIGHT, SEDGWICK COUNTY CLERK

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 100'

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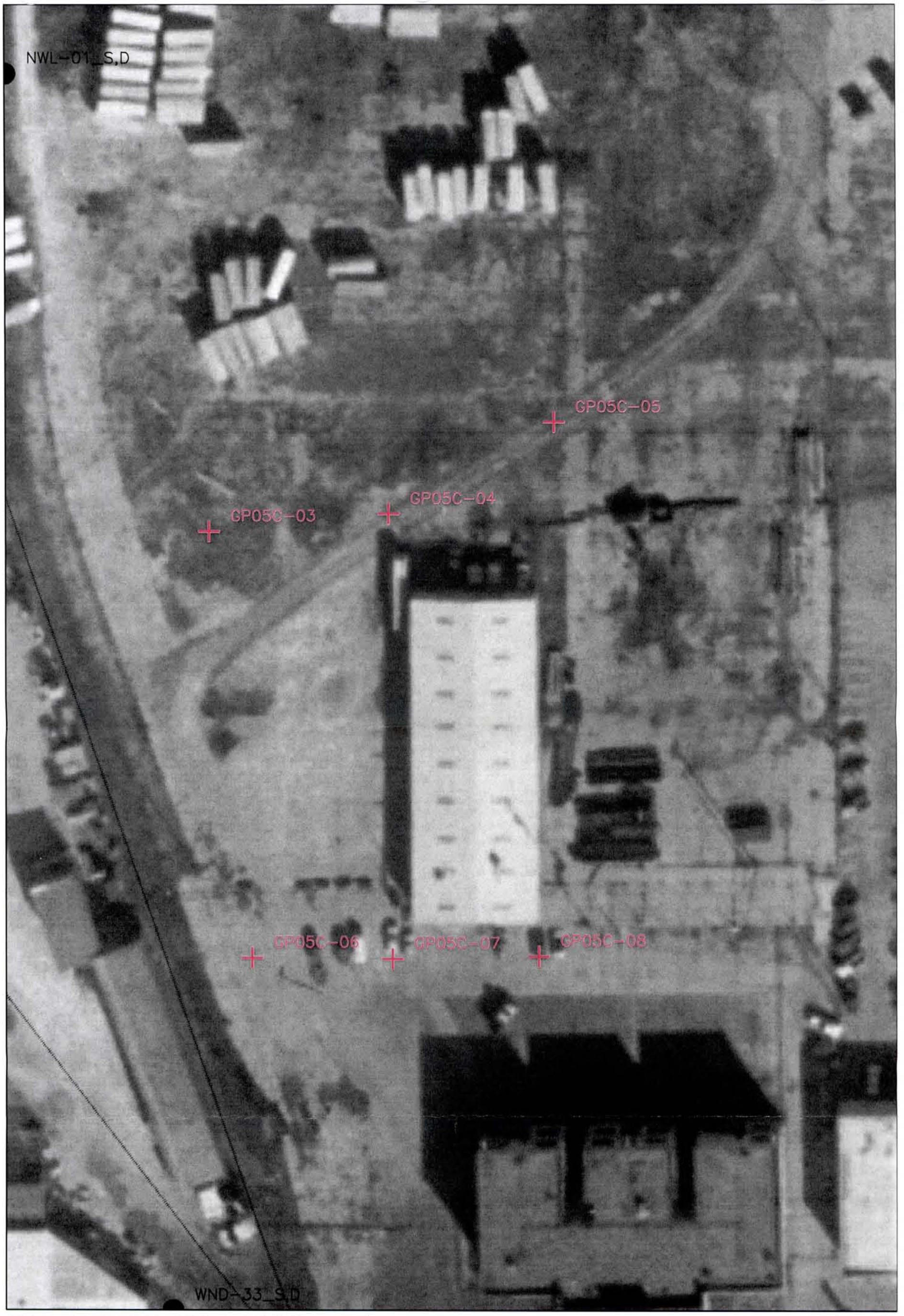
Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, A&A Auto and Truck Salvage Facility



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1" = 50'

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N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, A&A Auto and Truck Salvage Facility

Table(s)
Analytical Data Table(s)

A & A Auto and Truck Salvage Facility
North Industrial Corridor (NIC) Site
Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP05C-01	S/20	11/10/99		µg/L	<1	**2.9**	**97**	**1.8**	<1	**2.1**	**2.3**	<1	<1	<1	<5.4
GP05C-01	D/31	11/10/99		µg/L	<1	**150**	**75**	**39**	<1	**8**	**6.4**	<1	<1	**5**	**9.4**
GP05C-02	S/17	11/10/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP05C-02	D/29	11/10/99		µg/L	<1	**290**	**120**	**34**	**1.9**	**9.7**	**18**	<1	<1	**1**	<5.4
GP05C-03	S/20	01/25/00		µg/L	<1	**50**	**14**	**2.6**	<1	**1.7**	**1.6**	<1	<1	<1	<5.4
GP05C-03	D/32	01/25/00		µg/L	<1	**83**	**39**	**38**	<1	**4.4**	**4.2**	<1	<1	**4**	**8.4**
GP05C-04	D/35	01/26/00		µg/L	<1	**190**	**57**	**36**	<1	**7.9**	**11**	<1	**2**	**4.1**	**8.5**
GP05C-05	S/20	01/26/00		µg/L	<1	**9.8**	**1.4**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP05C-05	D/35	01/26/00		µg/L	<1	**91**	**38**	**31**	<1	**4.8**	**5.8**	<1	<1	**5.8**	**10.2**
GP05C-06	S/17	01/25/00		µg/L	<1	**130**	**62**	**21**	<1	**6.8**	**6.7**	<1	<1	<1	<5.4
GP05C-06	D/38	01/25/00		µg/L	<1	**160**	**51**	**40**	<1	**6.2**	**7.6**	<1	<1	**3.1**	**7.5**
GP05C-07	S/17	01/25/00		µg/L	<1	**68**	**22**	**3.2**	<1	**2.4**	**2.1**	<1	<1	<1	<5.4
GP05C-07	D/29	01/25/00		µg/L	<1	**110**	**57**	**37**	<1	**7.4**	**6.5**	<1	<1	**2.4**	**6.8**
GP05C-08	S/17	01/25/00		µg/L	<1	**150**	**52**	**15**	<1	**4.5**	**7.6**	<1	<1	<1	<5.4
GP05C-08	D/29	01/25/00		µg/L	<1	**380**	**130**	**49**	**1.1**	**12**	**26**	<1	<1	**2**	**6.4**
WND-33D	D	12/03/97		µg/L	<1	**380**	**150**	**110**	**2**	**12**	**25**	<1	<1	**5.4**	**10.8**
WND-33D	D	05/07/01		µg/L	<1.0	**43**	**72**	<1.0	<1.0	**4.3**	<1.0	<1.0	<1.0	<1.0	**5.4**
WND-33S	S	12/03/97		µg/L	<1	**370**	**120**	**70**	**1.8**	**14**	**27**	<1	<1	**4**	**10**
WND-33S	S	05/07/01		µg/L	<1.0	**160**	**100**	**9.4**	<1.0	**3.5**	**2.4**	<1.0	<1.0	<1.0	**5.4**
WND-37DR	D	06/16/98		µg/L	**1.4**	**900**	**220**	**12**	**21**	**12**	**70**	**2.6**	**3.1**	**2.9**	**7.5**
WND-37DR	D	05/07/01		µg/L	<1.0	**120**	**37**	<1.0	<1.0	**5.3**	**11**	<1.0	<1.0	**3.3**	**7.7**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-6
Aero Space Controls Facility

PRP Evaluation Summary

Aero Space Controls Facility
1050 North Mosley (SW of 10th and Mosley)

Potential Source Area PRP and Work Plan Addendum Map ID – 03F
Contaminants of Concern – TCE and its degradation product
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Aero Space Controls Facility

TCE Contamination

Data indicate that this area is a significant active source of chlorinated VOC groundwater contamination. Groundwater sampling data have shown a marked increase in concentrations of trichloroethene (TCE) along the groundwater flow path through this area. Groundwater samples collected from the shallow (18 to 20 feet bgs) aquifer upgradient of the Aero Space Controls (ASC) facility contained TCE concentrations of less than 60 µg/L at locations GP#18-1 and -2 during NIC Phase 1/1A sampling conducted in 1997 and also during confirmation sampling of these locations in 1999 (CDM 2000). During the 29th and Mead investigation, a groundwater sample collected from shallow upgradient monitoring well WND-40S contained 3.9 µg/L TCE (GTI 1993). At downgradient sample locations GP03F-02 and -03, TCE was detected in shallow groundwater at concentrations of 1,100 and 420 µg/L, respectively, in 1999.

Groundwater Flow

Site-wide water table maps presented in the Phase 1/1a Technical Memorandum indicate a groundwater flow from north to south. Localized groundwater flow direction in the vicinity of KPI was identified by TerraTech as south-southeast. Groundwater plume data also appear to indicate a south-southeast groundwater flow direction. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area to be south-southeast.

References

GTI 1996, Preliminary Results from Investigation of the 29th and Mead Area, Prepared by Groundwater Technologies, Inc. for the Wichita North Industrial District.

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Name of Company: Aero Space Controls Corp.

Name and/or Contact Person:

Street Address of Company: 1050 N. Mosley Ave.

City, State, and Zip Code: Wichita, Ks 67214

Regarding the Following Property:

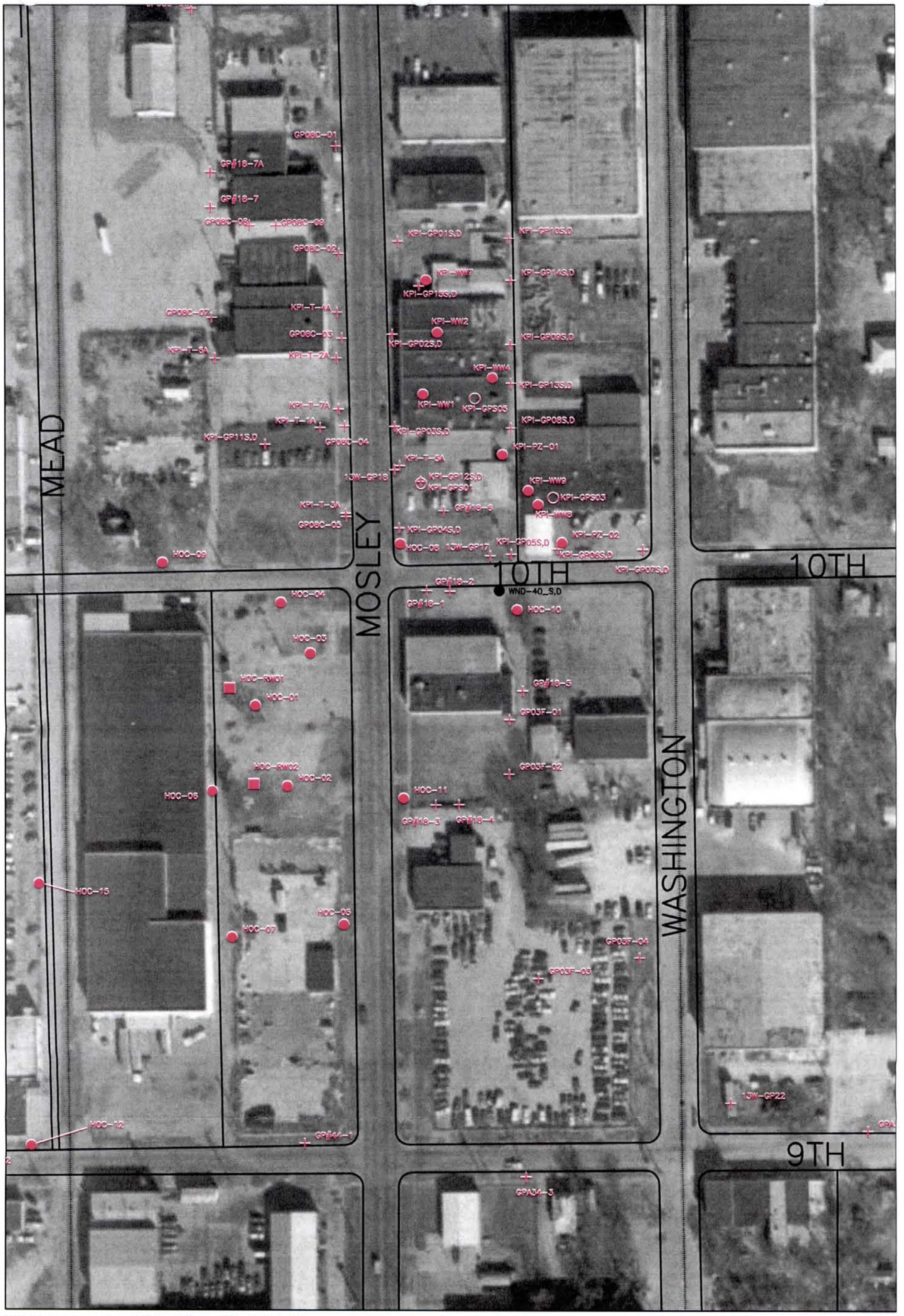
Phone Number of Contact:

History:

1995	Aero Space Controls Corp
1990	Same
1984-5	Same
1980	Same
1975	Same
1970	Same
1965	Vickers Refining Co Inc
1961	Vickers Petroleum Co

RCRA Info: D002-Corrosive Waste; D006-Cadmium; D007-Chromium; D018-Benzene; D021-Chlorobenzene; D027-1,4-Dchlorobenzene; D039-Tetrachloroethylene; D040-Trichloroethylene; F001-Spent halogenated solvents
Geoprobe shows possible TCA contamination

Figure(s)
Aerial Photographs and Sample Location Map(s)



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1" = 100'

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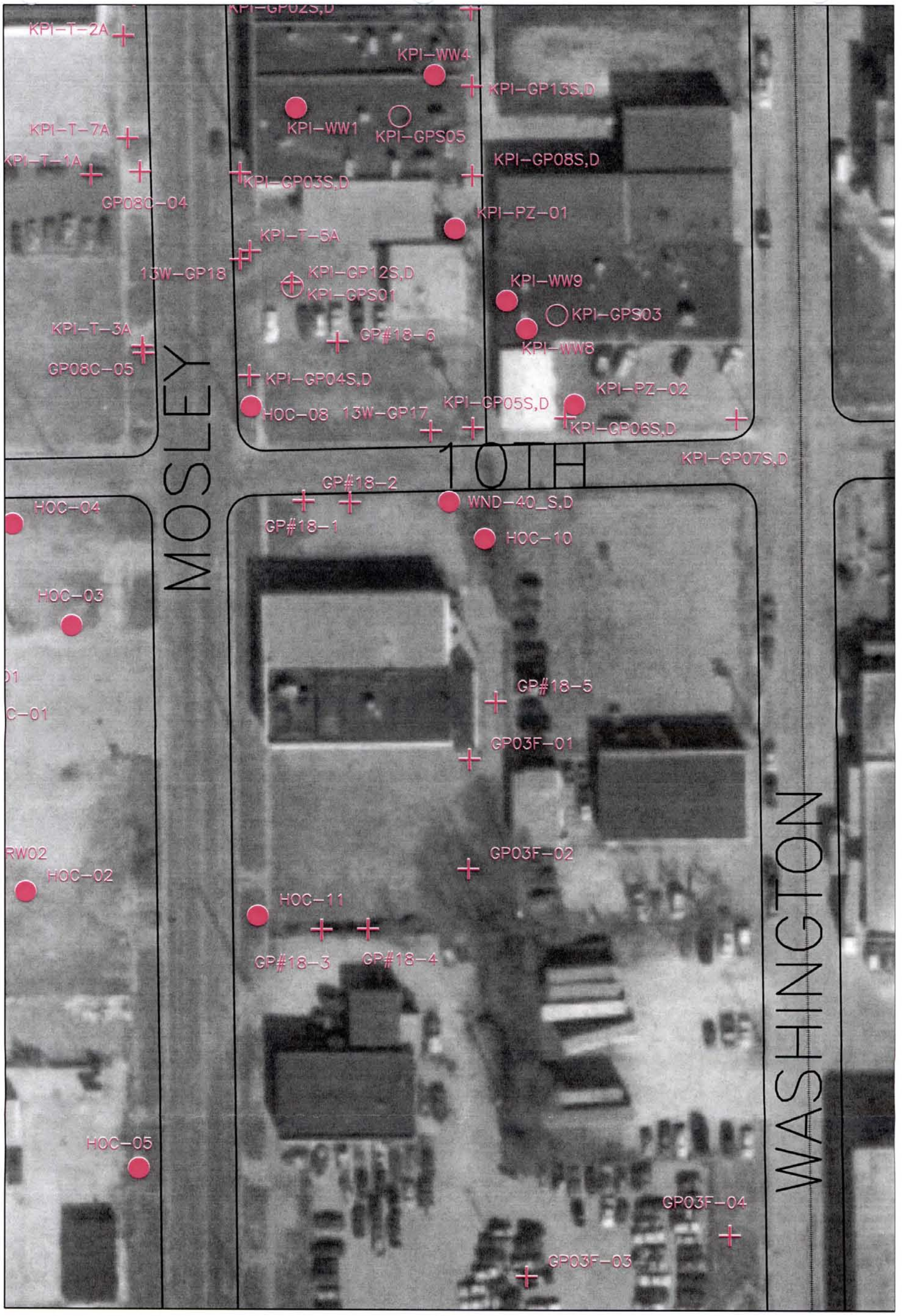
Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Aero Space Controls Facility



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1" = 50'

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Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Aero Space Controls Facility

Table(s)
Analytical Data Table(s)

Aero Space Controls Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#18-1	S/20	01/08/98		µg/L	<1	18	5.7	<1	110	7.5	26	<1	8.1	<1	243.7
GP#18-1	S/20	10/15/99		µg/L	<1	12	9.7	1	5.5	4.4	<1	<1	<1	<1	168.1
GP#18-1	D/33	01/08/98		µg/L	1.9	62	17	<1	5.9	1	2.1	<1	<1	<1	52.1
GP#18-2	S/20	01/08/98		µg/L	2.2	60	16	<1	5.9	<1	2.3	<1	<1	<1	52.1
GP#18-2	S/20	10/15/99		µg/L	<1	26	9.2	<1	38	1	8.8	<1	1	<1	<5.4
GP#18-2	D/32	01/08/98		µg/L	2.8	64	16	<1	5.4	1	1.8	<1	<1	<1	49.1
GP#18-3	S/20	01/08/98		µg/L	<1	<1	4.8	21	<1	6	<1	<1	<1	8.2	12.8
GP#18-3	D/33	01/08/98		µg/L	3.6	86	49	3.6	<1	1.8	1.1	<1	<1	<1	<5.4
GP#18-4	S/20	01/08/98		µg/L	<1	11	17	15	8.3	23	13	<1	<1	1.4	5.8
GP#18-4	D/30	01/08/98		µg/L	<1	23	24	<1	64	6	34	<1	1.9	<1	<5.4
GP#18-5	S/18	06/04/98		µg/L	<1	180	12	<1	110	12	33	<1	1.2	<1	<5.4
GP#18-5	S/18	10/15/99		µg/L	<1	120	10	<1	99	6.6	26	<1	2	<1	<5.4
GP#18-5	D/30	06/04/98		µg/L	<1	39	10	<1	12	2.7	6	<1	<1	<1	<5.4
GP#18-6	S/18	06/04/98		µg/L	<1	50	8.9	<1	100	1.3	38	<1	9.9	<1	<5.4
GP#18-6	S/18	10/15/99		µg/L	<1	35	6.3	<1	180	3.4	52	<1	5.8	<1	<5.4
GP#18-6	D/30	06/04/98		µg/L	<1	58	9.4	<1	2.1	<1	<1	<1	<1	<1	<5.4
GP#44-1	S/20	01/16/98		µg/L	<1	<1	23	<1	<1	<1	<1	<1	<1	2.9	7.3
GP#44-1	D/31	01/16/98		µg/L	<1	32	24	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03F-01	S/17	11/22/99		µg/L	<1	170	13	<1	68	4.4	19	<1	<1	<1	5
GP03F-01	D/25	11/22/99		µg/L	<1	48	7.2	<1	20	2.4	8.6	<1	<1	<1	5
GP03F-02	S/17	11/23/99		µg/L	15	1100	110	<1	140	10	32	<1	1.3	<1	<5.4
GP03F-02	D/35	11/23/99		µg/L	<1	91	30	1.8	6.9	1.7	4	<1	<1	<1	<5.4
GP03F-03	S/17	12/01/99		µg/L	3.1	420	30	<1	70	7.5	11	11	1.3	<1	<5.4
GP03F-03	D/32	12/01/99		µg/L	<1	71	16	<1	52	7.5	20	12	1.3	<1	<5.4
GP03F-04	S/17	12/01/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03F-04	D/30	12/01/99		µg/L	<1	11	5.8	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08C-05	S/17	12/17/99		µg/L	<1	2.3	1.1	<1	8.1	<1	<1	<1	<1	<1	<5.4
GP08C-05	D/26	12/17/99		µg/L	5.2	140 JH	57 JH	3.4	<1	3.5	1.2	<1	<1	<1	<5.4
GPA34-3	S/20	12/29/97		µg/L	2.1	150	41	1.2	51	12	19	<1	<1	<1	<5.4
GPA34-3	S/20	10/20/99		µg/L	1.6	180	47	3.5	52	12	13	<1	<1	<1	<5.4
GPA34-3	D/33	12/29/97		µg/L	<1	73	31	<1	97	6.1	27	<1	1.1	<1	<5.4
WND-40D	D	05/02/01		µg/L	1.4	54	21	<1.0	9.5	1.9	6.2	<1.0	<1.0	<1.0	5.4
WND-40S	S	05/02/01		µg/L	<1.0	36	9.6	<1.0	9.7	1.8	6	<1.0	<1.0	<1.0	5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroether
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-7
Apex Engineering Facility

PRP Evaluation Summary

APEX Engineering Facility
1234 North Wellington (11th and Wellington)

Potential Source Area PRP and Work Plan Addendum Map ID - 02H

Contaminants of Concern – TCE and its degradation products, possibly TCA

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of APEX Engineering Facility

TCE Contamination

Data indicate that this area is a significant active source of chlorinated VOC groundwater contamination. Groundwater sampling data have shown a marked increase in concentrations of Trichloroethene (TCE) and *cis*-1,2-dichloroethene (a degradation product). In general, groundwater samples collected from the shallow (17 to 20 feet bgs) aquifer upgradient of the APEX facility contained concentrations of less than 10 µg/L of TCE. At downgradient sample locations GP02H-09 and GPA29-4, TCE was detected in shallow groundwater at concentrations of 370 and 180 µg/L, respectively. The available data indicate that the source is a significantly active source area with a plume that appears to extend to at least 2nd Street to the south.

The RCRA files indicate the use of TCE on the facility and that TCE was present in the groundwater. Additionally, KDHE has indicated that it has information provided by APEX in response to an information request from KDHE. KDHE stated that the response included data indicating that three monitoring wells were formerly located on the property. Sampling of one of the monitoring wells at the southern end of the facility resulted in a TCE concentration reported by KDHE to be greater than 1,000 µg/L in the mid 1990s. The City does not currently have this information.

Additional sampling and monitoring is necessary to identify the precise location of the source area(s) within the facility as well as determine their degree of ongoing contribution to the groundwater.

PCE Contamination

Tetrachloroethene (PCE) was not detected in the upgradient shallow groundwater samples, but was detected at low concentrations (less than 5 µg/L) downgradient of the facility. The PCE contamination may coincide with the TCE contamination and could have been present as an impurity in the TCE product utilized at the facility.

Groundwater Flow

Localized groundwater flow direction in this area is not well defined. Site-wide water table maps presented in the Phase 1/1a Technical Memorandum indicate a groundwater flow from north to south. Groundwater plume data indicate a groundwater flow

direction to the south-southeast. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south but facility-specific groundwater flow is not well defined.

Reference

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Name of Company: **Apex Engineering co.**

Name and/or Contact Person:

Street Address of Company: **1234 N. Wellington St.**

City, State, and Zip Code: **Wichita, Ks 67203**

Regarding the Following Property:

Phone Number of Contact:

History:	1995	B G Aerostructure Inc
	1990	H & H Parts Co (Div of Chromalloy Gas Turbine)
	1984-5	H & H Parts Inc
	1980	Same
	1975	Same
	1970	Same
	1965	Same
	1961	Same

RCRA Info: APEX:
F003-Non Hal Solvents
F005-Non Hal Solvents
D006-Cadmium
D007-Chromium
D008-Lead
D035-MEK

B & G Aerostructure Inc/Chromalloy Aircraft Structures
F003, F005, D002 - Corrosive
D006, D007, D008, D035

Note: H & H Parts had plan for soil clean up of chromium; also with TCE in groundwater, UST tanks on site; file also shows 1,1,1-Trichloroethane

APEX Engineering; B G Aerostructures Inc; Chromalloy Aircraft Structures; H & H Parts; successor companies.
There also is an air quality file on APEX

8179

ID	Company	Contact	Title
14	Apex Engineering Co.	Michaelj D Herd	

Mailing Address	City	State
1234 N. Wellington St.	Wichita	KS

Zip	Work Phone	FAX Number
67203	(316) 262-1494	

Status	Site Address	COR	Source Area
B	1234 N. Wellington St.		

RCRA

APEX: F003/non hal solvents; F005/non hal solvents; D006/Cadmium; D007/Chromium; D008/Lead; D035/MEK. B& G Aerostructure Inc/Chromally Aircraft Structures: F003; F005; D002/Corrosives; D006, D007, D008, D035.

History

1995/B G Aerostructures Inc; 1990/H&H Parts Co (Div of Chromally Gas Turbine); 1984-5/H & H Parts Inc; 1980-1961/same.

Notes

H & H Parts had plan for soil clean up of chromium; also with TCE in groundwater, UST tanks on site; file also shows 1,1,1-Trichloroethane. APEX Engineering; B G Aerostructures Inc; Chromally Aircraft Structures; there also is an air quality file on APEX. City bus repair station.

ID	Company	Contact	Title
62	Beachner Grain	Gary Beachner/Paul Dalke	

Mailing Address	City	State
P.O. Box 128/616 7th St.	St. Paul	KS

Zip	Work Phone	FAX Number
66771	(316) 449-8500	(316) 449-8512

Status	Site Address	COR	Source Area
B			

RCRA

History

Notes

State of Kansas
Mike Hayden, Governor

Department of Health and Environment
South Central District Office

unley C. Grant, Ph.D., Secretary 1919 Amidon, Suite 130, Wichita, Kansas 67203-2118 (316) 838-1071

July 26, 1989

Mike Saunders
President
H and H Parts Company
1234 Wellington Place
Wichita, KS 67203

Re: Hazardous Waste Compliance Inspection
Non-notifier

Mr. Saunders:

On June 30, 1989, an inspection of your facility was conducted by this department to determine compliance with hazardous waste regulations.

The inspection revealed your facility generates the following hazardous wastes as defined by 40 CFR 261, referenced by K.A.R. 28-31-3:

	Wastes Generated	Waste Codes
1.	paint solvent	F003/F005
2.	trichloroethylene (it is my understanding generation of this will be discontinued in the near future)	F001

You also generate the following potentially hazardous waste: paint filters. In addition, the inspection revealed your facility uses chromate-containing salt in a heat treat process, and chlorinated solvent for paint stripping. You indicated at this time, no waste is generated from these operations. In the future, if you do generate waste heat treat salt or waste paint stripper, these will be classified as hazardous waste and will need to be disposed of in a proper manner (at a treatment/storage/disposal facility (TSD) with interim status or with a permit). A list of these disposal companies can be found in the Hazardous Waste Generator's Handbook that was left with you during the inspection.

The quantity of hazardous wastes generated at your facility is more than 25 kilograms (approximately 55 pounds) but less than 1000 kilograms (approximately 2200 pounds) per month. Therefore, your facility would normally be considered a Kansas Generator and regulated under 40 CFR, Part 262, excluding 262.34(a)(4), as adopted by K.A.R. 28-31-4. However, since

Charles Konigsberg, Jr., M.D., M.P.H., Director of Health (913) 296-1343
James Power, P.E., Director of Environment (913) 296-1535
Lorne Phillips, Ph.D., Director of Information Systems (913) 296-1415
Roger Carlson, Ph.D., Director of the Kansas Health and Environmental Laboratory (913) 296-1619

you have more than 2200 lbs of hazardous waste accumulated, you are technically considered an EPA generator and subject to full regulation under 40 CFR 262.

The inspection identified the following items not in compliance with regulations concerning generators of hazardous waste:

1. A personnel training plan and a contingency plan are required per K.A.R. 28-31-4(g) for EPA generators.

2. You are required to obtain an EPA ID number per K.A.R. 28-31-4(c). To do this, fill out the hazardous waste notification form located in Appendix B of the Hazardous Waste Generator's Handbook. Send to the address noted at the bottom of the form.

3. Lack of hazardous waste determination. A person who generates a solid waste, as defined in K.A.R. 28-31-3, must determine if that waste is a hazardous waste using the methods described in K.A.R. 28-31-4 (b). Due to the presence of zinc chromate primer, your paint filters will most likely be hazardous. You can either assume they are hazardous and handle them accordingly, or you may arrange for a certified lab to analyze them for EP toxicity and verify whether hazardous. Your Hazardous Waste Generator's Handbook includes a list of certified labs.

4. A generator of a hazardous waste who accumulates such wastes in containers on site, must inspect his containers for signs of leakage or corrosion in accordance with the requirements of 40 CFR 265.174, as referenced by K.A.R. 28-31-4. Such inspections must be documented in a log.

5. A generator of a hazardous waste who accumulates such wastes on site must manage his containers in accordance with the requirements of 40 CFR 265 Subpart I, as referenced by K.A.R. 28-31-4. Containers of hazardous waste must be kept closed except when adding or withdrawing waste. You had an open container of waste paint solvent in each paint booth.

6. Each container or tank must be marked clearly or labeled with the words, "Hazardous Waste" in accordance with K.A.R. 28-31-4. Neither of the containers mentioned in the above paragraph were labeled. You also had 7 drums of waste trichloroethylene in storage, at the southern corner of your main building, which were not labeled.

7. A generator of a hazardous waste who stores hazardous waste on site must mark the date upon which each period of accumulation began on each container, as prescribed in K.A.R. 28-31-4 (g). None of the TCE drums mentioned above were so labeled.

8. Your hazardous waste containers must be in good condition in accordance with 40 CFR 265.171, as referenced by K.A.R. 28-31-4. Two of the drums of TCE were excessively rusted, and at least one was excessively dented. The contents of these needed to be repackaged into good containers.

9. Hazardous waste may be accumulated on site without a permit or without having interim status for no longer than ninety (90) days. Refer to K.A.R 28-31-4 (g). A generator who accumulates hazardous waste for more than ninety (90) days is an operator of a storage facility and is subject to the requirements of 40 CFR Parts 264 and 265 and the permit requirements of 40 CFR 122. You informed me the drums of TCE had been generated late last year. This would indicate you are in violation of the 90 day storage limit with respect to the TCE waste.

10. According to K.A.R. 28-31-4(c) a generator shall not offer hazardous waste to transporters or treatment, storage, disposal facilities that do not have an EPA identification number. I was informed 2 drums of waste paint solvent and a tank with plating residue were moved from your facility to an employee's relative's farm. Neither the employee doing the transport, or the farm had ID numbers. The old plating tank at the Doll farm was in very poor condition and some chromate rainwater accumulated in the tank was leaking out during the time of my visit. Contents of this tank need to be pumped out into secure containers. According to my last phone conversation with you, this should have already been done. The containers of waste from this tank also need to be labeled "hazardous waste".

All containers of hazardous waste or suspected hazardous waste should be transported from the Doll farm back to your facility. This includes the plating waste and the paint solvent waste. These wastes should be stored at your facility until picked up by a hazardous waste disposal firm or determined not to be hazardous.

All drums of used oil, both on plant property and at the Doll residence, should be sent to an oil reclaimer. A list of these can be found in the Yellow Pages.

You should excavate all oil-contaminated ground near your metal chip storage bin (east of the main building). This soil can be disposed in your trash dumpster. You should also modify the chip storage bin to prevent future leakage of water soluble oil. Furthermore, the practice of dumping oil along the outside of the machine shop must be discontinued immediately. This represents a violation of K.S.A. 65-3409.

No later than <u>September 19, 1989</u> please send written documentation outlining how the above items (excepting item #1) have been corrected. This should include:

—a copy of your hazardous waste notification form
—determination as to whether paint filters are hazardous
—a copy of a manifest showing waste TCE accumulation has been shipped off to approved hazardous waste TSD facility
—actions taken to secure and arrange for disposal the hazardous or potentially hazardous waste at the Doll farm.

Compliance with Item #1 will not be required if you properly dispose of your hazardous waste accumulation in a reasonable period of time, and if your generation rate remains in the Kansas Generator level.

Lastly, I did take a sample of discolored soil in the alley east of your main plant. A soil cleanup may be required contingent on results of the sample analysis. I will let you know of the outcome.

Your cooperation with the Hazardous Waste Management Program is appreciated. If you have questions concerning the inspection, please call me at (316) 838-1071.

Sincerely,

Dale T. Stuckey

Dale T. Stuckey
Inspections and Enforcement Section
Bureau of Air and Waste Management
Kansas Department of Health and Environment
1919 Amidon, Wichita, KS 67203

c: Tom Gross
J.P. Goetz

NON-NOTIFIER INSPECTION REPORT

A. General

Date 6-30-89 Time 1020

Facility Name H and H Parts Co.

Street 1234 Wellington Place

City Wichita, Kansas Zip 67203

County Sedgwick Phone 316-262-1494

Contacts Mike Saunders--President

Inspector Dale T. Stuckey

Nature of Business see attached info

B. INDUSTRIAL WASTE

WASTE Paint solvent: acetone, MEK, toluene, etc.

PROCESS spraypainting

IS WASTE HAZARDOUS?
(Yes,No,Maybe) yes

IF YES, GIVE EPA
I.D.NUMBER F003/F005

IS WASTE EXEMPT DUE
TORECYCLING(261.6) no

AMOUNT GENERATED
PERMONTH 20gallons

PRESENT DISPOSAL METHOD in storage

DISPOSAL AUTHORIZATION
IN EFFECT
(If yes, give number) no

AMOUNT NOW IN STORAGE two? drums

ACCUMULATION TIME ?

TYPE OF CONTAINER 55 gal. drums

STORAGE CONDITIONS
ADEQUATE? no

WASTE TCE

PROCESS vapordegreasing

IS WASTE HAZARDOUS?
(Yes,No,Maybe) yes

IF YES, GIVE EPA
I.D. NUMBER F001

IS WASTE EXEMPT DUE
TORECYCLING(261.6) no

AMOUNT GENERATED
PERMONTH sporadic

PRESENT DISPOSAL METHOD in storage

DISPOSAL AUTHORIZATION
IN EFFECT
(If yes, give number) no

AMOUNT NOW IN STORAGE 7 drums

ACCUMULATION TIME 6 months

TYPE OF CONTAINER

STORAGE CONDITIONS
ADEQUATE? no

WASTE oil

PROCESS mostlyhydraulicoil

IS WASTE HAZARDOUS?
(Yes,No,Maybe) no

IF YES, GIVE EPA
I.D. NUMBER

IS WASTE EXEMPT DUE
TO RECYCLING (261.6)

AMOUNT GENERATED
PERMONTH ?

PRESENT DISPOSAL METHOD in storage

DISPOSAL AUTHORIZATION
IN EFFECT
(If yes, give number) no

AMOUNT NOW IN STORAGE 10-15 drums
ACCUMULATIONTIME ?
STORAGE CONDITIONS
ADEQUATE?

WASTE paint filters

PROCESS spray painting

IS WASTE HAZARDOUS?
(Yes,No,Maybe) maybe

IF YES, GIVE EPA
I.D. NUMBER

IS WASTE EXEMPT DUE
TORECYCLING(261.6) no

AMOUNT GENERATED
PER MONTH 24 every 3 weeks

PRESENTDISPOSALMETHOD trash

DISPOSAL AUTHORIZATION
IN EFFECT
(If yes, give number) none

AMOUNT NOW IN STORAGE none

ACCUMULATIONTIME

TYPE OF CONTAINER

STORAGE CONDITIONS
ADEQUATE?

1. Total monthly generation rate of known hazardous waste 20 gallons

2. Is facility required to notify? Yes

If yes, what reason was given for failure to notify?

Thought they were small quantity

C. HAZARDOUS WASTE MANAGEMENT PRACTICES

1. Are hazardous wastes or suspected hazardous wastes treated on site? YES - NO

NO

If yes, describe the treatment process

2. Are hazardous wastes or suspected hazardous wastes beneficially recycled, re-used or reclaimed? YES - NO

NO

If yes, are they Listed

Characteristic

and is activity on-site

off-site

3. Are hazardous wastes or suspected hazardous wastes presently disposed of on site? YES - NO

NO

a. Have they been in the past? YES - ?

NO

Ifyes,describe

b. If hazardous wastes or suspected hazardous wastes are disposed of via the sanitary sewer, has permission from the city been obtained? YES - ? NA

NO

4. Are hazardous wastes transported from the site? YES - Yes

NO

Ifyes, bywhom Lawrence Dell

To his dad's farm.

General Information *** Indicates problems or potential problems**

—This inspection resulted from a complaint relayed to me by Paul Belt.
—H and H Parts employees 110 people and is involved in commercial aircraft contract work (not military). Manufacture all manner of small parts for aircraft. The company was due to be bought out July 14, 1989 by Chromoloy (home company Simco?). They recently had an audit done by a staffperson from Chromoloy's environmental dept. The audit gave them a clean bill of health environmentally. I understand this auditor actually visited our district office a few days before my inspection to check if our staff knew problems existing in the area. I was not in the office at the time.

In response to the specific complaint allegations, Mike knew of no solvent being dumped on the back lot. He thought the complainant may be referring to water soluble oil that drains from aluminum chips in a dumpster back of the plant. I was told Glickman, Inc. was contracted to pick up these chips.

In reference to point #4 on the complaint: a new stretch press was being installed in the south part of the main plant. The press is set down in a large concrete pit which will serve to catch any hydraulic oil spillage. The only time a part of the floor was dug up was when this pit was installed, I was told; and no ketone soaked dirt had been taken out. Lawrence Doll, a worker at the plant, said this dirt was used to fill up a basement in a house in Colwich.

In reference to point #2 on the complaint: they did have an old magnesium plating tank, I was told, that had been temporarily removed to allow cleanup of the property in preparation for the sale. The plating tank is still on a truck at a farm in Colwich owned by the father of Lawrence Doll (his dad's name is Clarence Doll). This worker, Lawrence Doll, was present during some my briefing with Mike Saunders. The tank was taken out of service some 7 years ago. I was told the liquid was pumped out and the tank had been filled at that time with rock to prevent kids from crawling down in it and playing in it. I was assured no rock was ever taken out of the tank for use in filling potholes. Plating solution used in the tank was a Dow 17 (he was not sure of the exact ingredients).

Lawrence said he takes no drums of chemicals home to dump in a creek.

—There is one TCE vapor degreaser on-site. The degreaser is set down in a concrete pit. It has been pumped out; Chromoloy did not want it once they owned the site. The TCE was pumped out late last year and is being stored in barrels outside the southern portion of the main plant (see sketch). I told Mike he apparently exceeded the 90 day storage limit with respect to
* these drums. He offered no opposing argument. They've got a sample in at HRI for analysis. HRI will be disposing of the TCE. The degreaser vat itself will be removed within the next 90 days. The degreaser was only in use for 6 years.
—They have two dry paint boothes. Zinc chromate primer is one of the coatings used. They have plans to convert the boothes to waterfall boothes.

—Also have a metal finishing line which includes: Oakite 164 soapy water tank, irudite (chromated) tank, stainless steel pickle tank (nitric acid and water), stainless steel passivate tank (chromated), heated Oakite alkaline cleaner tank, hydrofluosilicic acid tank, and a deoxidizer tank (Oakite 34). Associated rinse tanks overflow to the sanitary sewer. I was told none of these tanks have ever been cleaned out.
—There is also a heat treat area consisting of a salt bath and water quench bath. I was told the heat treat tanks will be removed within 90 days; Chromoloy also does not want these. I was told the heat treat salt has never been cleaned out before.
—Water soluble is recirculated and strained in the machines. None of this waste oil is generateed except for what drains off the chips.
—A zyglo penetrant inspection room has been installed. Not operational yet.
—Lawrence Doll said he'd taken some 10-15 drums of waste oil to his Dad's farm. He was planning on using some of it to lubricate chain saws. He admitted he would probably only use 1 or 2 drums of the oil. Wasn't sure
* what would be done with the rest. I recommended sending it to an oil reclaimer. The oil drums are still on the back of one of his trucks at the farm.

Field observations

outside and east of main building (see sketch)

* —observed small amount of oil spillage from chip storage bin.
* —Also some oil spillage outside machine shop door and along edge of machine shop. They'd apparently been using the oil to try to kill weeds. Mike expressed ignorance as to who was doing this. He told me later, however, that he found out the oil being dumped was actually Trim-sol, a water soluble oil.

in main building

paint rooms

—talked to a man named Leonard here, who was apparently the paint foreman. Leonard said about 5 gallons/week of waste paint solvent is generated. They use toluene and TK19 solvent from Crown Metro. Leonard said the waste solvent was put in a drum outside. However, when we looked we could find no such drum.
—Leonard also said the filters were removed every 3 weeks and placed
* in the trash. There are 12 exhaust filters per booth.
* —In one of the paint booths I saw an open 5 gallon can half full of waste paint thinner. The can was not labeled.
* —In the other paint room I saw a full open can of waste paint solvent. Not labeled.
In this room, I also noted a small vat of an acidic paint stripper (DAP 201 from Oakite). I was told this stripper just evaporates and is never cleaned out. This solution gave off a strong carb cleaner type odor.

process line

Just south of paint rooms (see sketch). Rinsewater runs over concrete floor to sanitary sewer (I was told).

heat treat area

minimal dragout

materials warehouse

across street. Used for storage of metal sheet stock.

drum storage area at southeast corner of main building

* 7 drums of waste trichloroethylene. Not labeled or dated. Two of the drums were rusted and one severely dented. See photo.

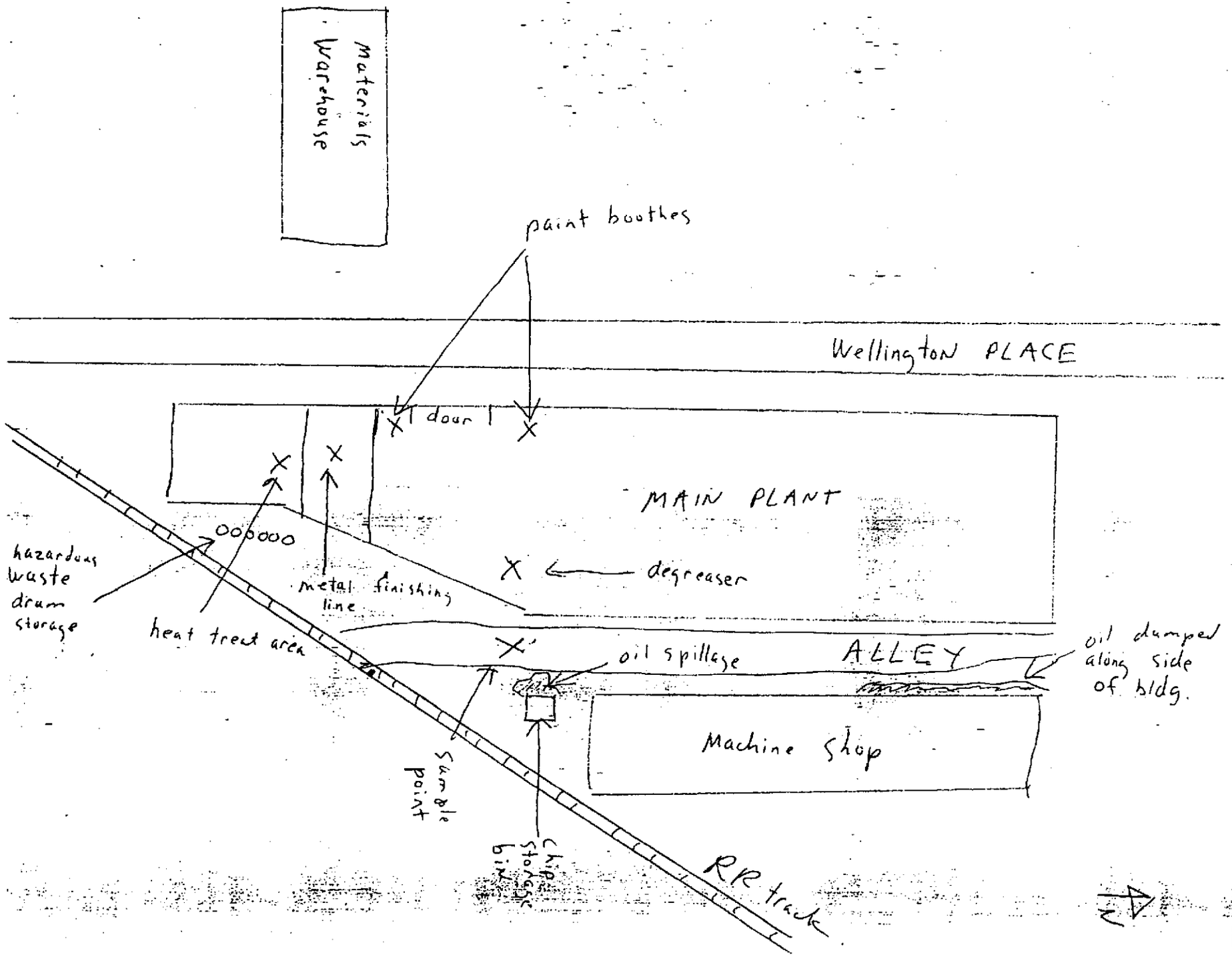
During my exit briefing with Mike Saunders and Lawrence Doll, I was informed that two of the drums Lawrence Doll had transported to his farm probably contained waste paint solvent. They were on the same truck as the drums of
* waste oil. I informed them they violated hazardous waste regulations by transporting without a license and without ID number. I was told they only intended to store the drums temporarily at the farm till they could get the grounds around the plant cleaned up. The drums were to be eventually be brought back on site.

Just before leaving, I sampled for EP toxicity at a discolored area in the alley between the machine shop and main building. See photo of sample point. Mike said this was a city alley and that trash trucks go through here all the time.

After the inspection was completed, and later in the afternoon, I went out to the Doll farm in Colwich (53 rd. street west to Colwich, first paved road on east edge of town, one block north). There I sampled one of the black drums thought to contain paint solvent. The drum was sampled for VOC's. Lastly, I took a look at the old plating tank on one of the other farm trucks, and discovered it contained yellow green tinted rainwater sitting on top of what appeared to be absorbant. Some of the rain water was leaking
* out small holes in the side. A bucket had been set out to catch the spillage. I expressed my concern at this, and informed Lawrence he had a hazardous waste problem with the water. I got sample of this water for EP toxicity analysis.

The following Wednesday, I called Mike Saunders and told him he should pump the rainwater out of this tank and into secure containers. He said he would have it done that afternoon.

H and H Parts, Wichita
6-30-89 inspection
Dale T. [illegible]



Department of Health and Environment
Division of Environment
Northcentral District Office, Kansas

PHOTO MOUNTING SHEET

Name of Site: H and H Parts Co.

Location: City Wichita County SG Legal: S- , T- S, R E W

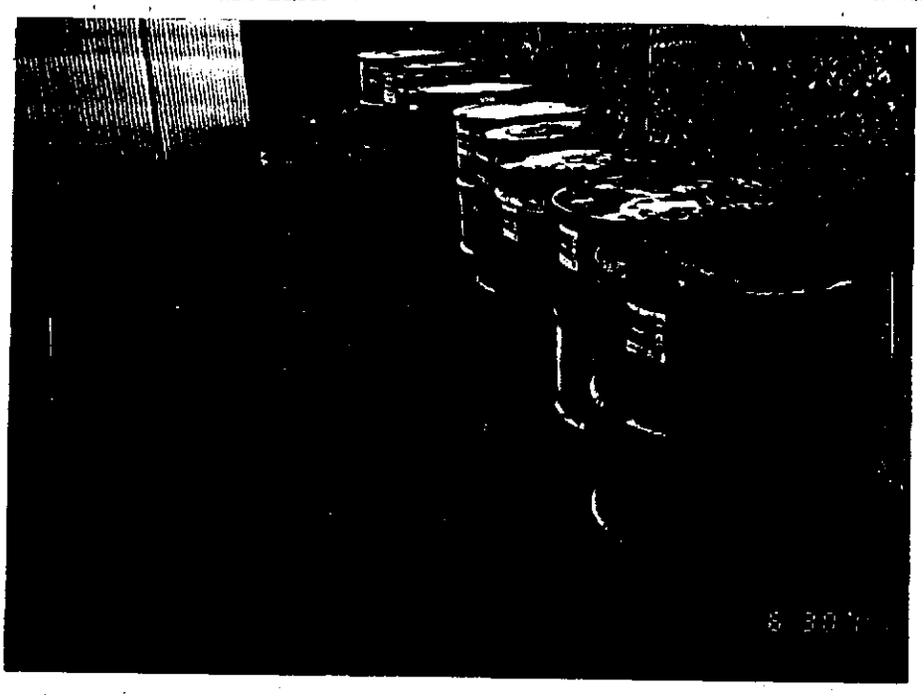


Photo No. 1 Time: Hrs.
Date: Day:
By: Dale T. Stuckey
General Direction Faced: NE
Weather Conditions:
Type of Camera: Minolta Freedom III
Comments: drums of waste TCE in storage

Photo No. 2 Time: Hrs.
Date: Day:
By: Dale T. Stuckey
General Direction Faced:
Weather Conditions:
Type of Camera: Minolta Freedom III
Comments: Sample point in alley

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

JOSEPH F. HARKINS, Secretary

Forbes Field
Topeka, Kansas 66620
913/862-9360

RECEIVED
BUREAU OF
JUL 15 1982
ENVIRONMENTAL
SANITATION

COPY

Mr. J.H. Saunders
H&H Parts Co.
1234 Wellington Place
Wichita, KS 67203

July 14, 1982

Re: Resource Conservation and
Recovery Act (RCRA)
Compliance Inspection

Mr. Saunders:

On June 3, 1982 a RCRA inspection of your facility was conducted by this department to determine compliance with state and federal regulations concerning hazardous waste.

The inspection revealed that your facility does not generate hazardous waste and is, therefore, exempt from all regulations regarding these wastes. However, if you ever generate 220 lbs. in one month of hazardous wastes or if you ever allow 2200 lbs. to accumulate, such wastes will be regulated. Hazardous wastes which may potentially be generated at your facility include trichloroethylene and trichloroethylene sludge and, possibly, heat treat salt-if analyzed to contain high concentrations of heavy metals.

Your cooperation with the Hazardous Waste Management Program is appreciated. If you have questions concerning the inspection, please call me at 265-3181.

Thank you,

DIVISION OF ENVIRONMENT

Dale T. Stuckey
Field Services Section
Bureau of Environmental Sanitation

C Thomas Gross

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

Joseph F. Harkins, Secretary

Topeka, Kansas 66620
913-862-9360

RECEIVED
BUREAU OF
JUL 15 1982
ENVIRONMENTAL
SANITATION

NON NOTIFIER WASTE GENERATOR'S REPORT

A. General

Date July 3, 1982 Time 2:30 p.m. EPA ID. No. -

Facility Name H&H Parts Co.

Street 1234 Wellington Place

City Wichita, Kansas Zip 67203

County Sedgwick Phone 316-262-1494

Contact Mr. J.H. Saunders

Inspector Dale T. Stuckey

Other

B. Waste Generation and Disposal Summary

List Waste Or Process	Generation Rate Kg/mo (lbs/month)	Disposal Method	Sample Obtained
			YES NO
dry paint filters	18lbs./6months	county landfill	YES (NO)
			YES NO
			YES NO
			YES NO
			YES NO

62.11 1. What attempt was made to determine if the waste(s) listed above are hazardous? None

61.4 a. Are wastes excluded by regulation? (YES) NO

61.5 b. Does this facility qualify as a small quantity generator? (YES) NO

1) If facility is a small quantity generator, does facility indicate small quantity status when sending waste to T/S/D facility or sanitary landfill? YES NO

2. If hazardous wastes are generated, are these wastes stored on the plant site? YES NO (N)

a. Does the storage period exceed 90 days? YES NO

b. How are wastes stored? Barrels Ponds Tanks Other_____

C. Waste Treatment and Disposal

1. Are hazardous wastes treated? YES (NO)

Type of treatment and final disposal? _____

2. Are hazardous wastes disposed of on site? YES (NO)

a. If yes, in what manner?

Landfilling YES NO

Injection wells YES NO

Incineration YES NO

Surface impoundment YES NO

Private sewer system YES NO

Public sewer system YES NO

Is waste pretreated? YES NO

Is waste tested before disposal? YES NO

Other_____ YES NO

D. Transportation of Wastes

1. Are hazardous wastes transported from the site? YES (NO)

a. If yes, by whom? _____

b. Wastes transported to: There is a trichloroethylene tank but Mr. Saunders said they'd never had a waste from it. There is a

Comments: 500 gallon tank containing Oakite Aluminum Cleaner 164. They've never had waste from here either. They just keeping adding to it. They have a heat treat salt bath tank. It has never produced a waste. The paint filters may be impregnated with ZnCrO4 Based paint.

Plant Layout:

BEFORE THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

In the Matter of the Violations by
H and H Parts Company of
Provisions of K.S.A. 65-3430 et. seq. Case No. 90-E-81

ORDER

James A. Power, Jr., Director, Division of Environment, Kansas Department of Health and Environment, has before him the following information:

FINDINGS OF FACT

1. Pursuant to the authority contained in K.S.A. 65-3431 et seq., the Secretary of Health and Environment (KDHE) has adopted K.A.R. 28-31-1 et seq., regulating the generation, transportation, storage and disposal of hazardous waste.

2. On June 22, 1990, an inspection was conducted at H and H Parts Company by Roger Carman, a representative of KDHE, to determine compliance with state and federal regulations governing hazardous wastes. The inspection revealed that H and H Parts Company generates waste paint solvent and sludge, waste paint booth filters, waste 1,1,1-trichloroethane and waste heat treating salts. The combined quantity generated by H and H Parts Company is more than 25 kilograms (approximately 55 pounds) but less than 1,000 kilograms (approximately 2,200 pounds) per month.

3. The following conditions were documented on the June 22, 1990 inspection:

a. H and H Parts Company was storing over 1,000 kilograms of

hazardous waste. In addition, manifests dated September 26, 1989, November 2, 1989, and January 22, 1990, indicate that H and H Parts was storing over 1,000 kilograms on these dates.

b. H and H Parts Company had not determined if their waste paint booth filters were hazardous wastes as required by K.A.R. 28-31-4(b). The paint filters were being disposed with routine trash at the sanitary landfill.

c. Weekly inspections of the hazardous waste storage areas were not being conducted as required by K.A.R. 28-31-4(h)(1)(B). These inspections must be documented in accordance with K.A.R. 28-31-4 (k).

d. Four containers of hazardous waste were not marked with the accumulation start dates as required by K.A.R. 28-31-4(h)(1)(D).

e. Four containers and one five-gallon satellite accumulation container of hazardous waste were not marked with the words "Hazardous Waste", as required by K.A.R. 28-31-4(h)(1)(D).

f. H and H Parts Company records did not contain copies of the land disposal restriction notices for manifests numbered 00003, 00004 and 00005 as required by K.A.R. 28-31-14.

g. Aisle space in the hazardous waste storage area was inadequate to provide access for emergency response or inspection as required by K.A.R 28-31-4(g)(1).

h. H and H Parts Company had not made arrangements with the local police and fire departments and hospitals to familiarize them with the emergency response requirements associated with their hazardous wastes as required by K.A.R. 28-31-4(g)(4).

i. H and H Parts Company had not developed a contingency plan as required by K.A.R. 28-31-4(g)(4).

j. H and H Parts had not developed a personnel training program as required by K.A.R. 28-31-4(g)(4).

4. In a letter to KDHE, dated August 6, 1990, H and H Parts Company described the actions they had taken to correct all of the deficiencies as described in paragraph 3 of this Order.

5. On June 30, 1989, an inspection was conducted at H and H Parts by Dale Stuckey, a representative of KDHE, to determine compliance with state and federal regulations governing hazardous wastes. Ten separate violations of the hazardous waste regulations were found during this inspection. Six of these violations were again identified as violations during the June 22, 1990 inspection.

CONCLUSIONS OF LAW

6. The Director of the Division of Environment concludes that the wastes identified in paragraph 2 of this Order meet the definition of hazardous waste as contained in 40 CFR Part 261 as adopted by K.A.R. 28-31-3. The waste codes for these wastes are as follows: waste paint solvent and sludge - F003/F005/D001, waste paint booth filters - D007 (An EP-Toxicity analysis conducted by the KDHE laboratory showed 72.662 milligrams/liter of chromium), waste 1,1,1-trichloroethane - F001, and waste heat treating salts - D007 (An EP-Toxicity analysis conducted by the KDHE laboratory showed 355.936 milligrams/liter of chromium).

7. The Director concludes that H and H Parts Company was storing over 1,000 kilograms of hazardous waste and is therefore subject to the generator requirements of K.A.R. 28-31-4 excluding

K.A.R. 28-31-4(h) and (m).

8. The Director of the Division of Environment concludes that the actions and omissions by H and H Parts Company described in paragraphs 3a through 3j of this Order constitute violations of K.A.R. 28-31-4 which are violations of K.S.A. 65-3441(a)(4).

9. K.S.A. 65-3446 provides for administrative penalties of ten thousand dollars ($10,000) for every violation of provisions of K.S.A. 65-3441. In the case of a continuing violation, every day such violation continues shall be deemed a separate violation.

NOTICE OF PROPOSED ORDER AND PENALTY TO BE IMPOSED

10. The Director of the Division of Environment finds that H and H Parts Company should be assessed an administrative penalty for the above cited violations of K.S.A. 65-3441(a)(4). Pursuant to K.S.A. 65-3446(a) and based on the violations as set out in the above findings of fact, the Director determines that $5,000 is an actual and substantial economic deterrent to the violations for which it is assessed.

11. H and H Parts Company is ordered to make payment of all penalties ($5,000) to the Kansas Department of Health and Environment, Forbes Field, Building 740, Topeka, Kansas 66620, within 30 days of receipt of this Order. Notice confirming payment of the penalties should be sent to the Legal Office, Department of Health and Environment, Landon State Office Building, 900 Southwest Jackson Street, Topeka, Kansas 66612-1690.

RIGHT TO REQUEST A HEARING

H and H Parts Company is hereby offered an administrative hearing in accordance with the provisions of the Kansas Administrative

Procedure Act, if H and H Parts Company is aggrieved by this Order. A request for a hearing must be submitted in writing within 18 days of service of this notice. The request must be submitted to Stanley C. Grant, Ph.D., Secretary, Department of Health and Environment, Forbes Field, Building 740, Topeka, Kansas 66620. Failure to submit a timely request will result in a waiver of H & H Parts Company's right to a hearing, and this administrative penalty will become a final order.

IT IS SO ORDERED, THIS 2nd DAY OF November 1990.

James A. Power, Jr., Director
Division of Environment

CERTIFICATE OF MAILING

This is to certify that on the 8th day of November, 1990, a true and correct copy of the above foregoing Order was deposited in the U.S. Mail, properly addressed to:

Steven Pack, General Manager
H and H Parts Company
1234 Wellington Place
Wichita, Kansas 67203

Dorothy Fowler
Staff Member

Certified Mail No. P 338 441 782 Mr. Steven Pack

State of Kansas

Bill Graves Governor

Department of Health and Environment

James J. O'Connell Secretary

September 27, 1996

Norman Manning
Apex Engineering Incorporated
1234 Wellington Place
Wichita, KS 67203

Re: **EPA I.D. Number—KSD 007 236 425**
1234 Wellington Place—Wichita

Dear Mr. Manning:

This is to acknowledge that you have filed a Subsequent "Notification of Hazardous Waste Activity" Form for the installation located at the address above.

K.A.R. 28-31-4 (c) (1) states that whenever there is a change in the information originally submitted to obtain an EPA Identification Number, the generator shall update that information. The generator shall submit these changes to the department on a form supplied by the department. You have complied with this requirement.

We have updated our records to reflect the changes shown in facility name from B G Aerostructures to Apex Engineering Incorporated and legal owner.

If you need further assistance or have any questions pertaining to this matter, please contact this office at the address below or by calling 913/296-1617 or you can call me direct at 913/296-0005.

Sincerely,

Linda Prockish

Linda Prockish
Hazardous Waste Section
Bureau of Waste Management

LCP/cc

Enclosure

C Mark Bradbury - DEA/SCDO/Waste Programs

Division of Environment, Bureau of Waste Management, Forbes Field Building 740, Topeka, Kansas 66620-0001

Telephone: (913) 296-0005
Fax Number: (913) 296-8909

Printed on Recycled Paper

Figure(s)
Aerial Photographs and Sample Location Map(s)

CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Apex Engineering Facility

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Apex Engineering Facility

Table(s)
Analytical Data Table(s)

Apex Engineering Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP02H-05	S/17	11/02/99		µg/L	<1	**13**	<1	<1	<1	<1	<1	<1	**1.5**	<1	<5.4
GP02H-05	D/38	11/02/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-07	S/17	11/11/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-07	D/28	11/11/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-08	S/17	11/11/99		µg/L	**2.7**	**4.1**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-08	D/38	11/11/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-09	S/17	11/11/99		µg/L	**3.9**	**370**	**43**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-09	D/35	11/11/99		µg/L	<1	**14**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-02	S/17	11/29/99		µg/L	<1	**7.1**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-02	D/38	11/29/99		µg/L	<1	<1	**1.2**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-2	S/20	12/04/97		µg/L	<1	**9.6**	**52**	<1	<1	<1	<1	<1	<1	<1	**230**
GPA29-2	D/35	12/04/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**8.7**
GPA29-4	S/20	05/29/98		µg/L	**1.6**	**180**	**8.8**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-4	S/20	12/16/99		µg/L	<1	**42**	<1	<1	<1	<1	<1	<1	<1	<1	**5**
GPA29-4	D/39	05/29/98		µg/L	<1	**1.7**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-5	S/20	05/29/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-5	D/36	05/29/98		µg/L	<1	<1	**1.3**	<1	<1	<1	<1	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethe
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

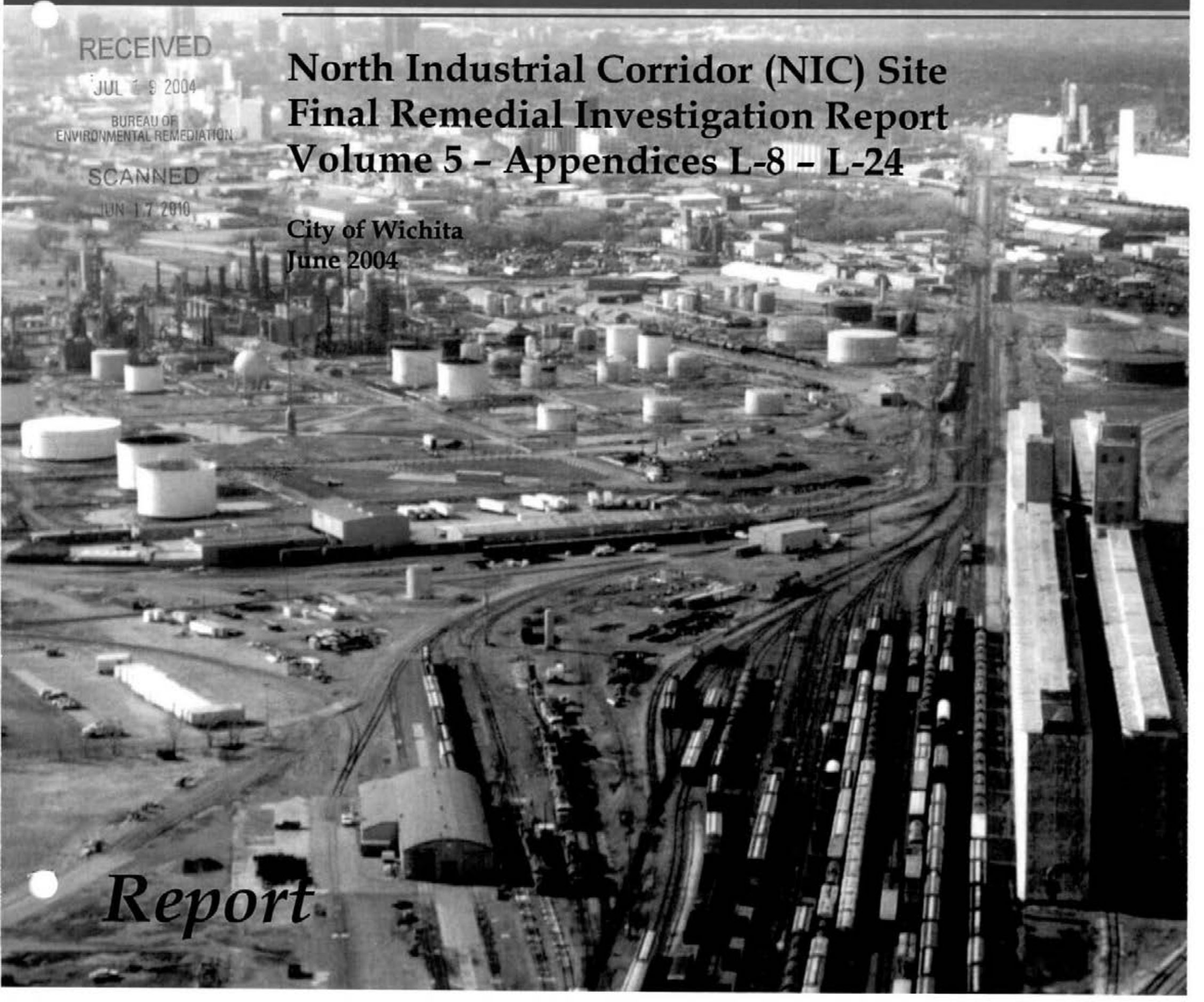
CDM

RECEIVED
JUL 19 2004
BUREAU OF
ENVIRONMENTAL REMEDIATION

SCANNED
JUN 17 2010

North Industrial Corridor (NIC) Site Final Remedial Investigation Report Volume 5 – Appendices L-8 – L-24

City of Wichita
June 2004



Report

PRP Evaluation Summary

Volume 5
Appendices L-8 – L-24

Appendix L-8 Cargill
Appendix L-9 Christopher Steel Inc. Facility
Appendix L-10 Former Coastal Boneyard Facility
Appendix L-11 Compressed Gases Facility
Appendix L-12 Former Copeland International Trucks Facility
Appendix L-13 Former Dold Foods Facility
Appendix L-14 Dow/Essex and Wil-Gro Facilities
Appendix L-15 Huttig Building Products Facility
Appendix L-16 Kansas Plating Facility
Appendix L-17 Kreonite East
Appendix L-18 Love Box Facility
Appendix L-19 National By-Products North Facility
Appendix L-20 Novick Facility
Appendix L-21 Parker Boss Facility
Appendix L-22 Stockyard Properties (Area 02B)
Appendix L-23 Stockyard Properties (Area 06D)
Appendix L-24 VW&R South Facility

SCANNED
JUN 17 2010

RECEIVED
JUL 19 2004
BUREAU OF
ENVIRONMENTAL REMEDIATION

Appendix L-8
Cargill

PRP Evaluation Summary

Cargill
715 East 13th Street North (11th and Santa Fe)

Potential Source, Area 09C

Contaminants of Concern – CT and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Cargill

Carbon Tetrachloride Contamination

Data indicate that this area is a potential source of chlorinated VOC contamination. Groundwater sampling data have shown an increase in concentrations of carbon tetrachloride (CT) along the groundwater flow path through this area.

Groundwater samples collected the shallow aquifer from Geoprobe locations GP#28-1, which is on the Cargill Elevator (CGL) facility and GPA30-04, which is immediately downgradient of the CGL facility, during Phase 1/1A of the NIC RI contained CT concentrations of 150 μg/L and 480 μg/L, respectively. Chloroform (CFM), which is a degradation product of CT, was also reported in these samples at 62 μg/L and 300 μg/L, respectively. CT and CFM were also respectively reported in the deep groundwater samples from GP#28-1 at 18 μg/L and 19 μg/L, and GPA30-04 at 2.6 μg/L and 4.3 μg/L. Neither CT nor CFM was reported the shallow and deep groundwater samples collected upgradient of the WTE facility from Geoprobe locations GPA27-02, GPA27-04, GPA27-03 and GPA28-01 and monitoring wells WND-46S and WND-46D.

Elevator personnel have acknowledged that at least one underground storage tank containing CT was present at the facility.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south but facility-specific groundwater flow is not well defined.

References

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 715 E. 13th N.

Current Owner/Business: Cargill Inc.

Contact Person: Scott Harter

Mailing Address: Cargill
PO Box 2519
Wichita, KS 67201

Cargill Inc.
PO Box 5626
Minneapolis, MN 55440-5626

Phone Number: (316) 291-2514 Local contact

Other information:

Name of Company:		Cargill Elevator
Name and/or Contact Person:		
Street Address of Company:		**715 E. 13th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		715 E. 13th Street North
Phone Number of Contact:		
History:	1951	Kansas Milling Co Wichita Scale & Mfg Co.
	1961	Kansas Milling Co.
	1965	Kansas Milling Co. Div of Ross Industries
	1970	Kansas Milling Co. (Div of Ross Industries Inc.) Wichita Terminal Elevator Co (grain elevator)
	1975	Ross Industries Inc. (flour mills)
	1980	Ross Industries Division of Cargill (flour mills)
	1984/5	Ross Industries (flour mills) Cargill Inc (ofc & laby)
	1990	Cargill Inc. (flour & wheat) Cargill Incorporated (feed division)
	1995/6	Cargill Inc. (flour & wheat) soybean processing Cargill Incorporated (soy division)
	2000	Cargill Incorporated Soybean Processing Division (soy bean mills)

RCRA Info:

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -08924
Pin: 125160210300100A
Page: 1

Name CARGILL INC
Situs 715 E 13TH ST N
WICHITA KS 67214

Phone
Mail PO BOX 5626
To MINNEAPOLIS MN 55440-5626

Tax	72,229.68
Specials	9.45
Total	72,239.13

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 129045

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -08924
Page: 2

Pin: 125160210300100A

Name: CARGILL INC

Legal Description

BEG 37 RDS W & 30 FT S NE COR NW1/4W TO A T & S F RY S 660 FT E TO PT S OF BEG N TO BEG EXC ROW SEC 16-27-1E

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

1.0

FORM A

Hazardous Waste Compliance Monitoring and Enforcement Log

HANDLER ID NUMBER: KSD073304321

LDF ( ) TSF ( ) GEN ( ) KG (X) SQ ( ) TRA ( )
HWM ( ) HWB ( ) UOM ( ) UOB ( ) NOT A GEN ( )

HANDLER NAME: Cargill Flour Milling Division

AT ____ CL ____
FT ____ RCRIS ____

STREET: 715 E. 13th Street CITY: Wichita

EVALUATION New [X] Followup [ ] Delete [ ]

Date YY 92 MM 09 DD 30 Agency S Type CEI Reason OO Person TLH District SC

Areas of Evaluation (EV - Evaluted, NE - Not Evaluated, NA - Not Applicable)

Generator				Transporter		Treatment/Storage/Disposal Facility								Other	
ER	EV	GPT	EV	TGR		DCH		DGW		DMC		DPP		CAS	
GR	EV	GRR	EV	TMR		DCL		DIN		DMR		DSI		FEA	
LB	EV	GSC	EV	TOR		DCP		DLB		DOR		DTR		ILD	
MR	EV	GSQ	EV	TRR		DFR		DLF		DOT		DTT			
CR	EV			TWD		DGS		DLT		DPB		DWP			

COMMENTS ____

VIOLATION # 1

New [X] Change [ ] Delete [ ] Link to: [ ] Comments [ ]

Agency	Number	Area	Class	Priority	Type
S		GER	2		SR

Regulation Citation: KAR 28-31-4(c)(1)

Date Determined MM 09 DD 30 YY 92

Returned to Compliance
Scheduled: MM 11 DD 20 YY 92
Actual: MM 10 DD 16 YY 92

VIOLATION # 2

New [X] Change [ ] Delete [ ] Link to: [ ] Comments [ ]

Agency	Number	Area	Class	Priority	Type
S		GPT	2		SR

Regulation Citation: KAR 28-31-4(h)(1)(C&D)

Date Determined MM 09 DD 30 YY 92

Returned to Compliance
Scheduled: MM 11 DD 20 YY 92
Actual: MM DD YY

VIOLATION # 3

New [X] Change [ ] Delete [ ] Link to: [ ] Comments [ ]

Agency	Number	Area	Class	Priority	Type
S		GPT	2		SR

Regulation Citation: KAR 28-31-4(h)(1)(B) & (k)

Date Determined MM 09 DD 30 YY 92

Returned to Compliance
Scheduled: MM 11 DD 20 YY 92
Actual: MM DD YY

VIOLATION # 4

New [X] Change [ ] Delete [ ] Link to: [ ] Comments [ ]

Agency	Number	Area	Class	Priority	Type
S		GPT	2		SR

Regulation Citation: KAR 28-31-4(h)(1)(F)

Date Determined MM 09 DD 30 YY 92

Returned to Compliance
Scheduled: MM 11 DD 20 YY 92
Actual: MM DD YY

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
~~Azizo Young, M.D., Secretary~~
Robert C. Harder, Secretary

November 12, 1992

Reply to: South Central District Office
1919 N. Amidon, Suite 130
Wichita, Kansas 67203
Phone: (316) 838-1071
Fax: (316) 838-0042

Mr. Bob McQuilliam, Plant Superintendent
Cargill Flour Milling Division
P.O. Box 2696
Wichita, Kansas 67201

Re: Hazardous Waste Compliance Inspection
715 E. 13th Street, Wichita
EPA Identification Number: KSD073304321

Dear Mr. McQuilliam:

On September 30, 1992 your facility was inspected to determine compliance with state hazardous waste regulations. Barney Wolters with the Wichita-Sedgwick County Health Department was also present.

The inspection revealed that your facility generates the following hazardous wastes as defined by K.A.R. 28-31-3:

Wastes Generated	Waste Codes
1. Safety Kleen Solvent	D001/D018/D039

At the time of the inspection, you were storing six boxes of miscellaneous laboratory chemicals. You indicated that you were in the process of making arrangements for the disposal of these chemicals. Please submit a copy of the manifest when they are picked up by the disposal firm.

Based on the information provided, the quantity of hazardous waste generated is more than 25 kilograms (approximately 55 pounds) but less than 1000 kilograms (approximately 2200 pounds) per month. Your facility is considered a Kansas generator and is regulated under K.A.R. 28-31-4 excluding K.A.R. 28-31-4(g) and K.A.R. 28-31-4(m).

These requirements are summarized in the Hazardous Waste Generator's Handbook which was given to you. Basically, these regulations require you to obtain an EPA Identification Number; manifest wastes shipped off-site; package, label, mark, and placard all containers; maintain records; and meet storage requirements. In addition, you must conduct personnel training and meet emergency response requirements.

The inspection identified the following items not in compliance with state regulations concerning generators of hazardous waste:

1. Your notification of hazardous waste activity did not accurately reflect the waste codes for wastes currently generated by your facility as required by K.A.R. 28-31-4(c)(1). A subsequent notification was submitted by you on October 16, 1992 which corrected this violation.

2. The six boxes of miscellaneous laboratory chemicals were not labeled with the words "Hazardous Waste" and were not marked with the accumulation start date as required by K.A.R. 28-31-4(h)(1)(C&D).

3. Weekly inspections were not being conducted on the boxes of laboratory chemicals as required by K.A.R. 28-31-4(h)(1)(B). In addition, these inspections must be recorded in a log as required by K.A.R. 28-31-4(k).

4. The emergency information that you have posted does not include the location for the fire extinguishers and spill control material as required by K.A.R. 28-31-4(h)(1)(F).

Violations #2 thru #4 must be corrected by November 20, 1992. Notify me in writing listing each violation and detailing the action taken to correct each one.

While reviewing the contractual agreements for your Safety Kleen waste, I noted you also had the original copies for the Hutchinson and Wellington facilities. These records need to be filed at the site where the waste is generated. You indicated the form is used for billing purposes. You need to assure that a copy of the document is kept at each site.

Your cooperation with the hazardous waste management program is appreciated. If you have questions concerning the inspection, please call me at 316/838-1071.

Sincerely,

Teresa Hansen

Teresa Hansen
Inspections and Enforcement Section
Bureau of Waste Management

TH:ss
pc: Mike Tate, BWM, Topeka
John Mitchell, BWM, Topeka
Barney Wolters, Wichita-Sedgwick Co. Health Dept.
SCD-File

Kansas Department of Health and Environment
Bureau of Air and Waste Management
Forbes Field, Topeka, Kansas 66620

Hazardous Waste Generator/Transporter Compliance Inspection Report

General

Time 2:30 PM Date 9-30-92

Facility Name Cargill Flour Milling Division EPA ID No. KSD073304321

Street 715 E. 13th Street City Wichita, KS Zip 67201

Mailing Address (If different than above) P.O. Box 2696 67201

County Sedgwick Phone (316) 292-2295

Contact(s) Bob McQuilliam, Plant Superintendent, Scott Jenkins, Head Miller, Bob Schrader

Inspector(s) Teresa Hansen, KDHE / Barney Wolters, Wichita-SG Co. H.D.

Type of Business

Has the company declared any information/processes as trade secrets (KSA 65-3447)? Yes (No)
If yes, explain.

Industrial Wastes Generated

(List hazardous wastes first)

Waste:	Safety Kleen Solvent	Waste Oil
If waste is hazardous, give HW ID Number:	D001/D018/D039	None
Amount generated per month:	140 lbs./3 wks.	Varies
Amount presently in storage:	None	4-55 gal. drums
Accumulation time:	n/a	Unknown
Present disposal method:	Safety Kleen	Radium Petroleum

Waste:		
If waste is hazardous, give HW ID Number:		
.ount generated per month:		
Amount presently in storage:		
Accumulation time:		
Present disposal method:		

General Requirements (GGR)

I. Has the facility evaluated all potentially hazardous waste(s) to determine if it is hazardous? (KAR 28-31-4(b)) — Yes (circled) No

A. If waste(s) was tested, was the analysis conducted by a laboratory certified by KDHE? (KAR 28-31-4(b)(3)(A)) — Yes No NA (circled)

B. If waste(s) was tested, are the results kept for three years? (KAR 28-31-4(f)(1)(C))? — Yes No NA (circled)

II. If hazardous waste(s) is disposed of via the sanitary sewer to a Publicly Owned Treatment Works (POTW), has written permission been obtained from the operator of the POTW? (KAR 28-31-3/40 CFR 261.4) — Yes No NA (circled)

III. If industrial waste(s) is disposed of at a permitted sanitary landfill, has a disposal authorization been obtained? (KAR 28-29-23) — Yes No NA (circled)

A. If yes, list the authorization number(s): _____

IV. Facility size classification:

- ☐ Not a Generator
- ☐ Small Qty. Generator
- ☒ Kansas Generator
- ☐ EPA Generator
- ☐ T/S/D Facility
- ☐ Transporter
- ☐ HW Burner/Marketer
- ☐ Used oil Burner/Marketer

Hazardous Waste Determination Requirements: ☐ Adequate ☐ Inadequate

Notification Requirements (GGR)

V. Has generator notified KDHE and obtained an EPA Identification Number? (KAR 28-31-4(c)) — Yes (circled) No NA

VI. Is current notification accurate? (KAR 28-31-4(c)(1)) — Yes No (circled) NA

A. Is this facility marketing (selling) hazardous waste as a fuel? — Yes No NA (circled)

B. Is this facility marketing (selling) used oil as a fuel? — Yes No NA (circled)

(If yes, to either question A or B, complete Used Oil Fuel Marketers/Blenders Checklist.)

C. Is this facility burning hazardous waste as a fuel? — Yes No NA (circled)

D. Is this facility burning used oil as a fuel? — Yes No NA (circled)

.fication Requirements: ☐ Adequate ☒ Inadequate ☐ NA

(If small quantity generator, stop here.)

Land Disposal Restrictions Requirements (GLB)

IX. Does facility generate any wastes subject to the land disposal restrictions requirements of 40 CFR 268, Subparts B and C? (Yes) No

List these wastes:

A. DOOL

B. _____

C. _____

D. _____

E. _____

F. _____

X. Is the waste(s) covered by a National Variance(s), Extension, or Petition? (40 CFR 268 5&6) Yes (No)

A. If yes, describe the variance, extension, or petition which applies:

_____

_____

XI. Is the waste covered by an exemption? (40 CFR 268.1(c)(2)) Yes (No)

A. If yes, does the generator provide a notice with the waste to the T/S/D facility stating that the waste is exempt from the land disposal restrictions? (40 CFR 268.7(a)(3)) Yes No

XII. Does generator ship waste(s) covered by the Land Disposal Restrictions off-site for treatment or disposal? (Yes) No

A. If yes, does the generator provide a notification to the T/S/D facility that includes: EPA hazardous waste number(s), applicable treatment standards, manifest number(s), and waste analysis data, if available? (40 CFR 268.7) (Yes) No

B. If yes, is a copy of this notification kept for five years? (Yes) No

XIII. Does generator treat restricted waste(s) on-site so that they are below the land disposal restrictions standards? (If yes, fill out land disposal restrictions checklist.) Yes (No)

Land Disposal Restrictions Requirements:	☒ Adequate	☐ Inadequate	☐ NA

Pre-Transport Requirements (GPT) N/A

XIV. Does generator package waste in accordance with DOT requirements? (KAR 28-31-4(e)(1)) Yes No NA

XV. Does generator label (flammable liquid, poison, etc.) each package in accordance with DOT requirements of 49 CFR 172.101 or 172.102? (KAR 28-31-4(e)(2)) Yes No NA

XVI. Does generator mark (consignee's or consignor's name and address, etc.) on each package in accordance with DOT requirements of 40 CFR 172 Subpart D? (KAR 28-31-4(e)(3)) Yes No NA

A. Does generator mark each container of 110 gallons or less as below? (KAR 28-31-4(e)(3)) Yes No NA

> Hazardous Waste—Federal Law Prohibits Improper Disposal.
> If found, contact the nearest police or public safety authority or the US EPA.
>
> Generator's Name and Address
>
> Manifest Document Number

XVII. Does generator have placards to offer to transporters in accordance with 49 CFR 172 Subpart F? (KAR 28-31-4(e)(4)) Yes No NA

5. Are containers holding ignitible or reactive waste(s) located at least 15 meters (50 feet) from the facility's property line? (EPA Generator and T/S/D Only) (KAR 28-31-4(g)(1) / 40 CFR 265.176) — Yes No NA
6. If waste in containers is incompatible with other materials stored nearby, are the containers separated from the other materials by means of a dike, berm, wall, or other means? (KAR 28-31-4(g)(1) or (h)(1)(B) / 40 CFR 265.177) — Yes No NA
7. Does generator have any satellite storage areas? (KAR 28-31-4(j)) — Yes No NA

If yes,

a. Is the waste stored in a container at or near the point of generation and under the control of the operator of the process generating the waste? — Yes No
b. Is the container in good condition and closed except to add or remove waste? — Yes No
c. Is the container marked with the words: "Hazardous Waste"? — Yes No
d. Is the container marked with the accumulation start date at the time it becomes full? — Yes No
e. Is the full container moved to the storage area within three days after it became full? — Yes No

(If waste(s) is placed in tanks, piles, or surface impoundments, complete the appropriate inspection checklist.)

Storage Requirements:	☐ Adequate	☒ Inadequate	☐ NA

Kansas Generator's Emergency Preparedness (GSQ)

XXII. Has facility named one employee as emergency coordinator? (KAR 28-31-4(h)(1)(E)) — Yes No

A. Is the emergency coordinator available to respond to an emergency by reaching the facility within a short period of time? — Yes No

B. Is the emergency coordinator or his/her designee prepared to respond to any emergencies (fires, spills, or releases) that arise? — Yes No

C. Is the emergency coodinator familiar with the reporting requirements of KAR 28-31-4(h)(2)? — Yes No

XXIII. Is the following information posted next to at least one telephone which is immediately assessable in an emergency? (KAR 28-31-4(h)(1)(F))

A. Name and telephone of emergency coordinator? — Yes No

B. Location of fire extinguishers, fire alarms, or spill control material, if available? — Yes No

C. Telephone number of fire department unless the facility has a direct alarm? — Yes No NA

XXIV. Have employees been trained so that they are familiar with proper waste handling and emergency procedures that are relevant to their responsibilities during normal facility operations? (KAR 28-31-4(h)(1)(G)) — Yes No

A. Is this training documented in any way? — Yes No

Kansas Generator's Emergency Preparedness Requirements :	☐ Adequate	☒ Inadequate	☐ NA

(If Kansas generator, stop here.)

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
[redacted]
Robert C. Harder, Secretary
Reply to: (913) 296-6898
Fax Number: (913) 296-1592

October 23, 1992

RECEIVED
OCT 23 1992

Bob McQuilliam
Cargill Flour Milling
PO Box 2696
Wichita, KS 67201

Re: EPA I.D. Number KSD073304321
715 E 13th--Wichita

Dear Mr. McQuilliam:

This letter is to acknowledge the subsequent Notification of Hazardous Waste Activity Form your firm submitted on October 16, 1992.

We have updated our records to reflect the change made in waste codes with the addition of D018 and D039.

A subsequent notification shall be submitted to this office whenever the information originally submitted to obtain an EPA I.D. Number has changed. If I can be of further assistance, please contact me at (913) 296-6898.

Sincerely,

Gigi Perry
Administrative Officer
Hazardous Waste Section
Bureau of Waste Management

C SCDO - BWM

RECEIVED
BUREAU OF
OCT 26 1992
WASTE MANAGEMENT

Please refer to the instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Date Received (For Official Use Only)

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification ☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD073304321

II. Name of Installation (Include company and specific site name)

CARGILL FLOUR MILLING

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 715 E 13TH

City or Town: WICHITA State: KS Zip Code: 67201-

County Code: 173 County Name: Sedgwick

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: PO BOX 2696

City or Town: WICHITA State: KS Zip Code: 67201-

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): McQUILLIAM (first): BOB

Job Title: PLANT SUPT Phone Number (area code and number): 316-292-2295

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: PO BOX 2696

City or Town: WICHITA State: KS Zip Code: 67201-

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: CARGILL

Street, P.O. Box, or Route Number: PO BOX 2696

City or Town: WICHITA State: KS Zip Code: 67201-

Phone Number (area code and number): 316-292-2200

B. Land Type: P

C. Owner Type: P

D. Change of Owner: Yes ☐ No ☒ (Date Changed) Month Day Year

STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT
DIVISION OF ENVIRONMENT
SOUTHCENTRAL DISTRICT OFFICE WICHITA

Name of Site: CARGILL INC., 13TH STREET and MOSLEY

Location: City WICHITA County SG Legal

CARGILL
PHOTO -1

No. 1 Taken by: DAVE KIRSCH

Date: 3 JUL 85 Time: 2:45 A.M. P.M.

General Direction Faced: EAST

Weather Conditions: Clear and hot

Type of Camera:

Comments: Hard surface area over concrete tank in the center of lot

CARGILL
PHOTO -2

No. 2 Taken by: DAVE KIRSCH

Date: 3 JUL 85 Time: 2:50 A.M. P.M.

General Direction Faced: EAST

Weather Conditions: Clear and hot

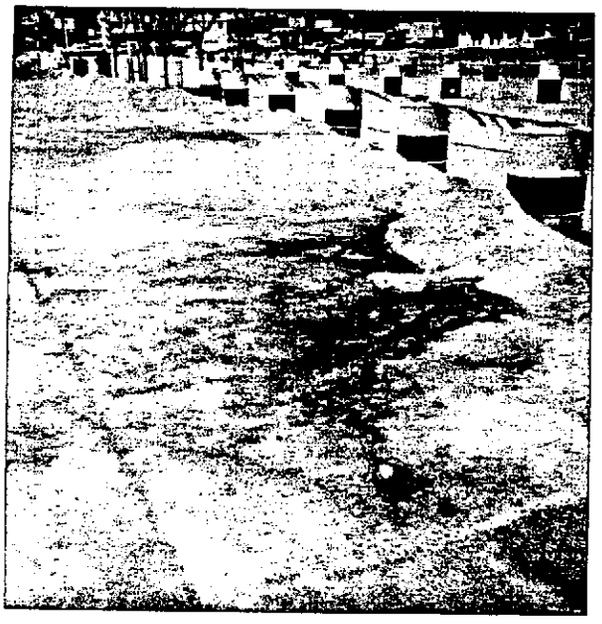
Type of Camera:

Comments: Broken surface of hard-stand over concrete tank

DEPARTMENT OF HEALTH AND ENVIRONMENT
DIVISION OF ENVIRONMENT
SOUTHCENTRAL DISTRICT OFFICE WICHITA

Name of Site: CARGILL INC., 13TH STREET and MOSLEY

Location: City WICHITA County SG Legal



CARGILL
PHOTO -3

No. 3 Taken by: DAVE KIRSCH

Date: 3 JUL 85 Time: 2:55 A.M. P.M.

General Direction Faced: NORTH

Weather Conditions: Clear and hot

Type of Camera:

Comments: Oil stained surface which was diked to prevent run-off

CARGILL
PHOTO -4

No. 4 Taken by: DAVE KIRSCH

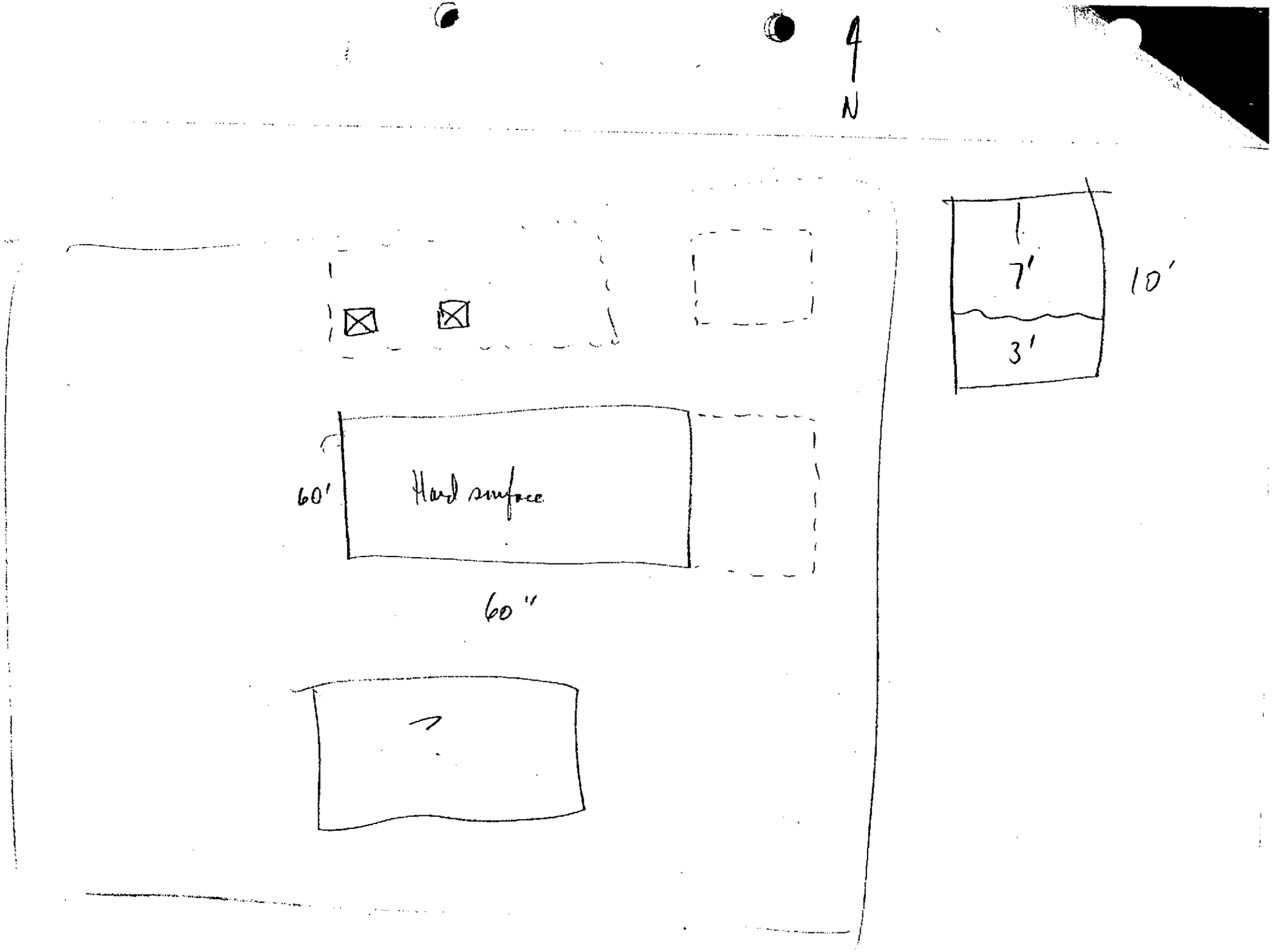
Date: 3 JUL 85 Time: 3:00 A.M. P.M.

General Direction Faced: SOUTH

Weather Conditions: Clear and hot

Type of Camera:

Comments: Oil stained surface area of lot


N
7'
3'
10'
60'
Hard surface
60"
?

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
LABORATORY SERVICES AND RESEARCH
ENVIRONMENTAL ORGANIC LABORATORY
TOPEKA, KANSAS 66620

GC/MS ANALYSIS REPORT

REPORT TO: DAVE KIRSCH
ADDRESS: SCDO

LAB NUMBER: 6000110C
REPORT DATE: 7- 3-85

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION NUMBER: 062785-1410
SAMPLE TYPE: WATER
COLLECTION SITE: CARGILL INC. WICHITA
COLLECTED BY: DAVE KIRSCH
DATE: 6-27-85
TIME: 1410

RESULTS OF ANALYSIS

PRIORITY POLLUTANT VOLATILE COMPOUNDS	CONCENTRATION (UG/L <PPB>)	DETECTION LIMIT (UG/L <PPB>)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.4
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	11.9	0.4
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	4.1	0.4
CHLOROBENZENE	NOT DETECTED	0.4
ETHYLBENZENE	2.8	0.7
META-XYLENE (1)	9.2	0.6
ORTHO &/OR PARA-XYLENE (1)	9.6	0.6

(1) NON-PRIORITY POLLUTANT VOLATILES

NOTE: CIS 1,2-DICHLOROETHYLENE IS REPORTED AS TRANS 1,2-DICHLOROETHYLENE.

COMMENT: MANY PETROLEUM TYPE HYDROCARBONS WERE DETECTED.
THE WATER LAYER WAS USED FOR ANALYSIS.

ANALYST: RICHARD L. PIERCE

ROGER H. CARLSON, PH.D., DIRECTOR

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
LABORATORY SERVICES AND RESEARCH
ENVIRONMENTAL ORGANIC LABORATORY
TOPEKA, KANSAS 66620

PCB ANALYTICAL REPORT

REPORT TO: DAVE KIRSCH
ADDRESS: SCDO

LAB NUMBER: 6000120C
REPORT DATE: 7- 3-85

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION NUMBER: 062785-1410
SAMPLE TYPE: OIL
COLLECTION SITE: CARGILL INC. WICHITA
COLLECTED BY: DAVE KIRSCH
DATE: 6-27-85
TIME: 1410

RESULTS OF ANALYSIS

POLYCHLORINATED BIPHENYL	CONCENTRATION (MG/KG)	DETECTION LIMIT (MG/KG)
PCB-1016	NOT DETECTED	10
PCB-1221	NOT DETECTED	10
PCB-1232	NOT DETECTED	10
PCB-1242	NOT DETECTED	10
PCB-1248	NOT DETECTED	10
PCB-1254	NOT DETECTED	10
PCB-1260	NOT DETECTED	10

ANALYST: DENNIS L. DOBSON

ROGER H. CARLSON, PH.D., DIRECTOR

RECEIVED
JUL 9 1985
DISTRICT OFFICE
NO.

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
LABORATORY SERVICES AND RESEARCH
ENVIRONMENTAL ORGANIC LABORATORY
TOPEKA, KANSAS 66620

ANALYTICAL REPORT

REPORT TO: DAVE KIRSCH
ADDRESS: SCDO

LAB NUMBER: 6000130C
REPORT DATE: 7- 3-85

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION NUMBER: 062785-1400
SAMPLE TYPE: SOIL
COLLECTION SITE: CARGILL INC. WITCHITA
COLLECTED BY: DAVE KIRSCH
DATE: 6-27-85
TIME: 1400

RESULTS OF ANALYSIS

COMPOUND	CONCENTRATION	DETECTION LIMIT

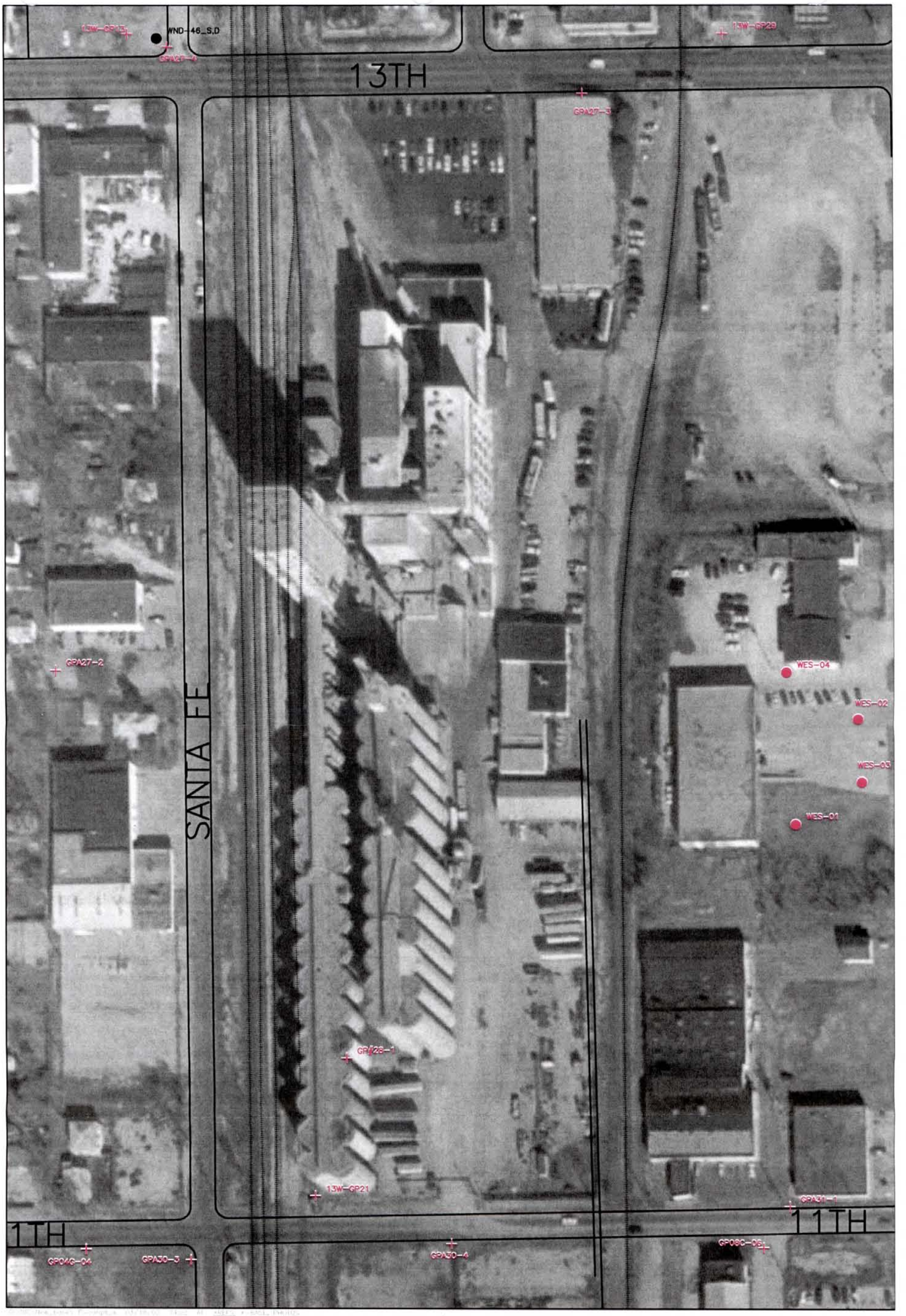
COMMENT: THIS SAMPLE WAS CANCELLED AS THERE WERE NO AROCLORS IN THE OIL THAT WAS SUBMITTED WITH THIS SAMPLE. THIS IS AS PER PHONE CONVERSATION.

ANALYST: DENNIS L. DOBSON
D&D

ROGER H. CARLSON, PH.D., DIRECTOR

RECEIVED
JUL 9 1985
DISTRICT OFFICE
NO. 11

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Cargill

Table(s)
Analytical Data Table(s)

Cargill
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#28-1	S/20.5	12/22/97		µg/L	<1	**1.4**	<1	<1	<1	<1	<1	**150**	**62**	<1	<5.4
GP#28-1	D/36	12/22/97		µg/L	<1	**14**	**6.6**	<1	<1	<1	<1	**18**	**19**	<1	<5.4
GPA27-3	S/20	12/22/97		µg/L	<1	**4**	**14**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA27-3	D/39	12/22/97		µg/L	<1	**300**	**100**	**10**	<1	**1.9**	**2.6**	<1	<1	<1	<5.4
GPA27-4	M/23	12/29/97		µg/L	<1	**27**	**8.2**	<1	**1.2**	**1.2**	<1	<1	<1	<1	<5.4
GPA27-4	D/40	12/29/97		µg/L	<1	**180**	**80**	**6.4**	**1.2**	**2.4**	**2.3**	<1	<1	<1	<5.4
GPA30-4	S/20	01/05/98		µg/L	<1	**6.8**	**4.3**	<1	<1	<1	<1	**480**	**300**	<1	<5.4
GPA30-4	D/36	01/05/98		µg/L	<1	**66**	**35**	<1	<1	<1	**1**	**1.8**	**3.8**	<1	<5.4
GPA30-4	D/36	01/05/98	DUP	µg/L	<1	**56**	**35**	<1	<1	<1	<1	**2.6**	**4.3**	<1	<5.4
WND-46D	D	05/10/01		µg/L	<1.0	**130**	**65**	**3.2**	**1.9**	**3.3**	**3.2**	<1.0	<1.0	<1.0	**5.4**
WND-46S	S	05/10/01		µg/L	<1.0	**8.8**	**2.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethe
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-9
Christopher Steel Inc. (CSI) Facility

PRP Evaluation Summary

Christopher Steel Inc. Facility
1221 East Murdock Avenue

Potential Source Area PRP and Work Plan Addendum Map ID - NA
Contaminants of Concern – PCE and its degradation products
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Christopher Steel Inc. Facility

PCE Contamination

Data indicate that the Christopher Steel Inc. Facility (CSI) at 1221 East Murdock Avenue is a potential source of low level chlorinated VOC contamination. Groundwater sampling data collected by CSI (Dames & Moore 1996a and 1996b) indicates the presence of tetrachloroethene (PCE) in groundwater at CSI. The presence of PCE is also documented directly downgradient of the CSI facility by Spurrier Chemicals at 1200 East Central (Terratech 1997).

To integrate data collected at the CSI facility into the NIC database, the identity of groundwater sampling locations referred to in the CSI investigation has been modified to provide the facility identifier and to correlate the sample location as noted in the facility's investigation. In the case of CSI, this nomenclature is implemented as such: the CSI investigation's sample location MW-1, collected by Geoprobe methods, is referred to as CSI-MW01. This convention is used for remaining wells at CSI.

Sampling at upgradient location CSI-MW01 indicated no detectable concentration of PCE in the shallow groundwater. At downgradient location CSI-MW02 PCE was detected at a concentration of 25 μg/L in shallow groundwater in 1995 (Dames & Moore 1996). PCE was detected at CSI-MW02 at a concentration of 6 μg/L in 1992 and at a concentration of 12 μg/L in 1997 (Dames & Moore 1997). During sampling at Spurrier Chemicals, PCE was detected at a location cross-gradient to the Spurrier facility and directly downgradient of CSI at a concentration of 5.4 μg/L indicating that PCE may be moving offsite from CSI.

PCE was also reported in soil samples collected at the facility during the RA (Dames and Moore 1996a) in the area of the Compressor Room and an area southwest of Building F where a compressor oil storage tank had been located. These were sample location DM-10-BG (Compressor Room) at 4.9 μg/kg, location DM-15BG (southwest of building F) at 7.9 μg/kg, Building F, Pit-3 at 22 μg/kg, Building F, West Excavation at 12.3 μg/kg, and the PSSA Soil Stockpile at 8.6 μg/kg. In addition, manifests show that

three drums (600 pounds) of an unspecified chlorinated solvent was removed from the facility during the RA (Dames and Moore 1996a).

Groundwater Flow

Site-wide water table maps presented in the Phase 1/1a Technical Memorandum indicate a groundwater flow generally from north to south. Localized groundwater flow direction in the vicinity of CSI was not well defined by the Phase 1/1A NIC investigation due to lack of sufficient monitoring locations. However, groundwater flow data collected by CSI indicate that localized flow is to the south-southeast (Dames & Moore, 1994). Neither the water level elevation data nor potentiometric maps supporting this conclusion are presented in currently available reports. Additional data developed during Phase 2 of the NIC RI improved definition of the groundwater flow direction in the vicinity of the CSI facility. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southeast.

References

Dames & Moore, 1994, *Environmental Site Assessment of Christopher Steel Inc., 1221 East Murdock Avenue, Wichita, Kansas,* Dames & Moore, Inc, May 20, 1994.

Dames & Moore, 1996a, *Remedial Action Report, Christopher Steel Inc., 1221 East Murdock Avenue, Wichita, Kansas,* Dames & Moore, Inc, May 29, 1996.

Dames & Moore, 1996b, *Report of Underground Storage Tank Groundwater Investigation, Christopher Steel Inc., 1221 East Murdock Avenue, Wichita, Kansas, KDHE Project # U208700145,* Dames & Moore, Inc, March 1, 1996.

Dames & Moore, 1997, *Report - Underground Storage Tank, January 1997 Groundwater Sampling, Christopher Steel Inc., 1221 East Murdock Avenue, Wichita, Kansas, KDHE Project # U208700145,* Dames & Moore, Inc, March 10, 1997.

TerraTech, 1997, Letter from Bruce Reed (TerraTech) to Chris Steincamp (Depew & Gillen) reporting results of Geoprobe sample collected January 3, 1997, TerraTech Environmental Service, Inc., January 22, 1997.

Application for Certificate and Release for Environmental Conditions, Spurrier Chemical Companies, Inc., 1200 East Central, Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 1221 E. Murdock

Current Owner/Business: Hall Industrial Development LLC
American Maplan
Drywall Supply
Palleton of Wichita
Trans World Alloys Midwest

Contact Person:

Mailing Address: P.O. Box 9544
Wichita, KS 67214-3496

Phone Number:

Other information:

Name of Company:		Christopher Steel Facility
Name and/or Contact Person:		
Street Address of Company:		**1221 E. Murdock**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		1221 E. Murdock
Phone Number of Contact:		
History:	1951	Church of God in Christ
	1961	No Listing (1217: Church of God in Christ – rear vacant)
	1965	No Listing
	1970	No Listing
	1975	No Listing
	1980	No Listing
	1984/5	No Listing
	1990	Christopher Steel Inc. (steel prods & mfrs) Lesco Industries Inc. (coml. bldrs hdw)
	1995/6	Vacant
	2000	A Drywall Supply (brck stn rltd mtr)
RCRA Info:		

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -03110 Pin: 125160430100100V
Page: 1

Name HALL INDUSTRIAL DEVELOPMENT LLC
Situs 1221 E MURDOCK
WICHITA KS 67214-3496

Tax	236.02
Specials	6.30
Total	242.32

Phone
Mail PO BOX 9544
To WICHITA KS 67277-0544

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 121825

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -03110
Page: 2

Pin: 125160430100100V
Name: HALL INDUSTRIAL DEVELOPMENT LLC

Legal Description
LOTS 9-11-13-15-17-19-21 & 1/2 VAC ALLEY ADJ ON W & VAC ST ADJ ON S
GARRISON'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
LALBERS
Level 01

View Property Information
Ownership

Function 06
Key No.: B -08906
Pin: 125160430100100Z
Page: 1

Name HALL INDUSTRIAL DEVELOPMENT LLC
Situs
KS

Tax	355.49
Specials	6.30
Total	361.79

Phone
Mail PO BOX 9544
To WICHITA KS 67277-0544

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 129027

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
LALBERS
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -08906
Page: 2

Pin: 125160430100100Z
Name: HALL INDUSTRIAL DEVELOPMENT LLC

Legal Description
BEG SW COR LOT 24 GARRISON ADD W 300 FT N 120.85 FT E 300 FT S TO
BEG & 1/2 VAC ST ADJ ON N SE1/4 SEC 16-27-1E

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information LALBERS
Function 06 Ownership Level 01
Key No.: B -03117 Pin: 125160430100101A
Page: 1

Name HALL INDUSTRIAL DEVELOPMENT LLC
Situs
KS

Tax	169.00
Specials	6.30
Total	175.30

Phone
Mail PO BOX 9544
To WICHITA KS 67277-0544

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 121833
USD-259-TD-NIC
Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
LALBERS
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -03117
Page: 2

Pin: 125160430100101A
Name: HALL INDUSTRIAL DEVELOPMENT LLC

Legal Description
LOTS 24-26-28-30-32 & W 18 FT LOT 34 & 1/2 VAC ST ADJ ON N
GARRISON'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information LALBERS
Function 06 Ownership Level 01
Key No.: B -08647 Pin: 125160430700100A
Page: 1

Name HALL INDUSTRIAL DEVELOPMENT LLC
Situs 611 N CLEVELAND ST
WICHITA KS 67214

Tax	5,343.42
Specials	6.30
Total	5,349.72

Phone
Mail P O BOX 9544
To WICHITA KS 67277-0544

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 128554
USD-259-TD-NIC
Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
LALBERS
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -08647
Page: 2

Pin: 125160430700100A
Name: HALL INDUSTRIAL DEVELOPMENT LLC

Legal Description
LOTS 68-70 & VAC ALLEY ADJ ON N CLEVELAND AVE.
CORWIN'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information
LALBERS
Function 06 Ownership Level 01
Key No.: B -08633 Pin: 125160430700100B
Page: 1

Name HALL INDUSTRIAL DEVELOPMENT LLC
Situs
KS

Tax	154.43
Specials	6.30
Total	160.73

Phone
Mail PO BOX 9544
To WICHITA KS 67277-0544

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 128539
USD-259-TD-NIC

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
LALBERS
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -08633
Page: 2

Pin: 125160430700100B
Name: HALL INDUSTRIAL DEVELOPMENT LLC

Legal Description
LOTS 63-65-67-69 & 1/2 VAC ST ADJ ON W & VAC ALLEY ADJ ON N
PLUM NOW INDIANA AVE. CORWIN'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
LALBERS
Level 01

View Property Information
Ownership

Function 06
Key No.: B -08618
Pin: 125160430700100C
Page: 1

Name HALL INDUSTRIAL DEVELOPMENT LLC
Situs
KS

Tax	119.47
Specials	6.30
Total	125.77

Phone
Mail PO BOX 9544
To WICHITA KS 67277-0544

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 128524

Add Keys & B-8619

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
LALBERS
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -08618
Page: 2

Pin: 125160430700100C
Name: HALL INDUSTRIAL DEVELOPMENT LLC

Legal Description
LOTS 66-68-70 & 1/2 VAC ST ADJ ON E& VAC ALLEY ADJ ON N INDIANA AVE.
CORWIN'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
LALBERS
Level 01

View Property Information
Ownership

Function 06
Key No.: B -08603
Page: 1

Pin: 125160430700100D

Name HALL INDUSTRIAL DEVELOPMENT LLC
Situs
KS

Phone
Mail PO BOX 9544
To WICHITA KS 67277-0544

Tax	131.12
Specials	6.30
Total	137.42

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 128509

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
LALBERS
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -08603
Page: 2

Pin: 125160430700100D
Name: HALL INDUSTRIAL DEVELOPMENT LLC

Legal Description
LOTS 63-65-67-69 & VAC ALLEY ADJ ON N OHIO AVE.
CORWIN'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

State of Kansas
Mike Hayden, Governor

Department of Health and Environment
Division of Environment

Stanley C. Grant, Ph.D., Secretary

Forbes Field, Bldg. 740, Topeka, KS 66620-0002

(913) 296-1535
FAX (913) 296-6247

December 29, 1989

RECEIVED
JAN 4 1990

Paula George
Christopher Steel, Inc.
P.O. Box 49228
Wichita, Kansas 67201

Re: EPA I.D. Number KSD007242084

Dear Ms. George:

This letter is to acknowledge the subsequent Notification of Hazardous Waste Activity Form your firm submitted on December 22, 1989.

We have updated our records to reflect the change made in location address from 1220 Blaine Street to 1221 East Murdock, contact person to Paula George, legal owner of installation to John Jaedicke, Kansas Generator status and additional waste codes of D001, F002 and F004.

This change in status is effective immediately. A subsequent notification shall be submitted to this office whenever the information originally submitted to obtain an EPA I.D. Number has changed. If I can be of further assistance, please contact me at (913) 296-6898.

Sincerely,

Gigi Perry

Gigi Perry
Hazardous Waste Section
Bureau of Air and Hazardous Waste

C District Office - Sedgwick

Please print or type with ELITE type (12 characters per inch)

Wichita

STATE OF KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT

Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law (*Section 3010 of the Resource Conservation and Recovery Act*).

For Official Use Only

Comments

Installation's EPA ID Number	Approved	Date Received (yr. mo. day)	COUNTY
C KSD007242084 T/A C 1		891228	173 Sedgwick

I. Name of Installation

CHRISTOPHER STEEL, INC

II. Installation Mailing Address

Street or P.O. Box: P.O. BOX 49228

City or Town	State	ZIP Code
WICHITA	KS	67201

III. Location of Installation

STREET ADDRESS OR LOCATION FROM KNOWN REFERENCE POINT: 1221 EAST MURDOCK

City or Town	State	ZIP Code
WICHITA	KS	67214

IV. Installation Contact

Name and Title (last, first, and job title)	Phone Number (area code and number)
CORPORATE PLANT SAFETY	316 267 6351

V. Ownership

A. Name of Installation's Legal Owner	B. Type of Ownership (enter code)
JOHN JAEDICKE	Corporation

VI. Type of Regulated Waste Activity (*Mark 'X' in the appropriate boxes. Refer to instructions.*)

A. Hazardous Waste Activity

- [X] 1a. Generator
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5. Market or Burn Hazardous Waste Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

NOTE: IF GENERATOR YOU MUST COMPLETE SECTION X.E. ON BACK SIDE OF FORM.

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer (*or On site Burner*) Who First Claims the Oil Meets the Specification

VII. Waste Fuel Burning: Type of Combustion Device (*enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.*)

[ ] A. Utility Boiler [ ] B. Industrial Boiler [ ] C. Industrial Furnace

VIII. Mode of Transportation (*transporters only — enter 'X' in the appropriate box(es)*)

[ ] A. Air [ ] B. Rail [ ] C. Highway [ ] D. Water [ ] E. Other (*specify*)

IX. First or Subsequent Notification

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

[ ] A. First Notification [X] B. Subsequent Notification (*complete item C*)

C. Installation's EPA ID Number: KSD007242084

ID — For Official Use Only														
C													T/A	C
W														1

X. Description of Hazardous Wastes *(continued from front)*

A. Hazardous Wastes from Nonspecific Sources. Enter the four-digit number from 40 *CFR* Part 261.31 for each listed hazardous waste from nonspecific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
F 0 0 2	F 0 0 4	F 0 0 3			
7	8	9	10	11	12

B. Hazardous Wastes from Specific Sources. Enter the four-digit number from 40 *CFR* Part 261.32 for each listed hazardous waste from specific sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. Commercial Chemical Product Hazardous Wastes. Enter the four-digit number from 40 *CFR* Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 — 261.24)*

- [X] 1. Ignitable *(D001)*
- [ ] 2. Corrosive *(D002)*
- [ ] 3. Reactive *(D003)*
- [ ] 4. Toxic (D004-D017) Specify below: ____ ____ ____

E. Total Quantity Generated Per Month. Mark 'X' in the appropriate box below corresponding to the total quantity of hazardous waste generated per month.

a. Greater than 1,000 KG (2,200 lbs)
[X] b. Less than 1,000 KG but greater than 25 KG (55 lbs)
c. Less than 25 KG (55 lbs)

XI. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Name and Official Title *(type or print)*	Date Signed
	Chief Financial Offers	12-22-89

EPA Form 8700-12 (Rev. 11-85) Reverse

MAIL COMPLETED FORM TO: BUREAU OF WASTE MANAGEMENT
KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
FORBES FIELD, BLDG. 730
TOPEKA, KS 66620

RECEIVED
BUREAU OF
DEC 2 6 1989
AIR and WASTE MANAGEMENT

State of Kansas
Joan Finney, *Governor*

1.0

Department of Health and Environment
Azzie Young, Ph.D., *Secretary*

Reply to: (913) 296-6898
Fax: (913) 296-1592

RECEIVED
DEC 06 1991

November 22, 1991

Linda Brady
Christopher Steel, Inc.
PO Box 4922B
Wichita, KS 67201

Re: EPA I.D. Number KSD007242084
1221 E Murdock--Wichita

Dear Ms. Brady:

This letter is to acknowledge the subsequent Notification of Hazardous Waste Activity Form your firm submitted on November 14, 1991.

We have updated our records to reflect the change made in contact person, legal owner and waste codes with the addition of D018 and D039.

This change in status is effective immediately. A subsequent notification shall be submitted to this office whenever the information originally submitted to obtain an EPA I.D. Number has changed. If I can be of further assistance, please contact me at (913) 296-6898.

Sincerely,

Gigi Perry
Hazardous Waste Section
Bureau of Air and Hazardous Waste

C SCDO - BAWM

APPENDIX C

Please refer to the Instructions for Filing Notification before completing this form. e information requested re is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Date Received (For Official Use Only): NOV 15 1991

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification ☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007242084

II. Name of Installation (Include company and specific site name): CHRISTOPHER STEEL INC

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 1221 EAST MURDOCK

City or Town: WICHITA State: KS Zip Code: [illegible]

County Code: 173 County Name: SEDGWICK

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: PO BOX 49228

City or Town: WICHITA State: KS Zip Code: 67201-9228

Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): BRADY (first): LINDA

Job Title: TREASURER Phone Number (area code and number): 316-267-6351

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: JSI MATERIALS INC

Street, P.O. Box, or Route Number: SAME

City or Town: State: Zip Code:

Phone Number (area code and number): 316-267-6351

B. Land Type: P C. Owner Type: P D. Change of Owner: Yes ☐ No ☒ (Date Changed) Month Day Year

FORM 8700-12 (7-90) PREVIOUS EDITION OBSOLETE.

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity

1. Generator (See Instructions)
   - ☐ Greater than 1000 kg/mo (2200 lbs)
   - ☒ 25 to 1000 kg/mo (55-2200 lbs)
   - ☐ Less than 25 kg/mo (55 lbs)
2. Transporter (Indicate Mode)
   - ☐ For own waste only
   - ☐ For commercial purposes

   Mode of Transportation
   - ☐ Air
   - ☐ Rail
   - ☐ Highway
   - ☐ Water
   - ☐ Other-specify _____
3. ☐ Treater, Storer, Disposer (at installation) Note: A permit is required for this activity. (See instructions.)
4. ☐ Hazardous Waste Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketers
   - ☐ Burner-indicate device(s) - Type of Combustion Device
     - ☐ Utility Boiler
     - ☐ Industrial Boiler
     - ☐ Industrial Furnace
5. ☐ Underground Injection Control

B. Used Oil Fuel Activities

1. ☐ Off-Specification Used Oil Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketer
   - ☐ Burner-indicate device(s)

   Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
2. ☐ Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles.

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic (List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminants)			
☒	☐	☐	D001	D018	D039	

B. Listed Hazardous Wastes.

1	2	3	4	5	6
F003					
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature	Name and Official Title (Type or print)	Date Signed
Linda C. Brady	Linda C. Brady, Treasurer	11-14-91

XI. Comments

MAIL COMPLETED FORM TO: KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
BUREAU OF AIR & WASTE MANAGEMENT
FORBES FIELD, BLDG. 740
TOPEKA, KS 66620-0001

Christopher Steel THE WICHITA EAGLE

KPERS

From Page 6B

Russell was questioned about a trip to the Caribbean during which he entertained Morgan on his boat.

"Just what was going on in his boat ride?" committee member Sen. Frank Gaines, D-Augusta, wanted to know.

"We had a couple of drinks and played gin," Russell replied, adding quickly, "No women, though."

"No women?" said Gaines in his best tone of mock disappointment. "Sounds like a boring boat ride."

Koger, too, experienced the truth of Gaines' warning that "things are going to get a little rough in here before these hearings are over." Koger's reports to the KPERS board during the years leading up to the failure of Home Savings were consistently upbeat and void of warnings about the seriousness of the thrift's problems with regulators. Koger's private files from that period, however, are full of correspondence indicating he knew about the problems.

Big failure in Wichita

During the final day of the committee's hearings, the focus shifted to Wichita and the failure of Christopher Steel, another KPERS investment.

Investigators found evidence that Christopher was in a very poor financial state when the Wichita firm of Peters Gamm West and Vincent arranged for KPERS to make the first chunk of what would total more than $8 million in investments in the company. KPERS put up all of the cash that Eastborough Mayor Jay Swanson and Wichitan John Jaedicke used to buy the company in 1989. They bought the company from Bank IV, which had taken over Christopher in a foreclosure.

Christopher Steel announced last week that it was closing its doors and planning liquidation, which state bank examiners estimate could wind up forcing KPERS to write off more than $6 million of its investment.

Neither Swanson nor Jaedicke had any experience in the steel business, and Jaedicke testified that they accepted optimistic assessments by Peters Gamm and officials of Bank IV that the company could easily be revived and made profitable.

Christopher announced last week that it was closing its doors and planning liquidation, which state bank examiners estimate could wind up forcing KPERS to write off more than $6 million of its investment. Evidence presented to the committee indicated that Koger's firm knew of the problems at Christopher but passed up chances to pull KPERS money out of the company before it failed.

"It seems to me," Elkouri said to Jaedicke during the testimony, "that the only ones who got helped in this deal were Bank IV."

Little information shared

KPERS board members other than Russell came out during last week's hearings as generally well meaning but out of touch with the system they supposedly controlled. Several testified that they knew little of what Russell, Koger or the board's money managers were doing. Several said they were shocked at the testimony they heard during the hearings.

Overhauling the board's duties and organization somehow is being discussed by members of the committee. KPERS in the past has been "too conservative," Carlin testified, denying the state a much-needed source of business capital.

If KPERS is going to continue taking the higher financial risks that go with investing in relatively small Kansas companies, Carlin warned, board members must find ways to keep closer watch on their staff and consultants. Board members probably need their own outside auditors apart from staff and consultants to size up the fund's performance. And the board's staff will have to be willing to blow the whistle, he said, if the system goes awry.

All those things can be done, Carlin said, without closing KPERS' doors to Kansas investments.

"We must look for ways to improve the system, not tear it down," Carlin said.

Title companies accuse treasurer of interference

By Jim Lynn
The Wichita Eagle

Two Wichita auto title companies have sued the Sedgwick County treasurer, claiming he has tried to interfere with their businesses.

Joe Deavours of Thrifty Title Service and Darrel O'Bar of D&S Title the issue said Blase has tried unsuccessfully to resolve the title companies' complaints in the past.

Title companies handle transactions related to vehicle titles and license tags, similar to the work performed by McCoy's office. The companies help customers get titles and

Denney Clement
Fridays, Editorial Page

Art Small
A HouseSold Word
Call about my 30 day marketing plan.
RE/MAX realty centre inc
685-8711

AUCTION
NURSERY LIQUID
SAT. ★ MAY 25 ★ 10:

State of Kansas
Mike Hayden, Governor

Department of Health and Environment
South Central District Office

Stanley C. Grant, Ph.D., Secretary 1919 Amidon, Suite 130, Wichita, Kansas 67203-2118 (316) 838-1071

November 2, 1989

Ms. Paula George
Personnel Safety Director
Christopher Steel, Inc.
P.O. Box 49228
Wichita, Kansas 67201-9228
Attention: Richard Gelvin, Plant Manager

Re: Hazardous Waste Compliance Inspection
EPA Identification Number: KSD007242084

Dear Ms. George:

On October 10, 1989, your facility was inspection to determine compliance with state hazardous waste regulations.

The inspection revealed your facility generates the following hazardous waste as defined by 40 CFR, Part 261, Subpart C and D as adopted by K.A.R. 28-31-3:

Waste Generated	Waste Codes
1. Waste Parts Cleaner	D001
2. Waste Carburetor Cleaner	F002/F004

The quantity generated is more than 25 kilograms (approximately 55 pounds) but less than 1000 kilograms (approximately 2200 pounds) per month. Your facility is considered a Kansas Generator and is regulated under K.A.R. 28-31-4 excluding 28-31-4(g) and 28-31-4(m).

The inspection revealed the following items not in compliance with state regulations concerning generators of hazardous waste:

1. Your facility generates waste shot blast dust and has not determined if this waste is hazardous. This is in violation of K.A.R. 28-31-4(b). On the day of the inspection, I sampled this waste. Half of the sample was given to Mr. Gelvin who was directed to have this analyzed for E.P. Toxicity (Heavy Metals). This sample should be analyzed as soon as possible. Please provide me a copy of the results as soon as you receive them. In the meantime, the shot blast dust from this process must be collected and stored on-site.

2. Your facility is disposing of waste xylene by spraying it out on the ground. This is an illegal disposal method as defined by K.S.A. 65-3441(a) and must be stopped immediately. The waste xylene must be collected and disposed of as a listed hazardous waste.

3. The information shown on the notification form is not accurate. You will need to submit a subsequent notification form showing the current information as required by K.A.R. 28-31-4(c)(1).

4. Emergency response information was not posted as required by K.A.R. 28-31-4(h)(1)(F).

5. You had not conducted training for the persons involved in the management of hazardous waste as required by K.A.R. 28-31-4(h)(1)(G).

The above deficiencies must be corrected by November 30, 1989. Please notify me in writing detailing the actions taken to correct each deficiency.

You are currently disposing of your waste solvent by mixing it with your used oil. Based on current state regulation K.A.R. 28-31-4(p)(3)(B), this disposal method makes the entire mixture of solvent and used oil a hazardous waste. In order to minimize the amount of hazardous waste generated by your facility, we recommend that you keep your waste solvent separate from your used oil. A solvent recycler can pick up your waste solvent and a used oil collector can pick up your used oil. The current accumulation of waste solvent and waste oil must be disposed of as a hazardous waste.

In the future when you generate waste carburetor cleaner, it will be classified as a listed hazardous waste: F002/F004. Since it is a F-listed hazardous waste, it is regulated under the new land ban requirements outlined in 40 CFR Part 268. These regulations, in part, require you to attach a notice to the manifest for each shipment of land disposal restricted wastes. Each notice must include: EPA hazardous waste number(s), the corresponding treatment standards, the manifest document number, and the waste analysis data, if available. A copy of these notices must be kept for a period of five (5) years.

During the inspection, twelve 55-gallon drums and twenty-two 5-gallon buckets were discovered near the paint shed, located near the southwest of the welding area. The contents of these containers were unknown. You must determine what is in each of these containers. If visual inspection can not verify the contents, then each container must be sampled and analyzed by a certified laboratory to make this determination. A list of the certified laboratories can be found in the **"Hazardous Waste Generator's Handbook"** that was left with Mr. Gelvin during the inspection. You must notify me in writing by November 30, 1989 identifying the contents of these containers.

The inspection also revealed that you have a plasma burning machine which uses a quenching liquid. This quenching liquid is disposed of via the sanitary sewer. During the inspection you were unable to provide a copy of the Materials Safety Data Sheet (MSDS) for this liquid. Please obtain a MSDS for this material and submit a copy to me by November 30, 1989.

Your cooperation with the hazardous waste management program is appreciated. If you have any questions concerning the inspection, please call me at 316/838-1071.

Sincerely,

Teresa Hansen
Inspections and Enforcement Section
Bureau of Air and Waste Management

cc: Tom Gross, BAWM, Topeka
J. P. Goetz, BAWM, Topeka
Don Carlson, BOW, Topeka
SCDO - File

SUMMARY

CHRISTOPHER STEEL, INC.

Christopher Steel, Inc. (formerly Geo. C. Christopher and Son, Inc.) has undergone a reorganization in the last several months. Geo. C. Christopher & Son had gone bankrupt and Bank IV took over. They have recently been sold.

The manufacture bridges and supply rebar for construction projects. They use xylene to mix with the paint they use for bridges. There is no waste generated from this process. In the past, they have used minimal amounts of xylene to clean their paint guns and have sprayed the residue out on the gravel covered floor. They indicated that there was a concrete slab under the area. I informed them that this is an unacceptable means of disposal and they would need to start collecting this residue.

They use a plasma cutting machine is one part of the operation. It contains a greenish liquid that resembles anti-freeze. They were unable to supply me a copy of the MSD Sheet. They were instructed to locate a copy and send it to me. They have changed the liquid out once or twice since it was installed by the previous owners. The liquid was disposed of in the sanitary sewer. The mixture contains 110 gallons of quenching liquid to approximately one hundred thousand gallons of water. (The bath is approximately 40 feet long by 15 feet wide by 3 feet high).

There are two maintenance shops. One is use strictly for machine repair, the other for vehicles. They both contain a 10 gallon parts washer. The mechanics in both shops have been disposing of the solvent in the waste oil. I informed them of the mixture rule.

There is also a bead blasting area. The piece to be blasted is hooked up to a hoist, then sent through the blaster. The shot is cleaned out when it needs it. This waste is disposed of in the dumpster. I took a split sample and had them take it to be analyzed. I sent in my split sample. At this time I am waiting for the final analysis.

During the inspection, I discovered several drums of unknown material. These drums are also to be analyzed. They were informed to send me a copy of these analysis.

Kansas Department of Health and Environment
Bureau of Air and Waste Management
Forbes Field, Topeka, Kansas 66620

Hazardous Waste Generator/ Transporter Compliance Inspection Report

General

Time 10:45 AM Date 10-10-89

Facility Name Christopher Steel, Inc. EPA ID No. KSD007242084

Street 1221 E. Murdock City Wichita, KS Zip 67201-9228

Mailing Address (if different than above) P.O. Box 49228

County Sedgwick Phone (316) 267-6351

Contact(s) Richard Gelvin, Plant Manager; Richard Matthews, Maintenance; Dennis Blodgett, Maintenance

Inspector(s) Teresa Hansen

Type of Business Steel fabrication

Has the company declared any information/processes as trade secrets (K.S.A. 65-3447)? Yes (No)
If yes, explain.

Industrial Wastes Generated

(List hazardous wastes first)

Waste:	Parts cleaning solvent	Carburetor Cleaner
If waste is hazardous, give H.W. ID Number:	D001	F002
Amount generated per ~~month~~ 2 months	20 gallons	Unknown
Amount presently in storage:	Unknown	2 gallons
Accumulation time:	Unknown	Unknown
Present disposal method:	Mixed with waste oil.	Haven't disposed of any yet.

Waste:	Xylene	Quenching liquid for plasma table
If waste is hazardous, give H.W. ID Number:	F003	Unknown
Amount generated per month:	Unknown	Unknown
Amount presently in storage:	N/A	None
Accumulation time:	N/A	N/A
Present disposal method:	used in process	Sanitary sewer.

Waste:	Shot (from bead blast process).	Antifreeze
If waste is hazardous, give H.W. ID Number:	Unknown	- - -
Amount generated per month:	Unknown	Unknown
Amount presently in storage:	None	1 drum
Accumulation time:	N/A	Unknown
Present disposal method:	Landfill	Haven't disposed of yet.

Waste:		
If waste is hazardous, give H.W. ID Number:		
Amount generated per month:		
Amount presently in storage:		
Accumulation time:		
Present disposal method:		

Waste:		
If waste is hazardous, give H.W. ID Number:		
Amount generated per month:		
Amount presently in storage:		
Accumulation time:		
Present disposal method:		

I. Has the facility evaluated all potentially hazardous waste(s) to determine if it is hazardous? (K.A.R. 28-31-4(b)) — Yes (No)
   A. If waste(s) was tested, was the analysis conducted by a laboratory certified by KDHE? (K.A.R. 28-31-4(f)) — Yes No (NA)
   B. If waste(s) was tested, are the results kept for three years? (K.A.R. 28-31-4(f)(1)(c))? — Yes No (NA)

II. If hazardous waste(s) is disposed of via the sanitary sewer to a Publicly Owned Treatment Works (POTW) has written permission been obtained from the operator of the POTW? (K.A.R. 28-31-3/40 CFR 261.4) — Yes No (NA)

III. If industrial waste(s) is disposed of at a permitted sanitary landfill, has a disposal authorization been obtained? (K.A.R. 28-29-23) — Yes No (NA)
   A. If yes, list the authorization number(s):

_____

IV. Facility size classification:

- ☐ Not a Gen.
- ☐ Small Qt. Gen.
- ☒ Ks. Gen.
- ☐ EPA Gen.
- ☐ T/S/D Facility
- ☐ Transporter
- ☐ Burner/Marketer

Hazardous Waste Determination Requirements: ☐ Adequate ☒ Inadequate

Notification Requirements

V. Has generator Notified KDHE and obtained an EPA Identification Number? (K.A.R. 28-31-4(c)) — Yes (No) NA

VI. Is current Notification accurate? (K.A.R. 28-31-4(e)) — Yes No NA
   A. Is this facility marketing (selling) hazardous waste as a fuel? — Yes No NA
   B. Is this facility marketing (selling) used oil as a fuel? — Yes No NA
   (If yes, to either question A or B, complete Used Oil Fuel Marketers/Blenders Checklist.)

   C. Is this facility burning hazardous waste as a fuel? — Yes No NA
   D. Is this facility burning used oil as a fuel? — Yes No NA

Notification Requirements: ☐ Adequate ☒ Inadequate ☐ NA

(If small quantity generator, stop here.)

Manifests (They have not shipped off any waste)

VII.	Is a contractual agreement used in place of manifesting? (K.A.R. 28-31-4(c))	Yes	No	
	A. If yes, does the contractural agreement include the type of waste and frequency of shipments?	Yes	No	
	B. If yes, is the vehicle used to transport the waste owned and operated by the reclaimer of the waste?	Yes	No	
	C. If yes, is a copy of the agreement kept for a period of three years after termination of agreement?	Yes	No	
VIII.	Is a current manifest showing revision date and burden disclosure statement used? (K.A.R. 28-31-4(d)/40 CFR 262.20)	Yes	No	NA
	A. If yes, does manifest(s) include:			
	1. Generator EPA Identification Number (twelve digit) and manifest document number (five digit)?	Yes	No	NA
	2. Number of pages?	Yes	No	
	3. Generators name and mailing address?	Yes	No	
	4. Generators phone number?	Yes	No	
	5. Transporter 1 Name?	Yes	No	
	6. Transporter 1 EPA Identification Number?	Yes	No	
	7. Transporter 2 Name?	Yes	No	NA
	8. Transporter 2 EPA Identification Number?	Yes	No	NA
	9. Name and site address of designated facility?	Yes	No	
	10. Designated facility's EPA Identification Number?	Yes	No	
	11. Waste Description (DOT shipping name, hazard class, and Identification Number)?	Yes	No	
	12. Number and type of containers?	Yes	No	
	13. Total Quantity?	Yes	No	
	14. Unit (weight or volume)?	Yes	No	
	15. Special handling instructions?	Yes	No	NA
	16. Generators certification including waste minimization statement, generators signature and date?	Yes	No	
	17. Name, signature and date of transporter 1?	Yes	No	
	18. Name, signature and date of transporter 2?	Yes	No	NA
	B. Does generator retain a copy of manifest(s) signed by both generator and transporter? (K.A.R. 28-31-4(d)/40 CFR 262.23)	Yes	No	
	C. Does generator retain copy of manifest(s) signed and dated by T/S/D/ facility owner/operator for three years? (K.A.R. 28-31-4(f)(1)(A))	Yes	No	
	D. Has generator ever failed to receive a signed copy of a manifest within 45 days of initiating a shipment?	Yes	No	
	1. If Yes, was exception report(s) filed? (K.A.R. 28-31-4(f)(4))	Yes	No	NA
	2. If Yes, was copy retained for 3 years? (K.A.R. 28-31-4(f)(1)(B))	Yes	No	NA

Manifesting Requirements:	☐ Adequate	☒ Inadequate	☐ NA

Land Disposal Restrictions Requirements

IX. Does facility generate any wastes subject to the land disposal restrictions requirements of 40 CFR 268, Subparts B and C? (Yes) No

List these wastes:

A F002/F004 (Carb. Cleaner) D. _____

B. _____ E. _____

C. _____ F. _____

X. Is the waste(s) covered by a National Variance(s), Extension, or Petition? Yes (No)

A. If Yes, describe the variance, extension, or petition which applies:

_____

_____

Have not shipped this waste off before

XI. Is the waste covered by an exemption? (40CFR 268.1(c)(3)) Yes (No)

A. If yes, does the generator provide a notice with the waste to the T/S/D facility stating that the waste is exempt from the land disposal restrictions? (40CFR 268.7(a)(3)) Yes No

XII. Does generator ship waste(s) covered by the Land Disposal Restrictions off-site for treatment or disposal? (Yes) No

A. If Yes, does the generator provide a Notification to the T/S/D facility that includes: EPA hazardous waste number(s), applicable treatment standards, manifest number(s), and waste analysis data, if available? Yes No

B. If yes, is a copy of this notification kept for 5 years? Yes No

XIII. Does generator treat restricted waste(s) on-site so that they are below the land disposal restrictions standards? (If Yes, fill out land disposal restrictions checklist.) Yes No

Land Disposal Restrictions Requirements:	☐ Adequate	☐ Inadequate	☒ NA

Pre-Transport Requirements

XIV. Does generator package waste in accordance with DOT requirements? (K.A.R. 28-31-4(e)(1)) Yes No NA

XV. Does generator label (flammable liquid, poison, etc.) each package in accordance with DOT requirements of 49 CFR 172.101 or 172.102? (K.A.R. 28-31-4(e)(2)) Yes No NA

XVI. Does generator mark (consignee's or consignor's name and address, etc) on each package in accordance with DOT requirements of 40 CFR 172 Subpart D? (K.A.R. 28-31-4(e)(3)) Yes No NA

A. Does generator mark each container of 110 gallons or less as below? Yes No NA

Hazardous Waste-Federal Law Prohibits Improper Disposal.
If found, contact the nearest police or public safety authority or the U.S. EPA.

Generator's Name and Address

Manifest Document Number

XVII. Does generator have placards to offer to transporters in accordance with 49 CFR 172 Subpart F? (K.A.R. 28-31-4(e)(4)) Yes (No) NA

XVIII. Does generator only use a transporter who is properly registered with the department? (K.A.R. 28-31-4(g)) Yes No (NA)

Pre-Transport Requirements:	☐ Adequate	☒ Inadequate	☐ NA

Biennial Reports

XIX. Has generator submitted a biennial report(s) to KDHE? (K.A.R. 28-31-4(f)(2)) Yes No NA

A. If Yes, does generator retain copies for three years? (K.A.R. 28-31-4(f)(1)(B)) Yes No NA
(Note: compare quantities reported on last biennial report with the total quantity of all manifests for those years.)

Biennial Report Requirements:	☐ Adequate	☒ Inadequate

Special Conditions

XX. Has generator received or transported any hazardous waste to or from a foreign source? (40 CFR Subpart E) Yes (No)

A. If Yes, has generator filed a Notice with the Secretary of Health and Environment? Yes No (NA)

B. Is waste manifested and signed by a foreign consignee? Yes No (NA)

C. If generator transports wastes out of the country, has confirmation of delivered shipment been received? Yes No (NA)

Special Conditions Requirements:	☐ Adequate	☐ Inadequate	☒ NA

Storage Requirements

XXI. Does generator temporarily store waste before transport? Yes No (

A. For 90 days or less? Yes No NA

B. For more than 90 days? Yes No NA

C. If waste is stored in containers:

1. Are containers marked with the words: "Hazardous Waste"? (K.A.R. 28-31-4(g)(3) or (h)(1)(D)) Yes No NA
2. Is the accumulation start date marked on each containers? (K.A.R. 28-31-4(g)(2) or (h)(1)(C)) Yes No NA
3. Are all containers holding hazardous waste closed during storage except when necessary to add or remove waste? (K.A.R. 28-31-4(g)(1) or (h)(1)(B)) Yes No NA
4. Does generator conduct weekly inspections of containers for signs of leakage and/or deterioration caused by corrosion or other factors? (K.A.R. 28-31-4(k)) Yes No NA

   a. If Yes, are these inspections documented in a log that includes date and time of inspection, full name of inspector, notations of observations, and date and nature of remedial actions? (K.A.R. 28-31-4(d)/40 CFR 265.15(d)) Yes No NA

5. Are containers holding ignitible or reactive waste(s) located at least 15 meters (50 feet) from the facility's property line? (EPA Generator and T/S/D Only) (K.A.R. 28-31-4(g)(1)) Yes No NA

6. If waste in containers is incompatible with other materials stored nearby, are the containers separated from the other materials by means of a dike, berm, wall, or other means? (K.A.R. 28-31-4(g)(1) or (h)(1)(B)) Yes No NA

7. Does generator have any satellite storage areas? (K.A.R. 28-31-4(j)) Yes No NA
If yes,

   a. Is the waste stored in a container at or near the point of generation and under the control of the operator of the process generating the waste? Yes No

   b. Is the container in good condition and closed except to add or remove waste? Yes No

   c. Is the container marked with the words: "Hazardous Waste"? Yes No

   d. Is the container marked with the accumulation start date at the time it becomes full? Yes No

   e. Is the full container moved to the storage area within 3 days after it became full? Yes No

(If waste(s) is placed in tanks, piles, or surface impoundments complete the appropriate inspection checklist.)

Storage Requirements:	☐ Adequate	☒ Inadequate	☐ NA

Kansas Generator's Emergency Preparedness

XXII. Has facility named one employee as emergency coordinator? Yes No

   A. Is the emergency coordinator available to respond to an emergency by reaching the facility within a short period of time? Yes No

   B. Is the emergency coordinator or his/her designee prepared to respond to any emergencies (fires, spills, or releases) that arise? Yes No

   C. Is the emergency coodinator familiar with the reporting requirements of K.A.R. 28-31-4(h)(2)? Yes No

XXIII. Is the following information posted next to at least one telephone which is immediately asscesssible in an emergency:

   A. Name and telephone of emergency coordinator? Yes No

   B. Location of fire extinguishers, fire alarms, or spill control material, if available? Yes No

   C. Telephone number of fire department unless the facility has a direct alarm? Yes No NA

XXIV. Have employee's been trained so that they are familiar with proper waste handling and emergency procedures that are relevant to their responsiblities during normal facility operations? Yes No

   A. Is this training documented in any way? Yes No

Kansas Generator's Emergency Preparedness Requirements:	☐ Adequate	☒ Inadequate	☐ NA

(If Kansas generator, stop here.)

Preparedness and Prevention

XXV. If appropriate, based upon the nature and quantity of wastes generated and stored at the facility, is the facility equipped with:

A. Internal communication or alarm system easily accessible in case of emergency? (K.A.R. 28-31-4(g)(4)/40 CFR 265.32(a))	Yes	No	NA
B. Telephone or hand-held two-way radio capable of summoning emergency response personnel? (K.A.R. 28-31-4(g)(4)/40 CFR 265.32(b))	Yes	No	NA
C. Portable fire extinguisher, fire control equipment, spill control equipment, and decontamination equipment? (K.A.R. 28-31-4(g)(4)/40 CFR 265.32(c))	Yes	No	NA
D. Is water of adequate volume provided for hose streams, foam producing equipment, sprinklers, etc.? (K.A.R. 28-31-4(g)(4)/40 CFR 265.32(d))	Yes	No	NA
E. Is this equipment (A-C above) tested and maintained to assure its proper operation? (K.A.R. 28-31-4(g)(4)/40 CFR 265.33)	Yes	No	NA

XXVI. Does a check of the facility show sufficient aisle space to allow unobstructed movement of personnel and equipment? (K.A.R. 28-31-4(g)(4)/40 CFR 265.35)	Yes	No	NA

XXVII. If appropriate for the type(s) of waste handled, has the owner/operator made the following arrangements:

A. Familiarized the local emergency authorities with the facility, wastes handled, entrances and exits? (K.A.R. 28-31-4(g)(4)/40 CFR 265.37(a)(1))	Yes	No	NA
B. Designated one authority where one or more police or fire departments might respond to an emergency? (K.A.R. 28-31-4(g)(4)/40 CFR 265.37(a)(2))	Yes	No	NA
C. Made agreements with local emergency response teams, emergency response contractors, and equipment suppliers? (K.A.R. 28-31-4(g)(4)/40 CFR 265.37(a)(3))	Yes	No	NA
D. Familiarized local hospitals with the properties of hazardous waste handled and types of injuries which could result from fires, explosions, or releases at the facility? (K.A.R. 28-31-4(g)(4)/40 CFR 265.37(a)(4))	Yes	No	NA

XXVIII. In cases where local authorities decline to enter into such arrangements, is the refusal entered in the operating record? (K.A.R. 28-31-4(g)(4)/40 CFR 265.37(a)(b))	Yes	No	NA

Preparedness and Prevention Requirements:	☐ Adequate	☐ Inadequate	☐ NA

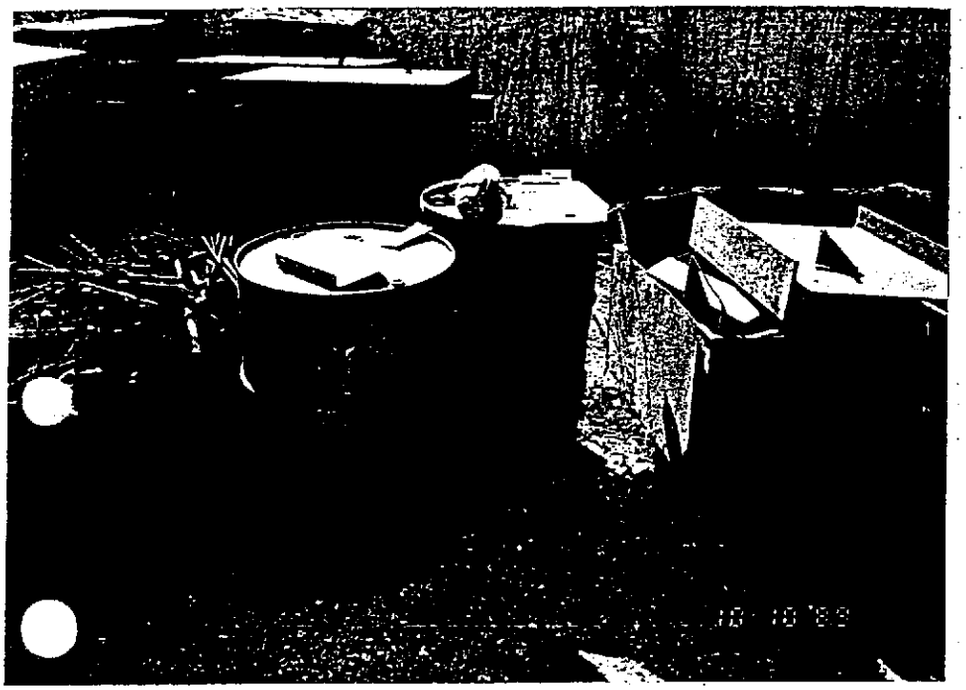
Personnel Training

XXIX. Has the owner/operator established a hazardous waste management training program? (K.A.R. 28-31-4(g)(4)/40 CFR 265.16)	Yes	No
A. Is the program directed by a person trained in hazardous waste management?	Yes	No
B. Are new personnel trained within six months after their employment?	Yes	No
C. Are new employees supervised until training is completed?	Yes	No
D. After initial training, are employees trained on an annual basis?	Yes	No

Department of Health and Environment
Division of Environment

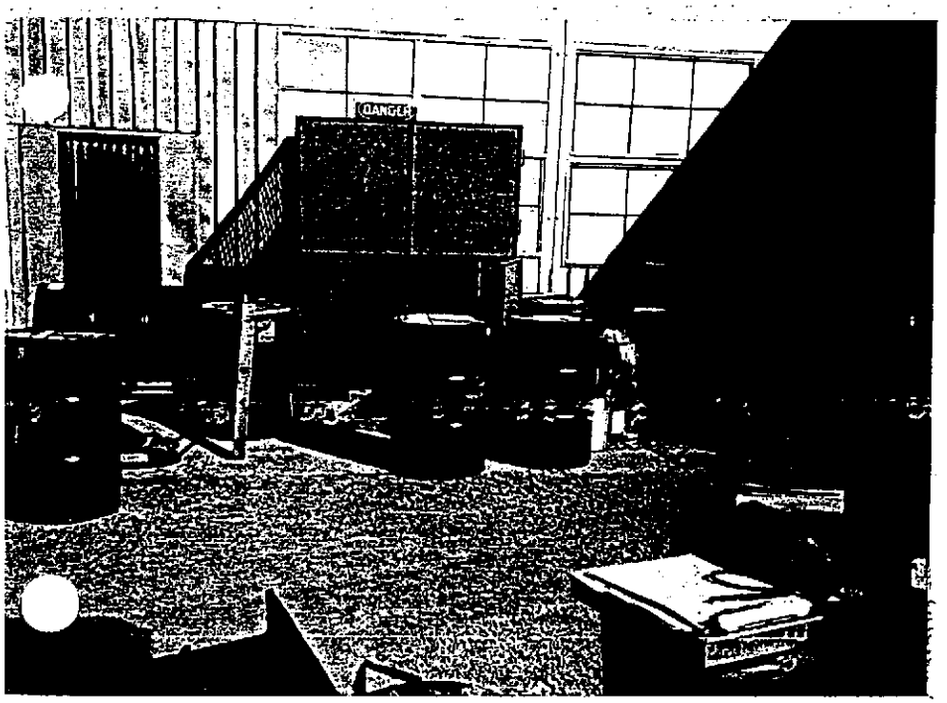
PHOTO MOUNTING SHEET

Name of Site: Christopher Steel, Inc. EPA ID # KSD007242084
Location: City Wichita County Sedgwick Legal



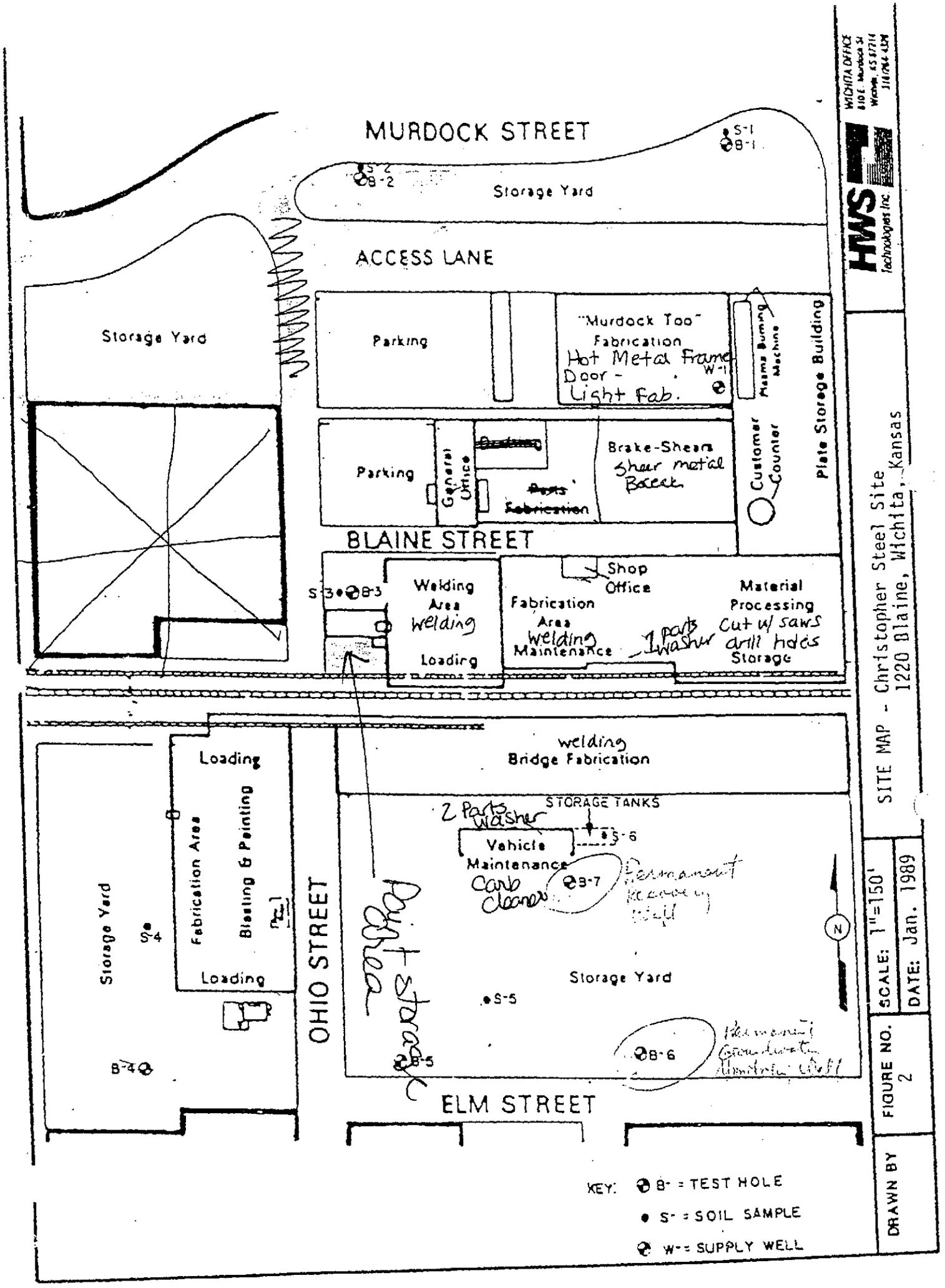
Picture No. 1
Date: 10-10-89
Time:
General Direction Faced: South
Weather Conditions: Warm & Sunny
Type of Camera: Minolta Freedom III
Comments: Unknown contents.

Teresa Hansen



Picture No. 2
Date:
Time: 10-10-89
General Direction Faced: North
Weather Conditions: Warm & Sunny
Type of Camera: Minolta Freedom III
Comments: Unknown contents.

Teresa Hansen


MURDOCK STREET
S-1
B-1
S-2
B-2
Storage Yard
ACCESS LANE
Storage Yard
Parking
"Murdock Too" Fabrication
Hot Metal Frame Door -
Light Fab.
W-1
Plasma Burning Machine
Plate Storage Building
Parking
General Office
Brake-Shear
Shear metal Bracet
Customer Counter
BLAINE STREET
S-3
B-3
Welding Area
welding
Loading
Shop Office
Fabrication Area
welding
Maintenance
1 parts washer
Material Processing
Cut w/ saws
drill holes
Storage
welding
Bridge Fabrication
Loading
Fabrication Area
Blasting & Painting
Loading
Storage Yard
S-4
B-4
OHIO STREET
2 Parts Washer
STORAGE TANKS
S-6
Vehicle Maintenance
Carb cleaner
B-7
Paint storage
Storage Yard
S-5
B-5
B-6
ELM STREET
N
KEY: B- = TEST HOLE
S- = SOIL SAMPLE
W- = SUPPLY WELL
WICHITA OFFICE
HWS technologies inc.
SITE MAP - Christopher Steel Site
1220 Blaine, Wichita, Kansas
SCALE: 1"=150'
DATE: Jan. 1989
FIGURE NO. 2
DRAWN BY

74-11

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

Joseph F. Harkins, Secretary

Forbes Field
Topeka, Kansas 66620
913-862-9360

April 26, 1982

Roy Barnes
Production Planner
Christopher and Sons Iron Works
1220 Blaine
Wichita, KS 67214

Re: Resource Conservation and Recovery Act (RCRA)
Compliance Inspection

Dear Mr. Barnes:

On January 8, 1982 a RCRA inspection of your facility was conducted by this department to determine compliance with state and federal regulations concerning hazardous waste.

The inspection revealed that your facility is a Kansas small quantity generator of hazardous waste as defined in K.A.R. 28-31-3. Over 100 Kg. but under 1000 Kg. of hazardous waste is generated per month. This subjects you to regulation under 40 CFR Part 262, excepting 262.34. Practically this means you must obtain an EPA ID number; manifest any shipment of hazardous waste offsite, except where a non-listed waste is being sent for recycling; and comply with all DOT standards for packaging, labeling, marking and placarding. A notification form for obtaining the ID number is included with this letter.

If the generation rate of your hazardous waste ever exceeds 1000 Kg./month or if over 1000 Kg. is allowed to accumulate, requirements of 40 CFR 262.34 would come into effect. This would mean waste could only be stored on site 90 days from date of accumulation, and personnel training plans and contingency plans would have to be drawn up.

Also, if you ever have a major floor cleanup and have a significant amount of paint chips or paint contaminated material to dispose of, you will need to have metals analysis run on the waste.

Your cooperation with the Hazardous Waste Management Program is appreciated. If you have questions concerning the inspection, please call me at 265-3181.

Thank you,

Division of Environment

Dale T. Stuckey

Dale T. Stuckey
Field Services Section
Bureau of Environmental Sanitation

DTS:jlw

cc: Thomas Gross

Excerpts from Report(s) Prepared by Others

CONFIDENTIAL AND PRIVILEGED
ATTORNEY/CLIENT WORK PRODUCT

ENVIRONMENTAL SITE ASSESSMENT
OF
CHRISTOPHER STEEL, INC.
1221 EAST MURDOCK AVENUE
WICHITA, KANSAS

FOR
HASTIE & KIRSCHNER
OKLAHOMA CITY, OKLAHOMA

DAMES & MOORE

May 20, 1994
Dames & Moore Job 25615-002-149

TABLE 2

SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE 1 GROUND WATER SAMPLES

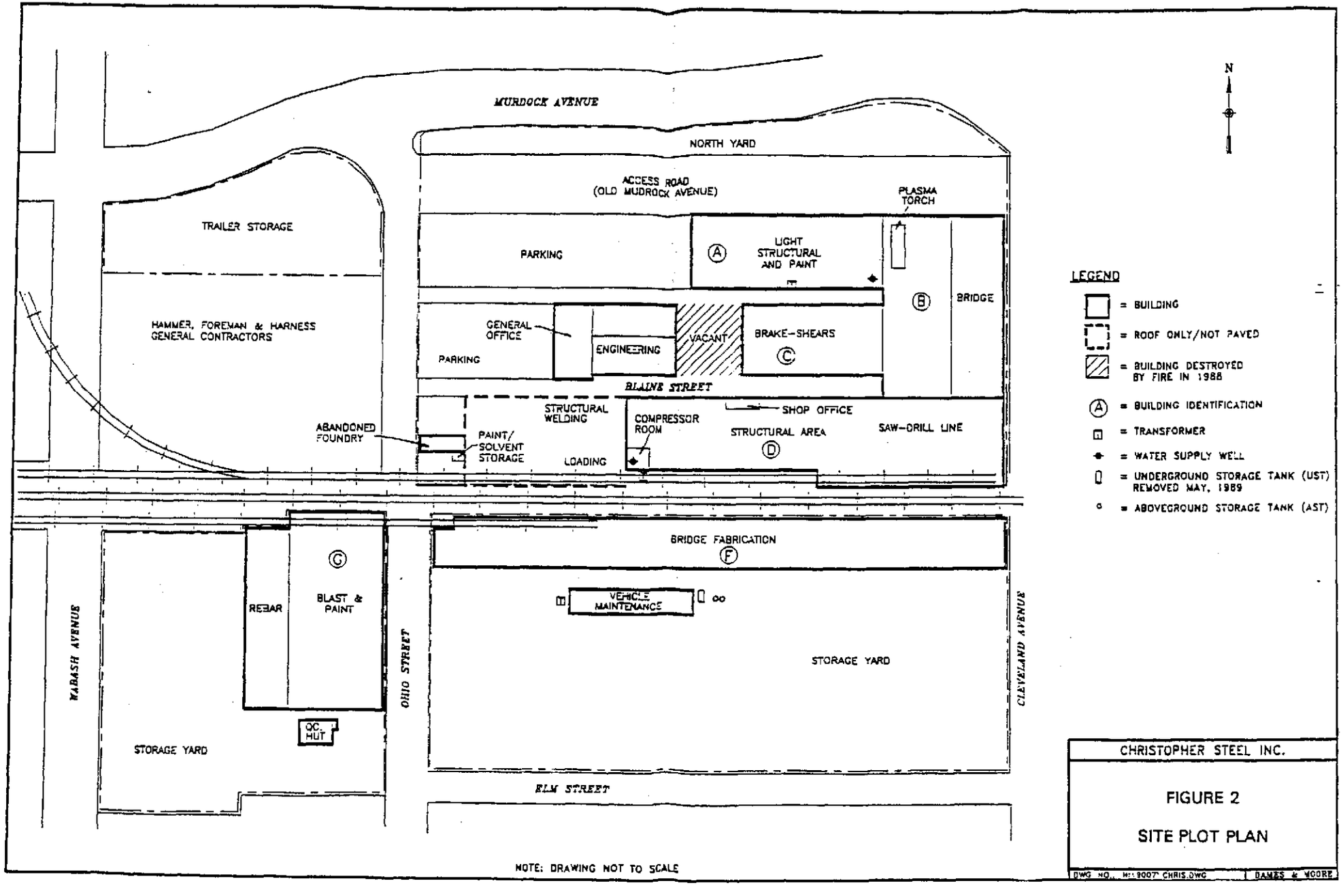
ANALYTE	BENZENE	ETHYLBENZENE	TOLUENE	XYLENES	TCE	TTCE	1,2-DCA
MDL	5 μg/l	5 μg/l	5 μg/l	5 μg/l	5 μg/l	5 μg/l	5 μg/l
KDHE ACTION LEVEL	5	680	2,000	440	5	5	5
MW-1	ND	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	6	ND
MW-3	ND	ND	ND	ND	18	ND	ND
MW-4	1,400	ND(50)	ND(50)	310	ND(50)	ND(50)	ND
MW-5	97	170	440	670	ND(25)	ND(25)	ND
MW-6	ND	ND	ND	ND	ND	ND	ND
COMPRESSOR WELL	ND	ND	ND	ND	ND	ND	ND

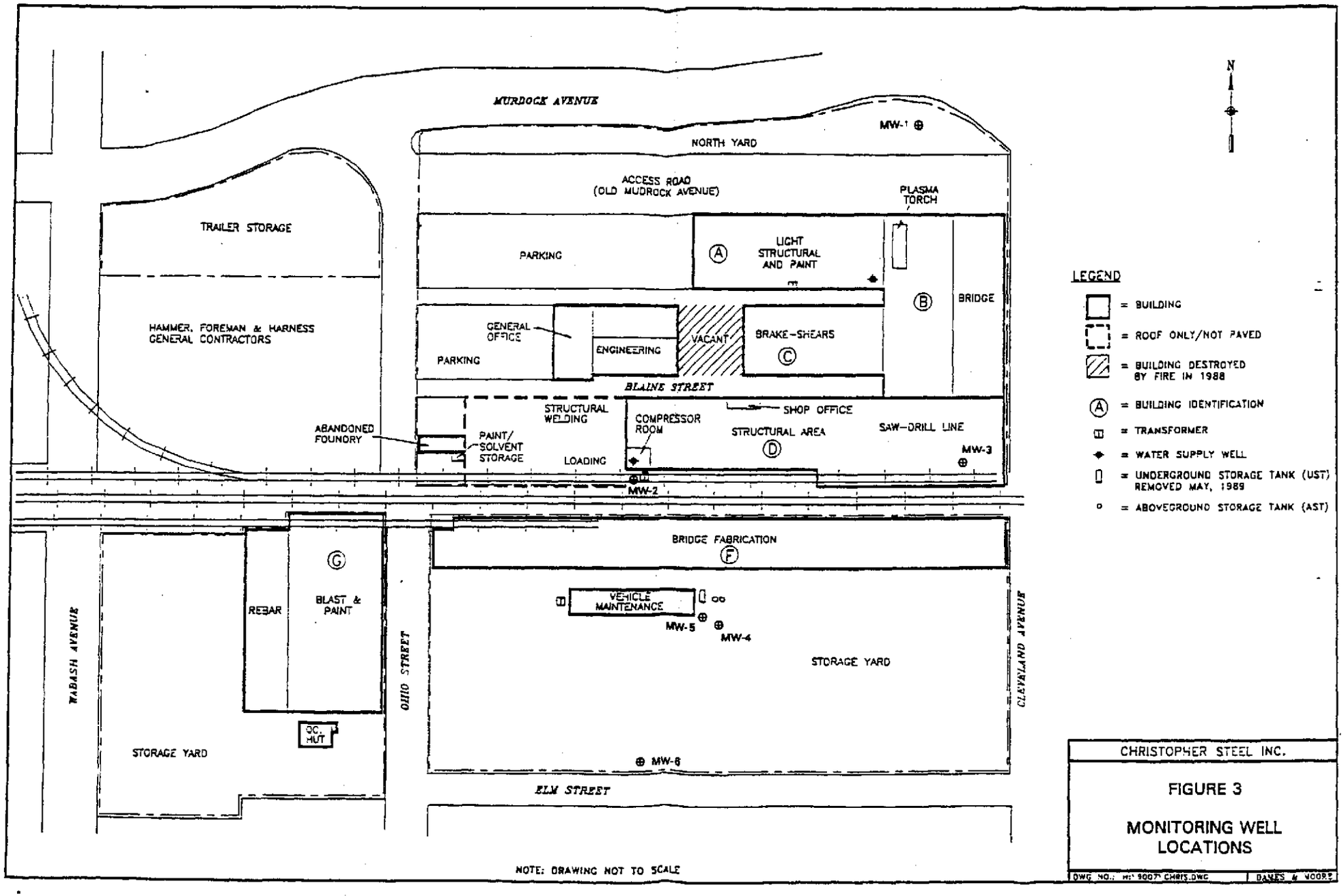
ND: Not detected at or above the MDL
TCE: Trichloroethylene
TTCE: Tetrachloroethylene
( ): Elevated MDL
Note: Analyzed November 12 and 13, 1992

TABLE 7
SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE 4 WELL POINT GROUND WATER SAMPLES

ANALYTE	LEAD	BENZENE	TCE	TTCE	1,2-DCA
MDL	0.005 mg/L	5 μg/L	5 μg/L	5 μg/L	5 μg/L
KDHE ACTION LEVEL	0.050	5	5	5	5
HP-1 (13.4)	0.254	ND	ND	ND	ND
HP-2 (11)	0.274	ND	ND	ND	ND
HP-3 (22.5)	0.677	ND	ND	ND	ND
HP-4 (14.5)	0.344	ND	ND	ND	ND
HP-5 (22.5)	0.193	ND	ND	ND	ND
HP-6 (22.5)	0.160	ND	ND	ND	ND
HP-7 (22.5)	0.232	ND	ND	ND	ND
HP-8 (22.5)	0.346	ND	ND	ND	ND
HP-9 (22.5)	0.114	ND	ND	ND	ND
HP-10 (22.5)	0.106	6	ND	ND	ND
HP-11 (22.5)	0.138	ND	ND	ND	ND
HP-12 (22.5)	0.403	ND	ND	ND	ND

ND: Not detected at or above the MDL
TCE: Trichloroethylene
TTCE: Tetrachloroethylene
( ): Sample Depth in feet
Note: Each well point sample was collected from a depth of 20 feet.
Samples analyzed November 24 and 30, 1993


MURDOCK AVENUE
NORTH YARD
ACCESS ROAD
(OLD MUDROCK AVENUE)
PLASMA TORCH
TRAILER STORAGE
PARKING
A
LIGHT STRUCTURAL AND PAINT
B
BRIDGE
HAMMER, FOREMAN & HARNESS GENERAL CONTRACTORS
GENERAL OFFICE
ENGINEERING
VACANT
BRAKE-SHEARS
C
PARKING
BLAINE STREET
STRUCTURAL WELDING
SHOP OFFICE
COMPRESSOR ROOM
STRUCTURAL AREA
D
SAW-DRILL LINE
ABANDONED FOUNDRY
PAINT/ SOLVENT STORAGE
LOADING
BRIDGE FABRICATION
F
G
REBAR
BLAST & PAINT
VEHICLE MAINTENANCE
STORAGE YARD
WABASH AVENUE
OHIO STREET
CLEVELAND AVENUE
QC. HUT
STORAGE YARD
ELM STREET
N
LEGEND
= BUILDING
= ROOF ONLY/NOT PAVED
= BUILDING DESTROYED BY FIRE IN 1988
= BUILDING IDENTIFICATION
= TRANSFORMER
= WATER SUPPLY WELL
= UNDERGROUND STORAGE TANK (UST) REMOVED MAY, 1989
= ABOVEGROUND STORAGE TANK (AST)
NOTE: DRAWING NOT TO SCALE
CHRISTOPHER STEEL INC.
FIGURE 2
SITE PLOT PLAN
DWG NO. H:\9007 CHRIS.DWG
DAMES & MOORE

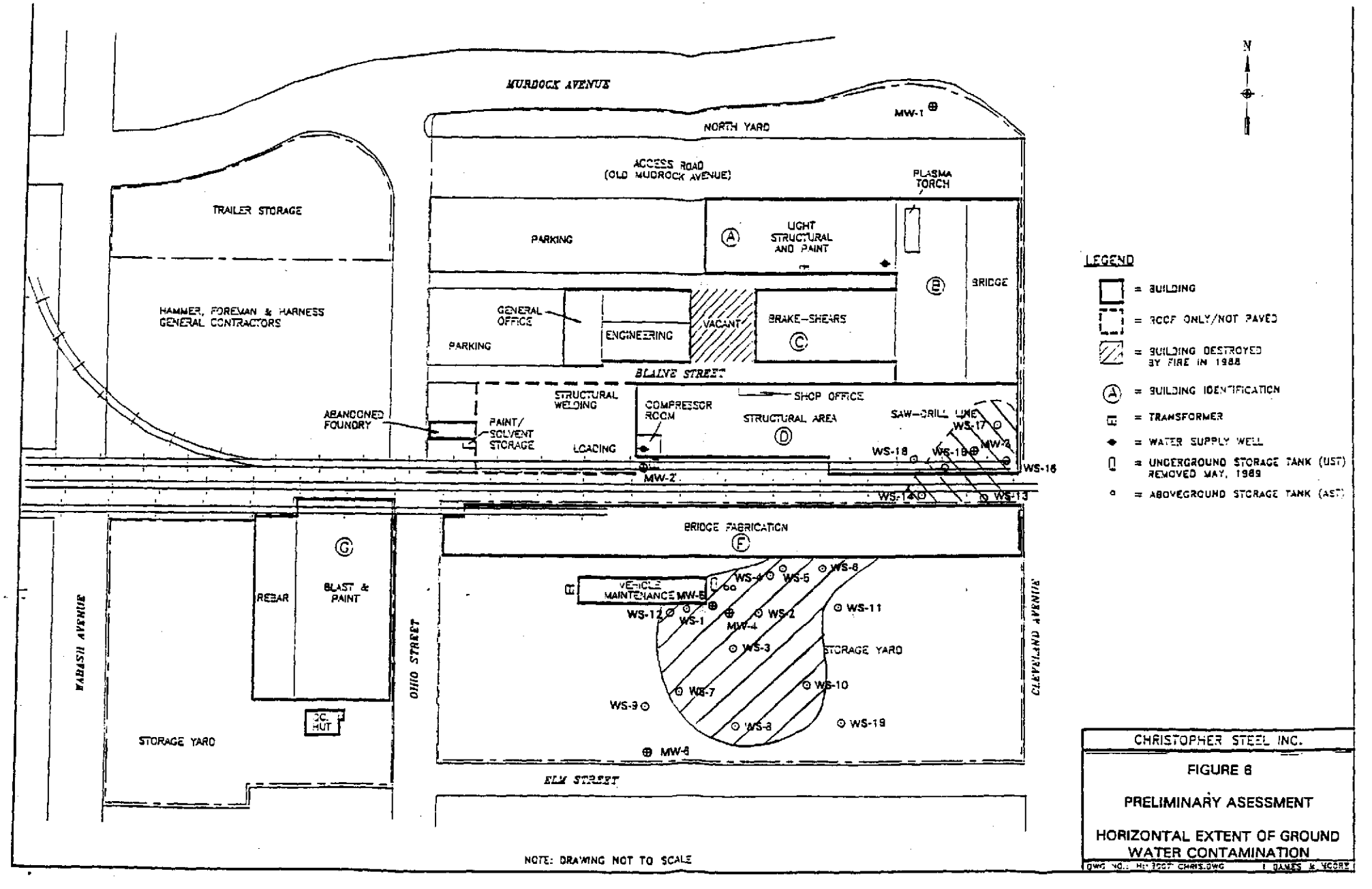


CHRISTOPHER STEEL INC.

FIGURE 3

MONITORING WELL LOCATIONS

DWG NO.: HI' 9007' CHRIS.DWG | DAMES & MOORE



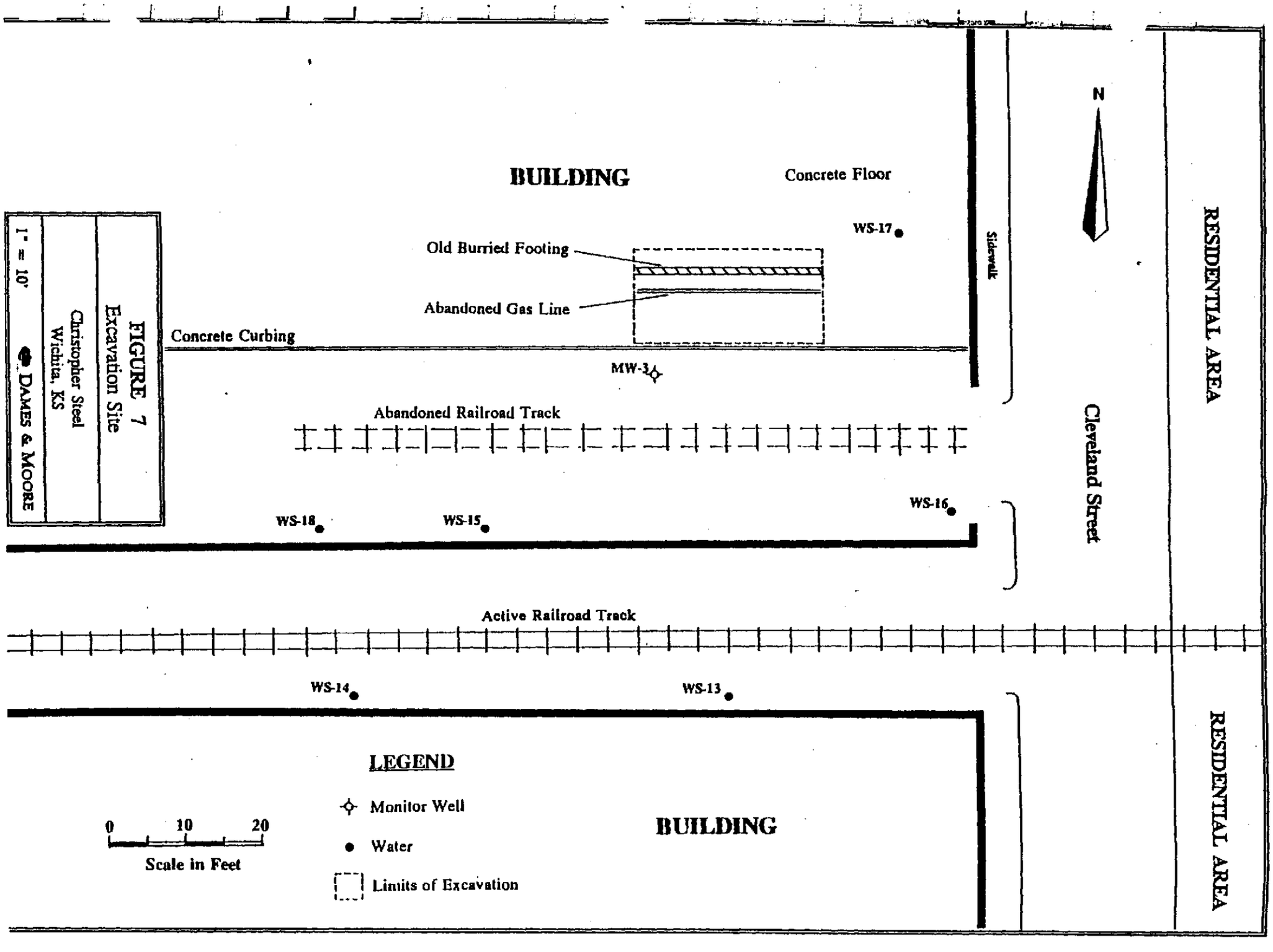
CHRISTOPHER STEEL INC.

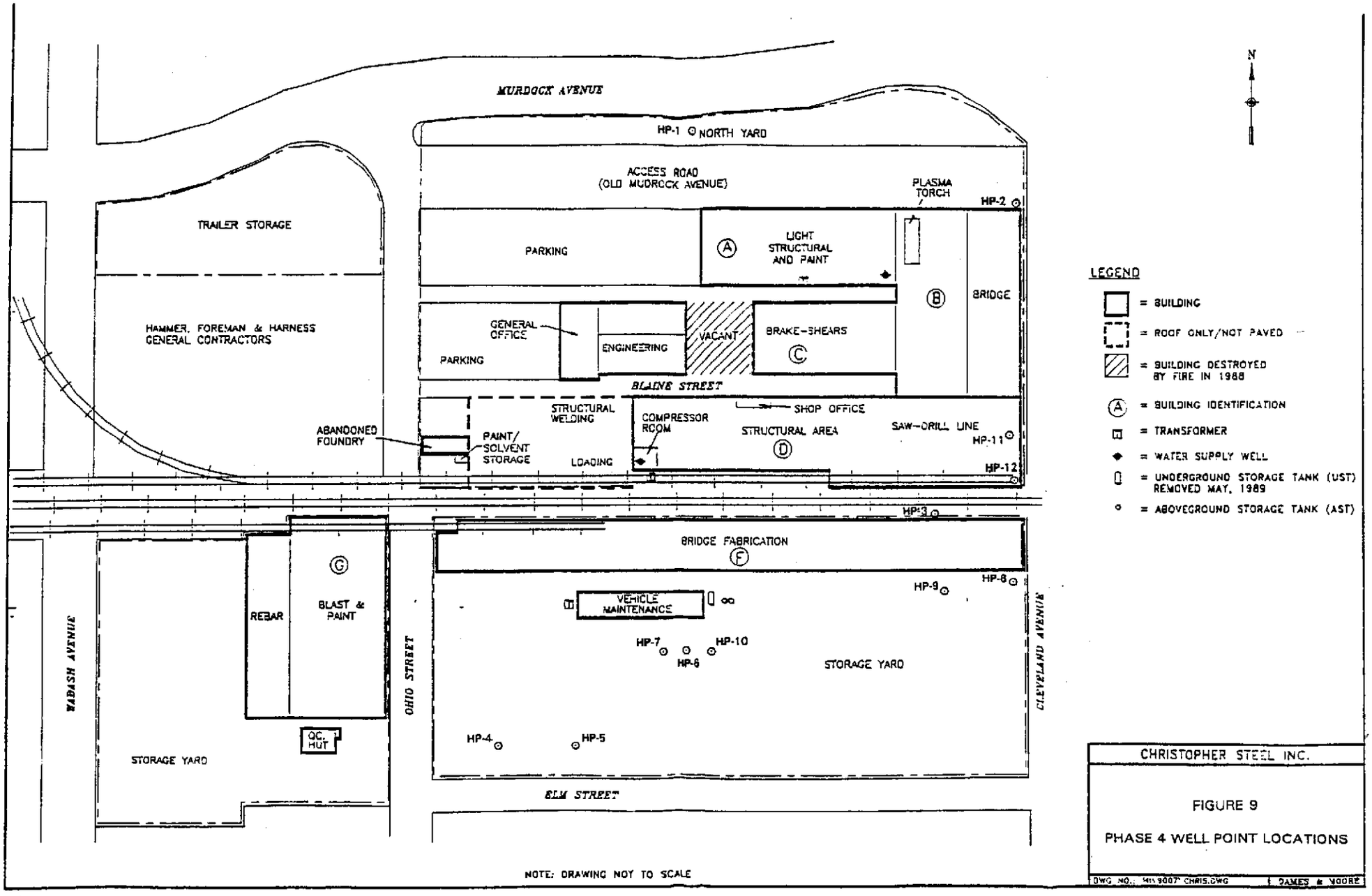
FIGURE 6

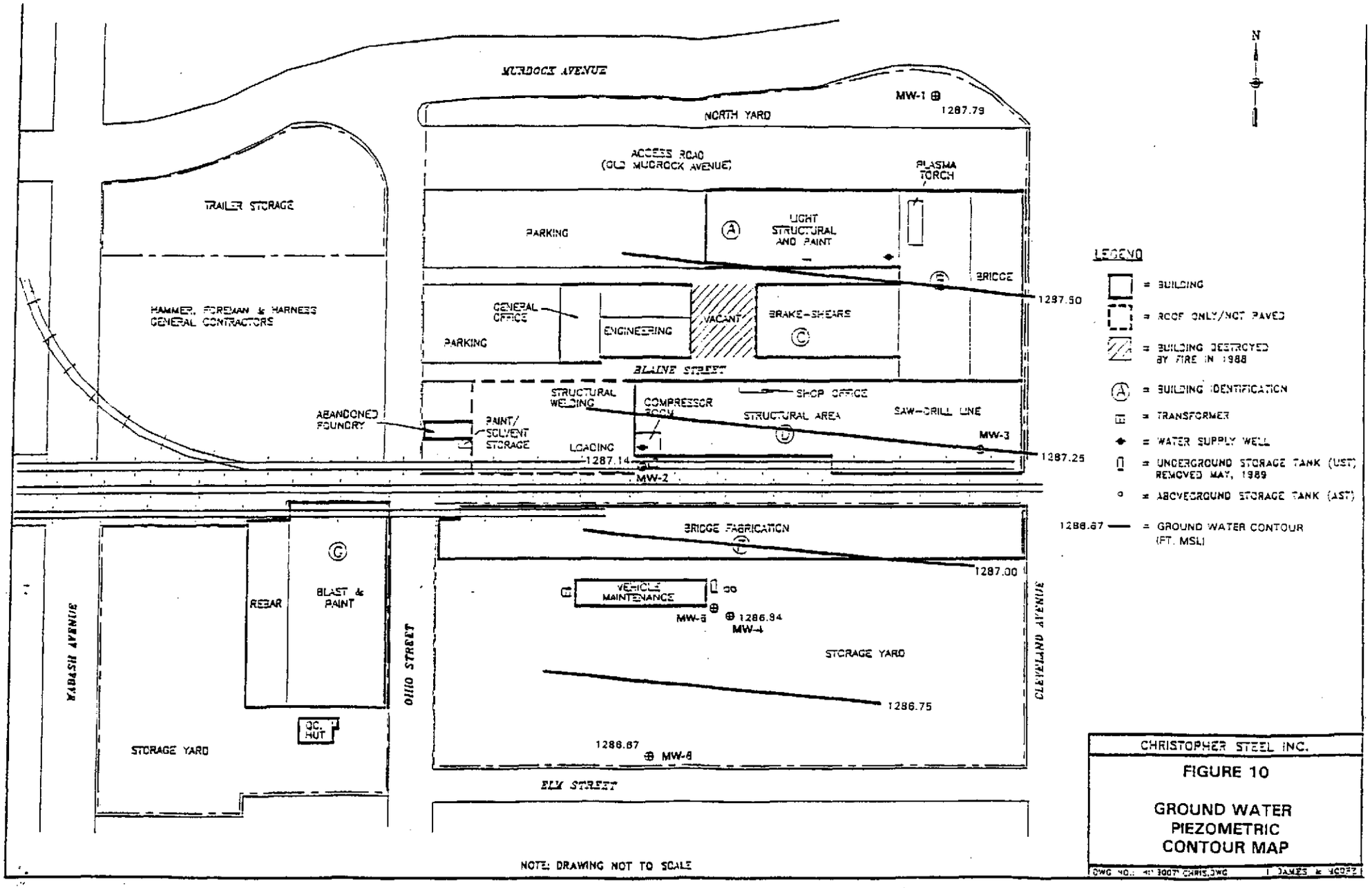
PRELIMINARY ASESSMENT

HORIZONTAL EXTENT OF GROUND WATER CONTAMINATION

DWG NO.: H: 3007 CHRIS.DWG J. BAKER & MOORE


BUILDING
Concrete Floor
WS-17
Old Buried Footing
Abandoned Gas Line
Concrete Curbing
MW-3
Sidewalk
N
RESIDENTIAL AREA
Cleveland Street
Abandoned Railroad Track
WS-18
WS-15
WS-16
Active Railroad Track
WS-14
WS-13
RESIDENTIAL AREA
LEGEND
Monitor Well
Water
Limits of Excavation
0
10
20
Scale in Feet
BUILDING
FIGURE 7
Excavation Site
Christopher Steel
Wichita, KS
1" = 10'
DAMES & MOORE


MURDOCK AVENUE
HP-1
NORTH YARD
ACCESS ROAD
(OLD MUDROCK AVENUE)
PLASMA TORCH
HP-2
TRAILER STORAGE
PARKING
A
LIGHT STRUCTURAL AND PAINT
B
BRIDGE
HAMMER, FOREMAN & HARNESS GENERAL CONTRACTORS
GENERAL OFFICE
ENGINEERING
VACANT
BRAKE-SHEARS
C
PARKING
BLAINE STREET
STRUCTURAL WELDING
COMPRESSOR ROOM
SHOP OFFICE
STRUCTURAL AREA
D
SAW-DRILL LINE
HP-11
ABANDONED FOUNDRY
PAINT/ SOLVENT STORAGE
LOADING
HP-12
HP-3
BRIDGE FABRICATION
F
G
BLAST & PAINT
REBAR
VEHICLE MAINTENANCE
HP-9
HP-8
HP-7
HP-10
HP-6
STORAGE YARD
WABASH AVENUE
OHIO STREET
CLEVELAND AVENUE
QC HUT
STORAGE YARD
HP-4
HP-5
ELM STREET
NOTE: DRAWING NOT TO SCALE
N
LEGEND
= BUILDING
= ROOF ONLY/NOT PAVED
= BUILDING DESTROYED BY FIRE IN 1988
= BUILDING IDENTIFICATION
= TRANSFORMER
= WATER SUPPLY WELL
= UNDERGROUND STORAGE TANK (UST) REMOVED MAY, 1989
= ABOVEGROUND STORAGE TANK (AST)
CHRISTOPHER STEEL INC.
FIGURE 9
PHASE 4 WELL POINT LOCATIONS
DWG. NO.: 14:\9007\ CHRIS.DWG
JAMES & MOORE



CHRISTOPHER STEEL INC.

FIGURE 10

GROUND WATER PIEZOMETRIC CONTOUR MAP

DWG NO.: 41 3007 CHRIS.DWG | JAMES & HOFFZ

REPORT
UNDERGROUND STORAGE TANK
GROUNDWATER INVESTIGATION
CHRISTOPHER STEEL, INC.
1221 EAST MURDOCK AVENUE
WICHITA, KANSAS
KDHE PROJECT # U208700145

DAMES & MOORE

March 1, 1996
Dames & Moore Job 30804-003-146

5.0 CONCLUSIONS

Based on the results and findings from this most recent investigation, as well as a review of the findings from previous investigations, there are a number of conclusions which may be drawn. First, a comparison of the analytical results from those wells from which previous results are available provides an good assessment of the decreasing impact resulting from the former UST site. Table 2 presents the results of analysis for groundwater samples collected from monitoring wells MW-1 through MW-6 in late 1992. The results clearly show that BTEX concentrations directly downgradient of the UST and ASTs are decreasing with time. In MW-4, benzene concentrations have decreased from 1,400 to 720 ug/L. In MW-5, benzene decreased from 97ug/L to ND at a reporting limit of 5 ug/L. All other parameters in these wells remain below Kansas Action Levels (KALs).

Second, the results of this analysis provide a third set of data showing that impacted groundwater above KALs is not migrating from the site. The first set of data documenting this condition was the results of the groundwater investigation presented by TCS, Inc. in 1989. The second data set was the results of the in-situ groundwater sampling with offsite laboratory analysis conducted by Dames & Moore in November 1993. This latest data set, which includes four additional data points downgradient of the UST and ASTs (MW-7 through MW-10) again clearly shows that no VOCs are migrating beyond the Christopher Steel boundary at concentrations exceeding KALs.

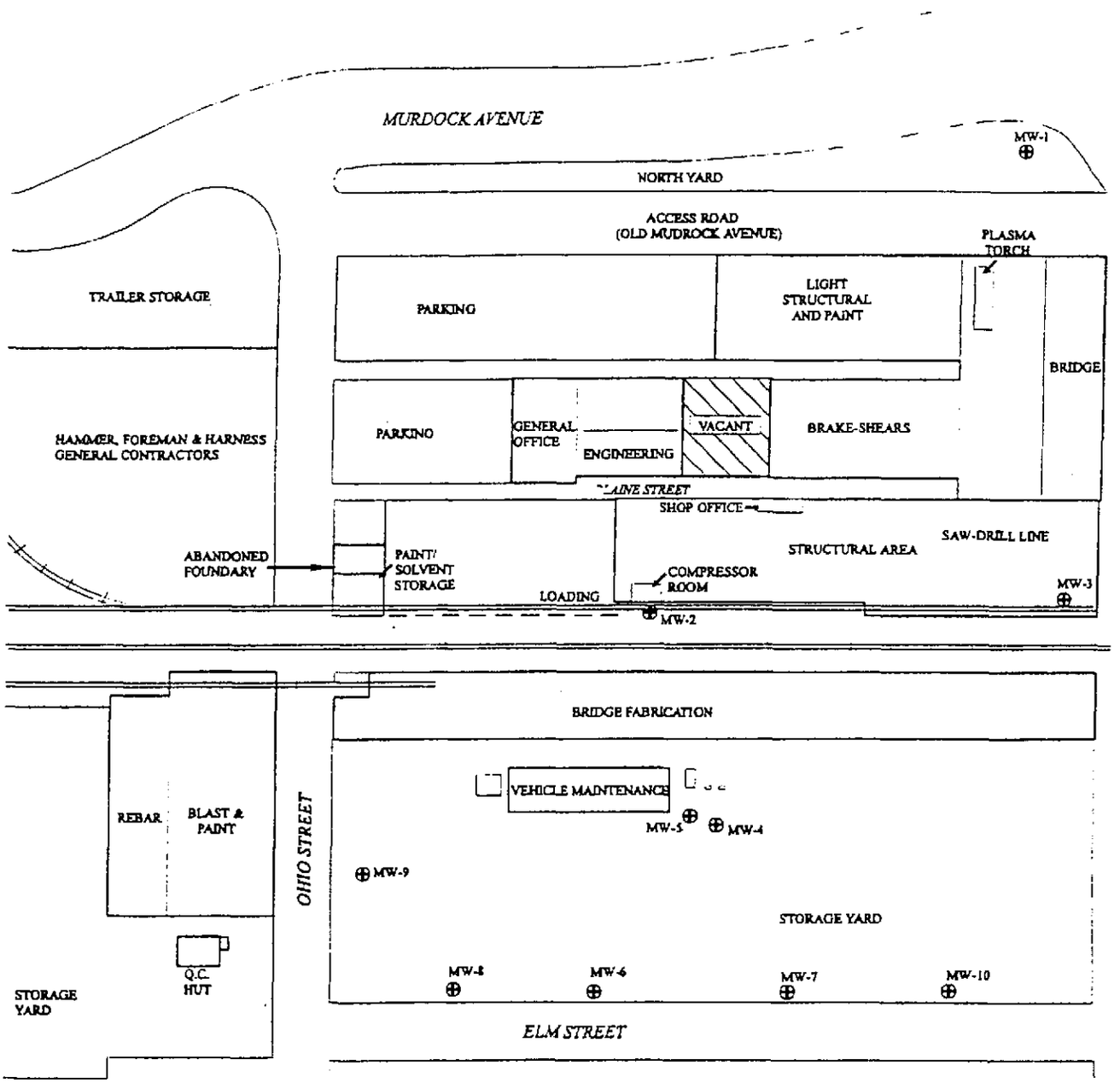
The conclusions which may be drawn from the results of this investigation, along with a review of previous work at the site is as follows:

- The concentrations of VOCs in the groundwater are below KALs at the locations of the monitoring wells along the downgradient property boundary;

- The concentration of BTEX constituents near the source area (MW-4 and MW-5) are decreasing with time. With the removal of the UST and ASTs it is highly probable that these constituent's concentrations will continue to decrease as natural biological degradation of these compounds occurs. Currently as well as historically, it appears that the aquifer has had sufficient biological capacity to degrade these constituents within the site boundaries;

- The probability for higher concentrations of constituents to migrate from the source area towards the south will continue to decrease with time because of the ongoing natural degradation processes in the source area; and

- Lead concentrations in groundwater appear to be related to the presence of natural concentrations of lead within the aquifer sediments which leach out in preserved samples, rather than from elevated concentrations of dissolved lead in groundwater.



LEGEND
⊕ MONITORING WELLS

N

1" = 200"

Figure 2
SITE PLOT PLAN

Christopher Steel, Inc.
Wichita, KS

Dames & Moore

TABLE 1
1995 GROUNDWATER SAMPLES ANALYTICAL RESULTS

CHRISTOPHER STEEL
WICHITA, KANSAS

SAMPLE IDENTIFICATION	MW-1	MW-2	MW-3	MW-4	MW-4A	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
ANALYSIS	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Lead (TOTAL) (KAL=50 Ug/L)	53.4	21.8	21.6	ND(5)	ND(5)	ND(5)	5.6	ND(5)	5	ND(5)	35.9
BENZENE (KAL= 5 ug/L)	ND(5)	ND(5)	ND(5)	570	720	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
TETRACHLOROETHENE (KAL=7 ug/L)	ND(5)	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
TOLUENE (KAL = 2,000 ug/L)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	16	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
ETHYLBENZENE (KAL = 680 ug/L)	ND(5)	ND(5)	ND(5)	62	63	82	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
XYLENES (TOTAL) (KAL = 440 ug/L)	ND(5)	ND(5)	ND(5)	78	86	330	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)
CIS-1,2-DICHLOROETHENE (KAL = 70 ug/L)	ND(5)	ND(5)	ND(5)	5.8	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)

KAL Kansas Action level
ND Below laboratory detection limit
NA Not analyzed
MW-4A Duplicate sample

Table 2
1992 Groundwater Samples Analytical Results
Christopher Steel
Wichita, Kansas

ANALYTE MDL 5ug/l	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	KDHE ACTION LEVELS	COMPRESSOR WELL
BENZENE	ND	ND	ND	1,400	97	ND	5	ND
ETHYLBENZENE	ND	ND	ND	ND(50)	170	ND	680	ND
TOLUENE	ND	ND	ND	ND(50)	440	ND	2,000	ND
XYLENES	ND	ND	ND	310	670	ND	440	ND
TCE	ND	ND	18	ND(50)	ND(25)	ND	5	ND
TTCE	ND	6	ND	ND(50)	ND(25)	ND	5	ND
1,2-DCA	ND	ND	ND	ND	ND	ND	5	ND
MINERAL SPIRITS MDL 0.4mg/L	--	--	12 (4)	--	--	--	--	--
GASOLINE MDL 0.4mg/L	--	--	ND	--	--	--	--	--
DIESEL FUEL MDL 0.4mg/L	--	--	ND	--	--	--	--	--
FUEL OIL MDL 0.4mg/L	--	--	ND	--	--	--	--	--
MOTOR OIL MDL 0.4mg/L	--	--	ND	--	--	--	--	--
BNAs MDL 10-50mg/L	--	--	ND	--	--	--	--	--

MDL: Method detection limit

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REMEDIAL ACTION REPORT
VOLUME 1 OF 3

CHRISTOPHER STEEL
1221 EAST MURDOCK AVENUE
WICHITA, KANSAS

May 29, 1996

DAMES & MOORE

Prepared by:
Dames & Moore, Inc.
Overland Park, Kansas
Project No. 30804-002

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Appendix A - Sanborn Fire Insurance Maps
Appendix B - Paint/Solvent Area
Appendix C - Compressor Room Area

Volume 2 of 3 (continued)

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Appendix J - Dames & Moore, "Report: Underground Storage Tank, Groundwater Investigation, Christopher Steel, Inc." dated March 1, 1996

EXECUTIVE SUMMARY

Dames & Moore was retained to perform environmental remediation services at the Christopher Steel facility located at 1221 East Murdock Avenue, Wichita, Kansas. Figure 1 presents a site location map. This report documents the remedial activities at the site and provides background information including a site description, local geology and hydrogeology, site history, and summary of previous site assessments; and presents the laboratory analytical data for soil, and groundwater collected during the remediation. The scope of work for the remediation activities was outlined in the Dames & Moore proposals of May 12, 1995, and November 21, 1995. The overall remediation activities consisted of the following (italicized descriptions indicate that the results are discussed in a separate report by Dames & Moore - see Appendix J):

Phase 1- Collected and disposed of hazardous/special solid waste materials which were identified during KDHE inspections of the subject property.

Phase 2- Collected and disposed of hazardous/special liquids waste materials which were identified in previous environmental assessments and noted as concerns by KDHE.

Phase 3- Performed general housekeeping over the subject property which involved the collection of non-hazardous solid waste, power washing of stained areas and the sweeping of facility floors.

Phase 4- *Installed four (4) monitoring wells and collected a round of groundwater samples from all monitoring wells for laboratory analyses. The groundwater phase of investigation is described in a different Dames & Moore report submitted under separate cover.*

Phase 5- *Abandoned three water wells located in the compressor room of Building D, outside the Building D compressor room, and in the southwest corner of Building A. Again, this activity is described in a different Dames & Moore report, submitted under separate cover.*

Dames & Moore's conclusions, based on the results of the first three phases of remedial activity, are presented as follows for each specific work area.

Paint/Solvent Area: The Paint/Solvent Area is located as shown on Figure 2, Site Plot Plan, to the south of the abandoned foundry, to the west of Building D and to the northeast of Building G. At this area, Dames & Moore excavated approximately 277 tons from beneath an area of visible surficial soil staining noted by KDHE. After excavation, confirmatory soil samples were collected from the side walls and floor of the excavation. Analytical results from these samples showed no detectable concentrations of volatile organic compounds (VOCs), and Total Petroleum Hydrocarbons (TPH) below the 100 mg/kg criterion which Dames & Moore used for excavation. This is also the standard criterion used by KDHE as a cleanup level for undifferentiated petroleum hydrocarbons in soil, although no cleanup level has been formally established by KDHE for TPH at the Christopher Steel site. Therefore, it is important to note that this criterion represents a voluntary criterion on the

part of Christopher Steel. Soil gas surveying in the paint/solvent area, outside the excavated area, showed no detectable concentrations of VOCs.

Compressor Room Area: approximately 99 tons of visibly impacted soil were excavated from the outside of the compressor room area. One of the confirmation samples collected after initial excavation showed 730 mg/kg of TPH as motor oil. Additional excavation was therefore performed to remove 20 additional tons of impacted materials at the location of that sample. A concentration of 55 mg/kg TPH as motor oil was reported for the final confirmation sample, collected from the bottom of the excavation. This is below the 100 mg/kg criterion used by Dames & Moore for excavation (and the typical KDHE standard of 100 mg/kg).

Former Above-ground Storage Tank Area: a former above-ground storage tank (AST) area south of Building F showed surface staining, and was excavated to the depth of the water table (14 ft below ground surface). Approximately 263 tons of impacted soil were removed. Confirmation samples were collected from the downgradient side wall of the excavation, to document remaining VOC and TPH concentrations, if any. Analytical results from the two wall samples which were collected reported no detectable concentrations of VOCs, no detectable TPH concentration at 4 feet, and TPH as fuel oil at 62 mg/kg at 12 feet, just above the water table. This result was below the 100 mg/kg criterion which Dames & Moore used for excavation (and the typical KDHE standard of 100 mg/kg). Dames & Moore did not continue excavation below the water table, since the primary contaminant is diesel and Dames & Moore's previous investigations at the site have shown diesel impact to groundwater. Remaining impacted soils below groundwater at the former AST area, if any, are most effectively addressed as part of the groundwater monitoring program already in place (see Appendix J, "Report: Underground Storage Tank, Groundwater Investigation, Christopher Steel, Inc." dated March 1, 1996).

A small, separate area of about 5 ft by 5 ft in the vicinity of the maintenance shed and the AST area was also excavated, to a depth of 3 ft.

Near the small stained area west of the former AST area, three soil gas samples were collected at depths of 5 and 12 ft. The results of the soil gas sampling showed relatively low concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) constituents (10.5 parts per billion volume [ppbv], total BTEX) in the 5 ft depth soil gas samples in this area. At 12 feet, the maximum concentration was 220 ppbv total BTEX. Based on these results, Dames & Moore concluded that further soil and groundwater sampling was not warranted.

Area Southwest of Building F: A stained area was identified by KDHE, located southwest of Building F just inside the fenced area, and west of the former AST area described above . Upon further investigation, an area close to the surface was found to be impacted from a former above-ground compressor oil tank inside Building F. Dames & Moore excavated an area 12 by 15 feet, to a depth of 3 feet. Confirmation samples from the walls and floor of the excavation were collected. Off-site analysis confirmed the presence of TPH as motor oil, at 2200 mg/kg. In response to these results, the excavation was expanded from 15 ft by 12 ft to 58 ft by 24 ft, with depths of 2 to 3 feet.

A total of 76 tons of impacted soil was removed from the excavation. Final confirmation samples from the walls and floor of the excavation reported TPH at 42 mg/kg in the floor sample, and 70 mg/kg TPH in the wall sample. Both results were below the 100 mg/kg criterion Dames & Moore used for excavation (and the typical KDHE standard of 100 mg/kg).

Building G - Blast and Paint: waste blast sand and paint chips were removed from an area of Building G covering approximately 25,000 square feet. The blast sand and paint chips were consolidated in a staging area, and subsequently disposed of. The approximate quantity of material was 79 tons.

Also, approximately 116 tons of soil at the south end of Building G were excavated to address an area of visibly stained soils. Samples were collected and analyzed for Priority Pollutant metals, TPH, VOCs, and semivolatiles. Several metals were found to be present. Of these, however, only lead, chromium and mercury have established Kansas Action Levels in soils. Total concentrations of these three metals at the Christopher Steel site were below Kansas Action Levels for soil. Also, a TCLP analysis conducted for lead and chromium showed leachable lead was not detectable, and leachable chromium was below the RCRA TCLP limit of 5 mg/kg in the samples collected.

TPH as motor oil was detected in all four samples collected (ranging from 140 to 260 mg/kg). TPH as diesel fuel was also detected in three of the four samples (ranging from 7.3 to 9.9 mg/kg).

Dames & Moore noted that the sampling locations were inside a covered building (Building G), which would tend to lessen the potential for contaminant migration through leaching. Because of the area's restricted access, the lack of VOCs, and the relatively low hazard of TPH, Dames & Moore considered further excavation to be unwarranted.

Building D Bays: approximately 60 tons of stained soil were excavated from the dirt bays within Building D. Samples were collected and analyzed for Priority Pollutant metals, TPH, VOCs, and semivolatiles. Several metals were found to be present. Of these, however, only lead, chromium and mercury have established Kansas Action Levels in soils. Total concentrations of these three metals at the Christopher Steel site were below Kansas Action Levels for soil, except for lead at 603 mg/kg in the southwest bay. Also, a TCLP analysis conducted for lead and chromium showed both leachable lead and leachable chromium to be present at concentrations less than the RCRA TCLP limit of 5 mg/L in the samples collected.

TPH as motor oil was detected in all four samples collected (ranging from 320 to 3000 mg/kg). Several polynuclear aromatic hydrocarbon compounds were also detected, but at concentrations less than 1 mg/kg.

Dames & Moore noted that all of the above sampling locations are inside a covered building which would tend to lessen the potential for contaminant migration through leaching. Because of the area's restricted access, the lack of VOCs, and the relatively low hazard of TPH, Dames & Moore considered further excavation to be unwarranted.

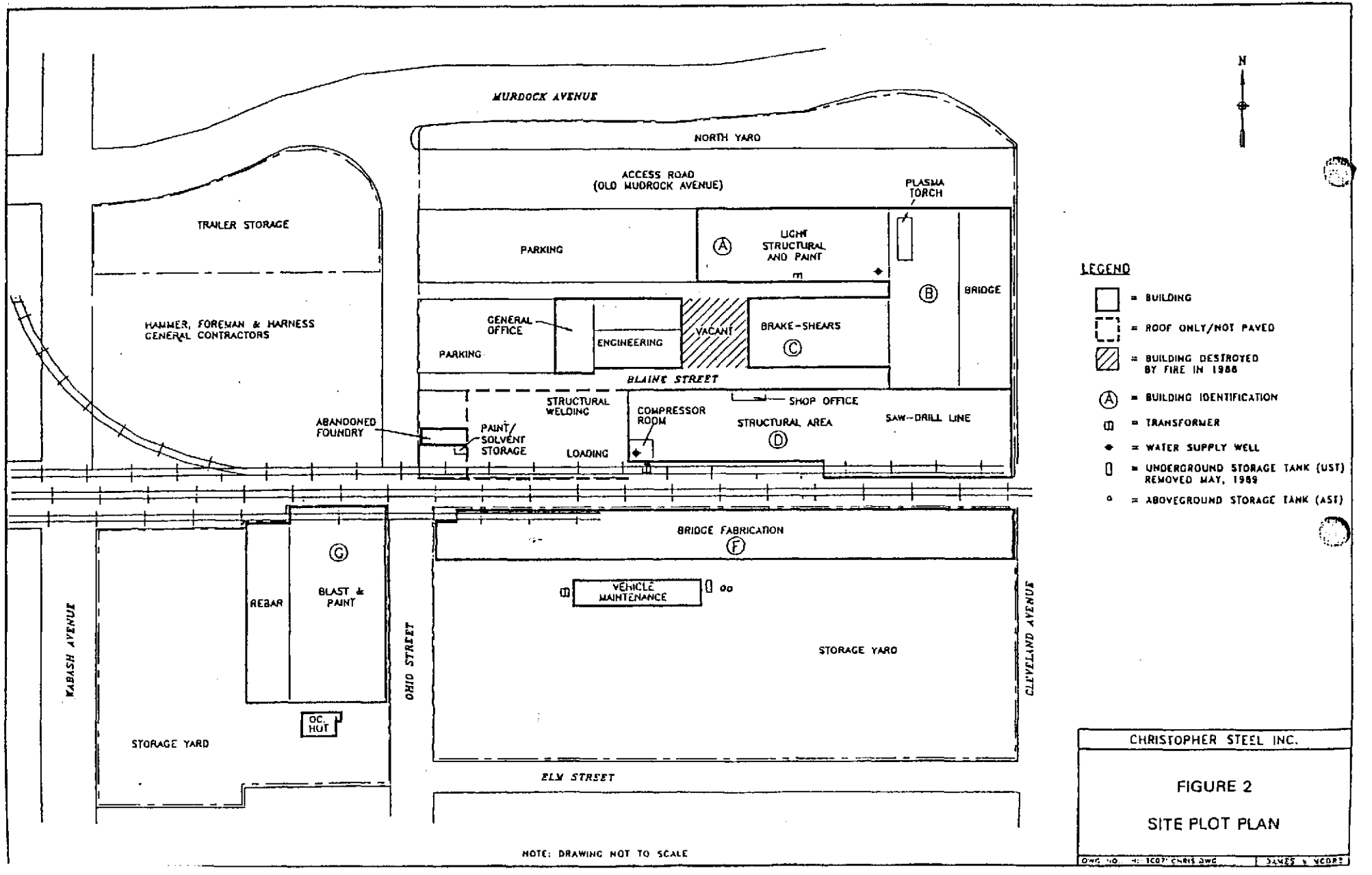
Buildings C & D, Concrete Floors & Hydraulic Pits: several stained areas identified by KDHE on the concrete floors and hydraulic pits in Building C and D were power washed. The liquid waste generated during the power wash was collected and sampled prior to offsite disposal. Soil sampling around the seven machine pits was performed. All borings were advanced at least two feet below the base of the machine pit. No visible signs of impact from hydraulic oil were observed in any of the soil borings. Soil samples were collected for TPH analysis from the two feet depth interval beginning at the base of the machine pit. Laboratory analysis reported the presence of TPH as diesel fuel in Pit #4, but at only 6.5 mg/kg, well below the 100 mg/kg criterion used by Dames & Moore for excavation.

Drum Removal: drums located throughout the site property were collected, an inventory was conducted, and all 55-gallon drums were divided into waste streams based on drum content. Empty drums were collected, crushed and disposed of as solid waste. The 55-gallon drums were profiled, properly labeled and staged in one area for disposal.

The above paragraphs outline the work performed by Dames & Moore at each of the specific work areas remediated. Following receipt of the analytical results for the final confirmatory samples, all excavations were backfilled. Sand backfill material was used and placed in the excavation in loose lifts which were compacted with a backhoe. The excavation was returned to within 12 inches of grade with sand and then extended upward to original grade level with a compacted AB3 stone-based material. Dames & Moore's field supervisor monitored the backfilling operation.

Materials identified by KDHE and materials generated from the remediation activities performed during the project were disposed of in an appropriate manner, according to their physical properties and concentrations.

Based on the above conclusions and remedial action performed at the site, Dames & Moore concludes that the RCRA issues raised by KDHE which are described in this report have been satisfactorily addressed and recommends that no further action should be taken regarding those issues.


MURDOCK AVENUE
NORTH YARD
ACCESS ROAD
(OLD MUDROCK AVENUE)
PLASMA TORCH
TRAILER STORAGE
PARKING
LIGHT STRUCTURAL AND PAINT
BRIDGE
HAMMER, FOREMAN & HARNESS GENERAL CONTRACTORS
GENERAL OFFICE
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VACANT
BRAKE-SHEARS
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= WATER SUPPLY WELL
= UNDERGROUND STORAGE TANK (UST) REMOVED MAY, 1989
= ABOVEGROUND STORAGE TANK (AST)
CHRISTOPHER STEEL INC.
FIGURE 2
SITE PLOT PLAN

FIGURE 7

AREA SOUTHWEST OF BUILDING F, ORIGINAL EXCAVATION AND SAMPLING LOCATIONS

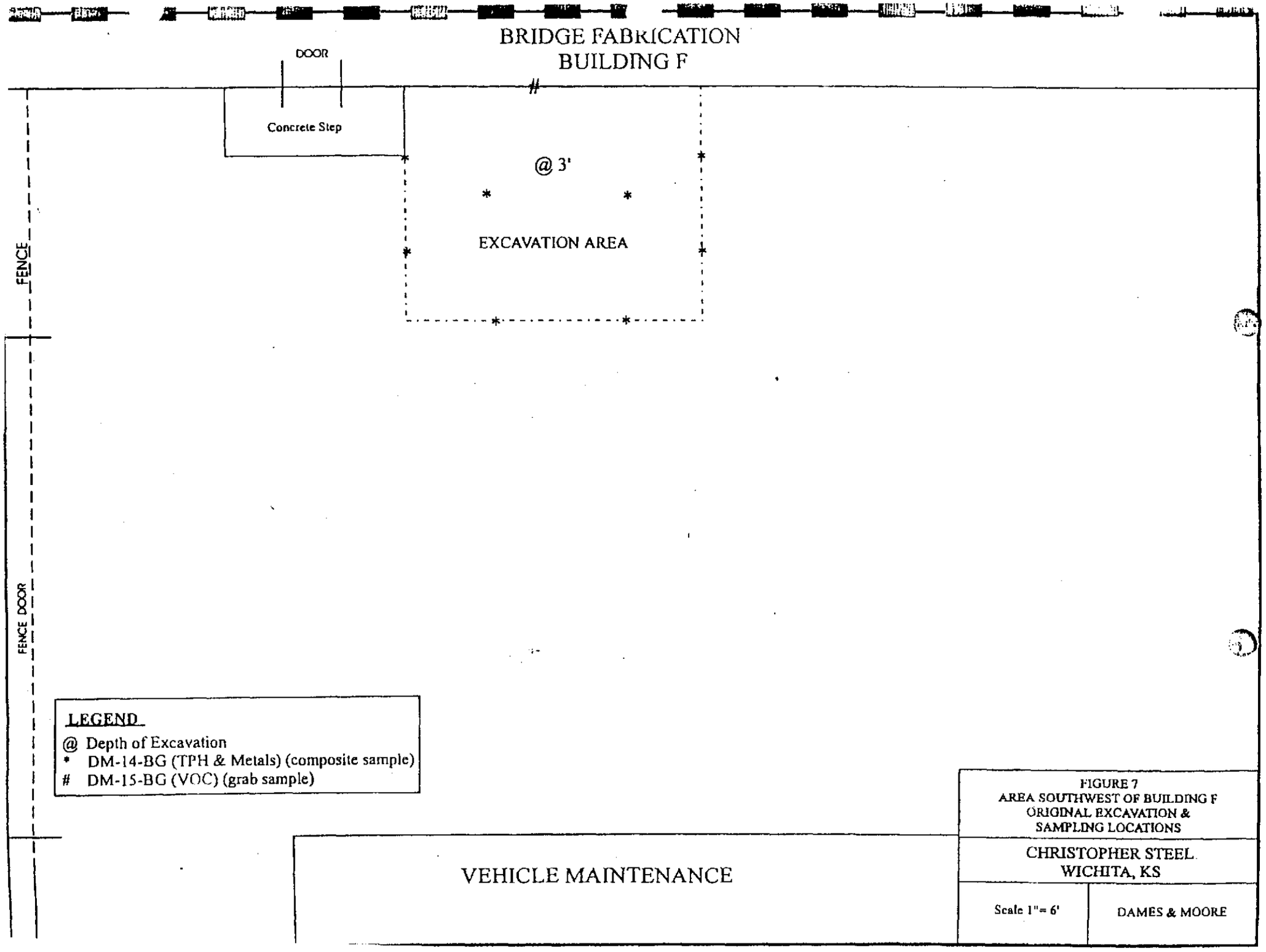


FIGURE 7
AREA SOUTHWEST OF BUILDING F
ORIGINAL EXCAVATION &
SAMPLING LOCATIONS

CHRISTOPHER STEEL
WICHITA, KS

Scale 1"= 6'

DAMES & MOORE

FIGURE 8

AREA SOUTHWEST OF BUILDING F, EXPANDED EXCAVATION AND SAMPLING LOCATIONS

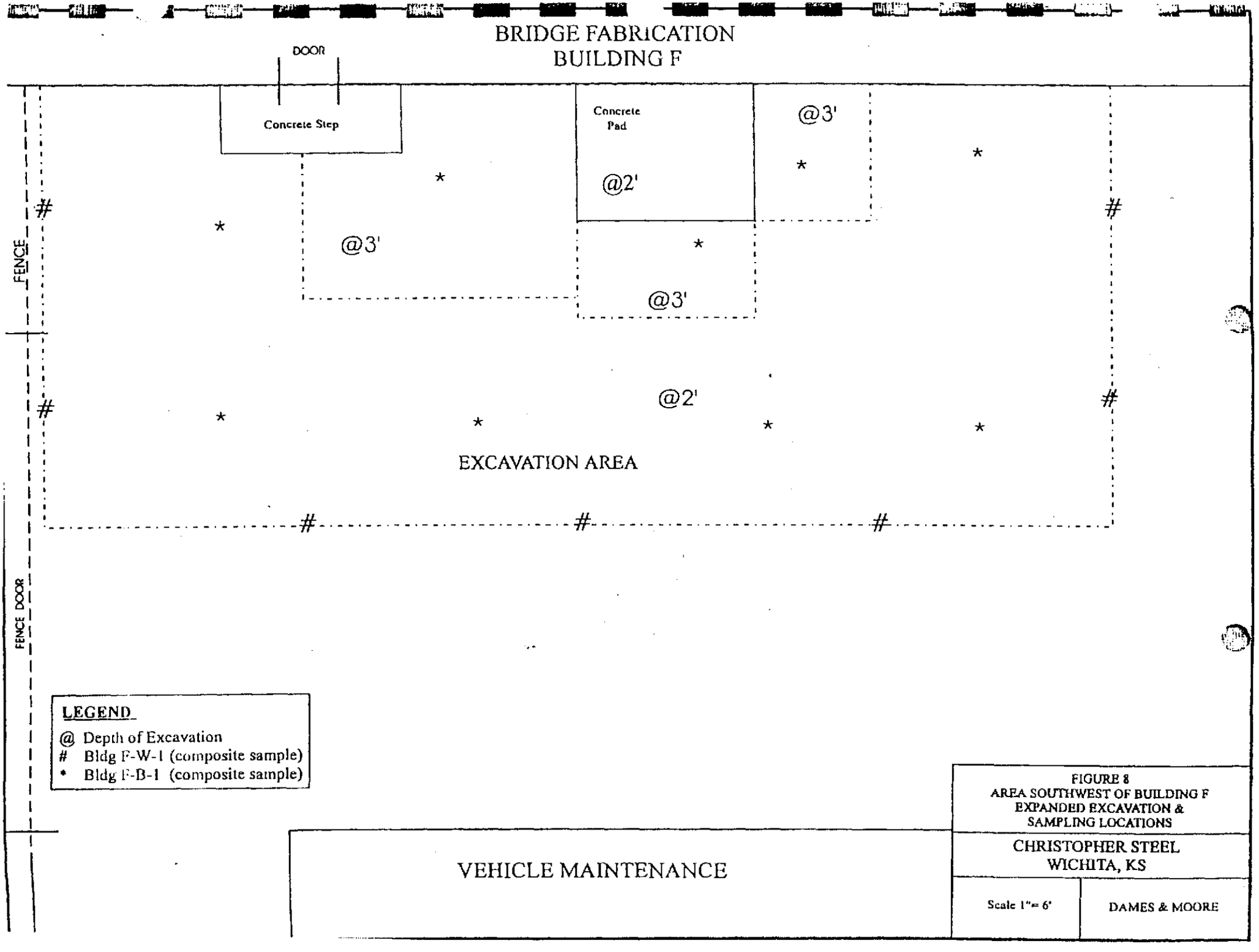


FIGURE 8
AREA SOUTHWEST OF BUILDING F
EXPANDED EXCAVATION &
SAMPLING LOCATIONS

CHRISTOPHER STEEL
WICHITA, KS

Scale 1"= 6'

DAMES & MOORE

VOLATILE ORGANICS

Method 8260

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: West Hazmat Contracting, Inc.
Client Project ID: Christopher Steel–KS 50-693
Lab Sample ID: 95-11-054-01

Sample ID: BLD "F" Pit 3

Date Collected: 11/03/95
Date Analyzed: 11/15/95

Sample Matrix: Soil
Sample Weight: 5 g
Results are reported on a wet weight basis.

Analyte	Results (ug/kg)	Detection Limit (ug/kg)
Chloromethane	ND	10
Bromomethane	ND	10
Vinyl chloride	ND	10
Chloroethane	ND	10
Methylene chloride	59 B	5
Acetone	39 B	10
Carbon disulfide	ND	5
1,1-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
cis-1,2-Dichloroethene	6	5
trans-1,2-Dichloroethene	ND	5
Chloroform	ND	5
1,2-Dichloroethane	ND	5
2-Butanone	ND	10
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
Vinyl acetate	ND	10
Bromodichloromethane	ND	5
1,2-Dichloropropane	ND	5
cis-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
Dibromochloromethane	ND	5
1,1,2-Trichloroethane	ND	5
Benzene	2 J	5
trans-1,3-Dichloropropene	ND	5
Bromoform	ND	5
2-Hexanone	ND	10
4-Methyl-2-pentanone	ND	10
Tetrachloroethene	22	5
1,1,2,2-Tetrachloroethane	ND	5
Toluene	4 J	5
Chlorobenzene	ND	5
Ethylbenzene	3 J	5
Styrene	ND	5
Total Xylenes	19	5

SURROGATE RECOVERIES

Analyte	% Recovery	%Rec Limits
Dibromofluoromethane	120	80 - 120
Toluene-d8	95	81 - 117
Bromofluorobenzene	125 *	74 - 121

ND = Not Detected
B = Analyte found in Blank
J = Estimated value, analyte found below detection limit
* = Out of Limits

VOLATILE ORGANICS

Method 8260

Sample ID

BLD "F" Pit 3

Lab Name: Analytical Technologies of Colorado, Inc.
Client Name: West Hazmat Contracting, Inc.
Client Project ID: Christopher Steel–KS 50-693
Lab Sample ID: 95-11-054-01 DL

Date Collected: 11 03 95
Date Analyzed: 11 14 95

Sample Matrix: Soil
Sample Weight: 1 g
Results are reported on a wet weight basis.

Analyte	Results (ug/kg)	Detection Limit (ug/kg)
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl chloride	ND	50
Chloroethane	ND	50
Methylene chloride	75	25
Acetone	48 J	50
Carbon disulfide	ND	25
1,1-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
cis-1,2-Dichloroethene	ND	25
trans-1,2-Dichloroethene	ND	25
Chloroform	ND	25
1,2-Dichloroethane	ND	25
2-Butanone	ND	50
1,1,1-Trichloroethane	ND	25
Carbon tetrachloride	ND	25
Vinyl acetate	ND	50
Bromodichloromethane	ND	25
1,2-Dichloropropane	ND	25
cis-1,3-Dichloropropene	ND	25
Trichloroethene	ND	25
Dibromochloromethane	ND	25
1,1,2-Trichloroethane	ND	25
Benzene	ND	25
trans-1,3-Dichloropropene	ND	25
Bromoform	ND	25
2-Hexanone	ND	50
4-Methyl-2-pentanone	ND	50
Tetrachloroethene	ND	25
1,1,2,2-Tetrachloroethane	ND	25
Toluene	ND	25
Chlorobenzene	ND	25
Ethylbenzene	ND	25
Styrene	ND	25
Total Xylenes	28	25

SURROGATE RECOVERIES

Analyte	% Recovery	%Rec Limits
Dibromofluoromethane	109	80 - 120
Toluene-d8	102	81 - 117
Bromofluorobenzene	91	74 - 121

ND = Not Detected
J = Estimated value, analyte found below detection limit
DL = Dilution

AL LABORATORIES, INC.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

ORATORY REPORT: REFERENCE #: 9508556

SENT DAMES & MOORE
: 6310 LAMAR AVE, SUITE 135
OVERLAND PARK, KS 66202
ROBERT WEBER

DATE REPORTED: 08/30/95
DATE COLLECTED: 08/28/95
DATE RECEIVED: 08/29/95
P.O. #:

RECEIVED SEP 13 1995

Sample ID: PSSA STOCKPILE Sample Matrix: SOILS

TEST	METHOD-CAS #	RESULT	UNITS	MDL	ANALYZED	EXTRACTED
LATILES	SW 846 8240					
ACETONE	67-64-1	ND	UG/KG	5.0	08/30/95DN	
ACETONITRILE	75-05-8	ND	UG/KG	5.0	08/30/95DN	
ACROLEIN	107-02-8	ND	UG/KG	5.0	08/30/95DN	
ACRYLONITRILE	107-13-1	ND	UG/KG	5.0	08/30/95DN	
ALLYL ALCOHOL	107-18-6	ND	UG/KG	5.0	08/30/95DN	
ALLYL CHLORIDE	107-05-1	ND	UG/KG	5.0	08/30/95DN	
BENZENE	71-43-2	ND	UG/KG	5.0	08/30/95DN	
BENZYL CHLORIDE	100-44-7	ND	UG/KG	5.0	08/30/95DN	
BROMOACETONE	598-31-2	ND	UG/KG	5.0	08/30/95DN	
ROMODICHLOROMETHANE	75-27-4	ND	UG/KG	5.0	08/30/95DN	
OMOFORM	75-25-2	ND	UG/KG	5.0	08/30/95DN	
BROMOMETHANE	74-83-9	ND	UG/KG	5.0	08/30/95DN	
2-BUTANONE	78-93-3	ND	UG/KG	5.0	08/30/95DN	
CARBON DISULFIDE	75-15-0	ND	UG/KG	5.0	08/30/95DN	
CARBON TETRACHLORIDE	56-23-5	ND	UG/KG	5.0	08/30/95DN	
CHLOROBENZENE	108-90-7	ND	UG/KG	5.0	08/30/95DN	
CHLORODIBROMOMETHAND	124-48-1	ND	UG/KG	5.0	08/30/95DN	
CHLOROETHANE	75-00-3	ND	UG/KG	5.0	08/30/95DN	
2-CHLOROETHANOL	107-07-3	ND	UG/KG	5.0	08/30/95DN	
2-CHLOROETHYL VINYL ETHER	110-75-8	ND	UG/KG	5.0	08/30/95DN	
CHLOROFORM	67-66-3	ND	UG/KG	5.0	08/30/95DN	
CHLOROMETHANE	74-87-3	ND	UG/KG	5.0	08/30/95DN	
CHLOROPRENE	126-99-8	ND	UG/KG	5.0	08/30/95DN	
3-CHLOROPROPIONITRILE	562-76-7	ND	UG/KG	5.0	08/30/95DN	
1,2-DIBROMO-3-CHLOROPROPA	96-12-8	ND	UG/KG	5.0	08/30/95DN	
1,2-DIBROMOMETHANE	106-93-4	ND	UG/KG	5.0	08/30/95DN	
DIBROMOMETHANE	74-95-3	ND	UG/KG	5.0	08/30/95DN	
1,4-DICHLORO-2-BUTENE	764-41-0	ND	UG/KG	5.0	08/30/95DN	
DICHLORODIFLUOROMETHANE	75-71-8	ND	UG/KG	5.0	08/30/95DN	
1,1-DICHLOROETHANE	75-34-3	ND	UG/KG	5.0	08/30/95DN	
1,2-DICHLOROETHANE	107-06-2	ND	UG/KG	5.0	08/30/95DN	
1,1-DICHLOROETHENE	75-35-4	ND	UG/KG	5.0	08/30/95DN	
cis-1,2-DICHLOROETHENE	540-59-0	ND	UG/KG	5.0	08/30/95DN	
trans-1,2-DICHLOROETHENE	156-60-5	ND	UG/KG	5.0	08/30/95DN	

Sample ID: PSSA STOCKPILE Sample Matrix: SOILS

TEST	METHOD-CAS #	RESULT	UNITS	MDL	ANALYZED	EXTRACTED
1,2-DICHLOROPROPANE	78-87-5	ND	UG/KG	5.0	08/30/95DN	
1,3-DICHLORO-2-PROPANOL	96-23-1	ND	UG/KG	5.0	08/30/95DN	
cis-1,3-DICHLOROPROPENE	10061-01-5	ND	UG/KG	5.0	08/30/95DN	
trans-1,3-DICHLOROPROPENE	10061-02-6	ND	UG/KG	5.0	08/30/95DN	
1,2:3,4-DIEPOXYBUTANE	1464-53-5	ND	UG/KG	5.0	08/30/95DN	
1,4-DIOXANE	123-91-1	ND	UG/KG	5.0	08/30/95DN	
EPICHLOROHYDRIN	106-89-8	ND	UG/KG	5.0	08/30/95DN	
ETHANOL	64-10-5	ND	UG/KG	5.0	08/30/95DN	
ETHYLBENZENE	100-41-4	ND	UG/KG	5.0	08/30/95DN	
ETHYLENE OXIDE	75-21-8	ND	UG/KG	5.0	08/30/95DN	
ETHYL METHACRYLATE	97-63-2	ND	UG/KG	5.0	08/30/95DN	
2-HEXANONE	591-78-6	ND	UG/KG	5.0	08/30/95DN	
2-HYDROXYPROPIONITRILE	78-97-7	ND	UG/KG	5.0	08/30/95DN	
IODOMETHANE	74-88-4	ND	UG/KG	5.0	08/30/95DN	
ISOBUTYL ALCOHOL	78-83-1	ND	UG/KG	5.0	08/30/95DN	
MALONONITRILE	109-77-3	ND	UG/KG	5.0	08/30/95DN	
METHACRYLONITRILE	126-98-7	ND	UG/KG	5.0	08/30/95DN	
METHYLENE CHLORIDE	75-09-2	ND	UG/KG	5.0	08/30/95DN	
METHYL IODIDE	74-88-4	ND	UG/KG	5.0	08/30/95DN	
METHYL METHACRYLATE	80-62-6	ND	UG/KG	5.0	08/30/95DN	
4-METHYL-2-PENTANONE	108-10-1	ND	UG/KG	5.0	08/30/95DN	
PENTACHLOROETHANE	76-01-7	ND	UG/KG	5.0	08/30/95DN	
2-PICOLINE	109-06-8	ND	UG/KG	5.0	08/30/95DN	
PROPARGYL ALCOHOL	107-19-7	ND	UG/KG	5.0	08/30/95DN	
b-PROPIOLACTONE	57-57-8	ND	UG/KG	5.0	08/30/95DN	
PROPIONITRILE	107-12-0	ND	UG/KG	5.0	08/30/95DN	
n-PROPYLAMINE	107-10-8	ND	UG/KG	5.0	08/30/95DN	
PYRIDINE	110-86-1	ND	UG/KG	5.0	08/30/95DN	
STYRENE	100-42-5	ND	UG/KG	5.0	08/30/95DN	
1,1,1,2-TETRACHLOROETHANE	630-20-6	ND	UG/KG	5.0	08/30/95DN	
1,1,2,2-TETRACHLOROETHANE	79-34-5	ND	UG/KG	5.0	08/30/95DN	
TETRACHLOROETHENE	127-18-4	8.60	UG/KG	5.0	08/30/95DN	
TOLUENE	108-88-3	ND	UG/KG	5.0	08/30/95DN	
1,1,1-TRICHLOROETHANE	71-55-6	ND	UG/KG	5.0	08/30/95DN	
1,1,2-TRICHLOROETHANE	79-00-5	ND	UG/KG	5.0	08/30/95DN	
TRICHLOROETHENE	79-01-6	ND	UG/KG	5.0	08/30/95DN	
TRICHLOROFLUOROMETHANE	75-69-4	ND	UG/KG	5.0	08/30/95DN	
1,2,3-TRICHLOROPROPANE	96-18-4	ND	UG/KG	5.0	08/30/95DN	
VINYL ACETATE	108-05-4	ND	UG/KG	5.0	08/30/95DN	
VINYL CHLORIDE	75-01-4	ND	UG/KG	5.0	08/30/95DN	
XYLENE (TOTAL)	1330-20-7	ND	UG/KG	5.0	08/30/95DN	
4-BROMOFLUOROBENZENE	-	80	125	75		
1,2-DICHLOROETHANE-D4	-	114	125	75		
TOLUENE-D8	-	77	125	75		

Sample ID: BLDG F EXCAVATION WEST Sample Matrix: SOILS

TEST	METHOD-CAS #	RESULT	UNITS	MDL	ANALYZED	EXTRACTED
VOLATILES	SW 846 8240					
ACETONE	67-64-1	ND	UG/KG	5.0	08/30/95DN	
ACETONITRILE	75-05-8	ND	UG/KG	5.0	08/30/95DN	
ACROLEIN	107-02-8	ND	UG/KG	5.0	08/30/95DN	
ACRYLONITRILE	107-13-1	ND	UG/KG	5.0	08/30/95DN	
ALLYL ALCOHOL	107-18-6	ND	UG/KG	5.0	08/30/95DN	
ALLYL CHLORIDE	107-05-1	ND	UG/KG	5.0	08/30/95DN	
BENZENE	71-43-2	ND	UG/KG	5.0	08/30/95DN	
BENZYL CHLORIDE	100-44-7	ND	UG/KG	5.0	08/30/95DN	
BROMOACETONE	598-31-2	ND	UG/KG	5.0	08/30/95DN	
BROMODICHLOROMETHANE	75-27-4	ND	UG/KG	5.0	08/30/95DN	
BROMOFORM	75-25-2	ND	UG/KG	5.0	08/30/95DN	
BROMOMETHANE	74-83-9	ND	UG/KG	5.0	08/30/95DN	
2-BUTANONE	78-93-3	ND	UG/KG	5.0	08/30/95DN	
CARBON DISULFIDE	75-15-0	ND	UG/KG	5.0	08/30/95DN	
CARBON TETRACHLORIDE	56-23-5	ND	UG/KG	5.0	08/30/95DN	
CHLOROBENZENE	108-90-7	ND	UG/KG	5.0	08/30/95DN	
CHLORODIBROMOMETHAND	124-48-1	ND	UG/KG	5.0	08/30/95DN	
CHLOROETHANE	75-00-3	ND	UG/KG	5.0	08/30/95DN	
2-CHLOROETHANOL	107-07-3	ND	UG/KG	5.0	08/30/95DN	
2-CHLOROETHYL VINYL ETHER	110-75-8	ND	UG/KG	5.0	08/30/95DN	
CHLOROFORM	67-66-3	ND	UG/KG	5.0	08/30/95DN	
CHLOROMETHANE	74-87-3	ND	UG/KG	5.0	08/30/95DN	
LOROPRENE	126-99-8	ND	UG/KG	5.0	08/30/95DN	
-CHLOROPROPIONITRILE	562-76-7	ND	UG/KG	5.0	08/30/95DN	
1,2-DIBROMO-3-CHLOROPROPA	96-12-8	ND	UG/KG	5.0	08/30/95DN	
1,2-DIBROMOMETHANE	106-93-4	ND	UG/KG	5.0	08/30/95DN	
DIBROMOMETHANE	74-95-3	ND	UG/KG	5.0	08/30/95DN	
1,4-DICHLORO-2-BUTENE	764-41-0	ND	UG/KG	5.0	08/30/95DN	
DICHLORODIFLUOROMETHANE	75-71-8	ND	UG/KG	5.0	08/30/95DN	
1,1-DICHLOROETHANE	75-34-3	ND	UG/KG	5.0	08/30/95DN	
1,2-DICHLOROETHANE	107-06-2	ND	UG/KG	5.0	08/30/95DN	
1,1-DICHLOROETHENE	75-35-4	ND	UG/KG	5.0	08/30/95DN	
cis-1,2-DICHLOROETHENE	540-59-0	ND	UG/KG	5.0	08/30/95DN	
trans-1,2-DICHLOROETHENE	156-60-5	ND	UG/KG	5.0	08/30/95DN	
1,2-DICHLOROPROPANE	78-87-5	ND	UG/KG	5.0	08/30/95DN	
1,3-DICHLORO-2-PROPANOL	96-23-1	ND	UG/KG	5.0	08/30/95DN	
cis-1,3-DICHLOROPROPENE	10061-01-5	ND	UG/KG	5.0	08/30/95DN	
trans-1,3-DICHLOROPROPENE	10061-02-6	ND	UG/KG	5.0	08/30/95DN	
1,2:3,4-DIEPOXYBUTANE	1464-53-5	ND	UG/KG	5.0	08/30/95DN	
1,4-DIOXANE	123-91-1	ND	UG/KG	5.0	08/30/95DN	
EPICHLOROHYDRIN	106-89-8	ND	UG/KG	5.0	08/30/95DN	
ETHANOL	64-10-5	ND	UG/KG	5.0	08/30/95DN	
ETHYLBENZENE	100-41-4	ND	UG/KG	5.0	08/30/95DN	
ETHYLENE OXIDE	75-21-8	ND	UG/KG	5.0	08/30/95DN	
ETHYL METHACRYLATE	97-63-2	ND	UG/KG	5.0	08/30/95DN	
2-HEXANONE	591-78-6	ND	UG/KG	5.0	08/30/95DN	
2-HYDROXYPROPIONITRILE	78-97-7	ND	UG/KG	5.0	08/30/95DN	

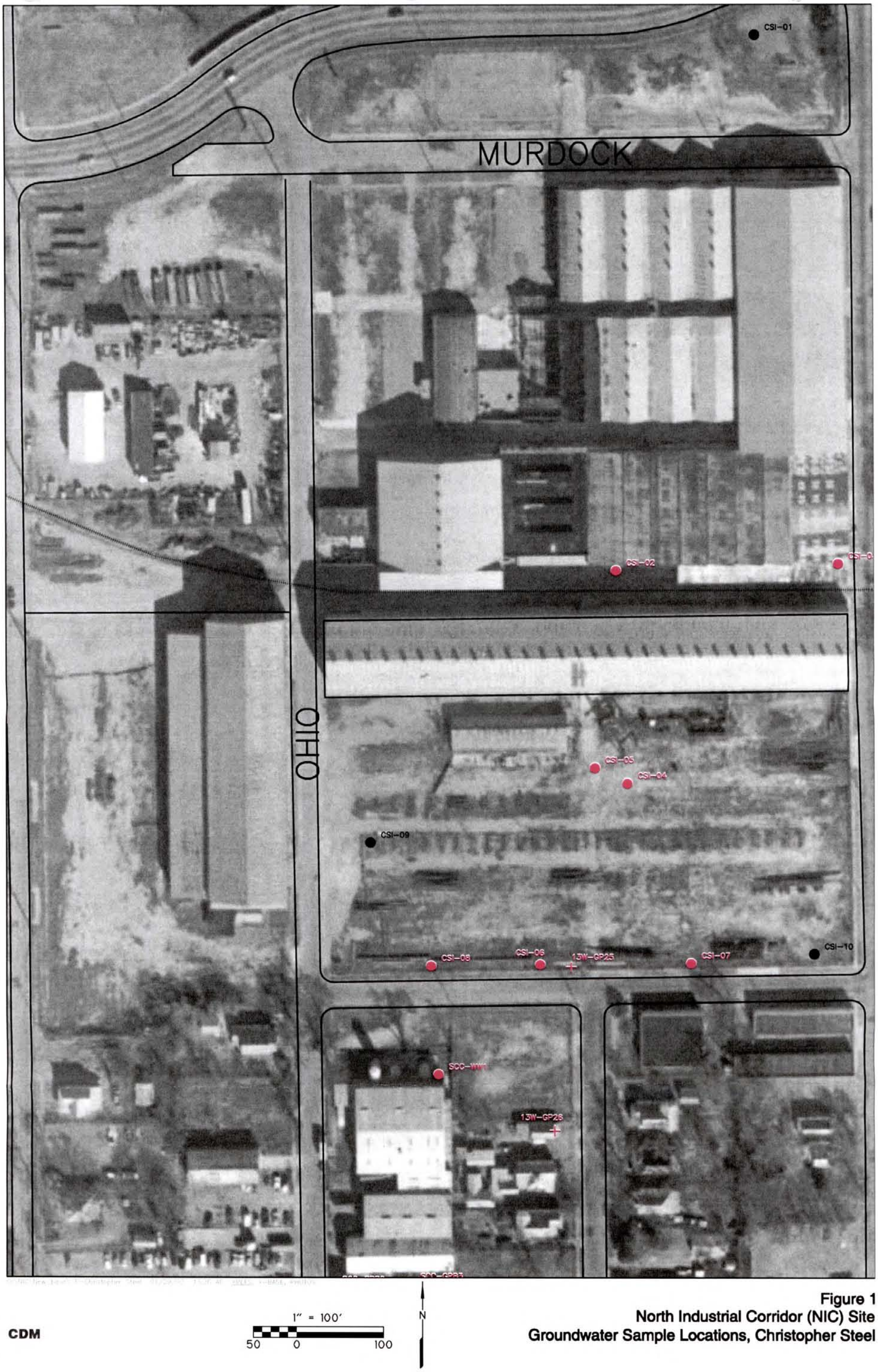
Sample ID: BLDG F EXCAVATION WEST Sample Matrix: SOILS

TEST	METHOD-CAS #	RESULT	UNITS	MDL	ANALYZED	EXTRACTED
IODOMETHANE	74-88-4	ND	UG/KG	5.0	08/30/95DN	
ISOBUTYL ALCOHOL	78-83-1	ND	UG/KG	5.0	08/30/95DN	
MALONONITRILE	109-77-3	ND	UG/KG	5.0	08/30/95DN	
METHACRYLONITRILE	126-98-7	ND	UG/KG	5.0	08/30/95DN	
METHYLENE CHLORIDE	75-09-2	ND	UG/KG	5.0	08/30/95DN	
METHYL IODIDE	74-88-4	ND	UG/KG	5.0	08/30/95DN	
METHYL METHACRYLATE	80-62-6	ND	UG/KG	5.0	08/30/95DN	
4-METHYL-2-PENTANONE	108-10-1	ND	UG/KG	5.0	08/30/95DN	
PENTACHLOROETHANE	76-01-7	ND	UG/KG	5.0	08/30/95DN	
2-PICOLINE	109-06-8	ND	UG/KG	5.0	08/30/95DN	
PROPARGYL ALCOHOL	107-19-7	ND	UG/KG	5.0	08/30/95DN	
b-PROPIOLACTONE	57-57-8	ND	UG/KG	5.0	08/30/95DN	
PROPIONITRILE	107-12-0	ND	UG/KG	5.0	08/30/95DN	
n-PROPYLAMINE	107-10-8	ND	UG/KG	5.0	08/30/95DN	
PYRIDINE	110-86-1	ND	UG/KG	5.0	08/30/95DN	
STYRENE	100-42-5	ND	UG/KG	5.0	08/30/95DN	
1,1,1,2-TETRACHLOROETHANE	630-20-6	ND	UG/KG	5.0	08/30/95DN	
1,1,2,2-TETRACHLOROETHANE	79-34-5	ND	UG/KG	5.0	08/30/95DN	
TETRACHLOROETHENE	127-18-4	12.3	UG/KG	5.0	08/30/95DN	
TOLUENE	108-88-3	ND	UG/KG	5.0	08/30/95DN	
1,1,1-TRICHLOROETHANE	71-55-6	ND	UG/KG	5.0	08/30/95DN	
1,1,2-TRICHLOROETHANE	79-00-5	ND	UG/KG	5.0	08/30/95DN	
TRICHLOROETHENE	79-01-6	ND	UG/KG	5.0	08/30/95DN	
TRICHLOROFLUOROMETHANE	75-69-4	ND	UG/KG	5.0	08/30/95DN	
1,2,3-TRICHLOROPROPANE	96-18-4	ND	UG/KG	5.0	08/30/95DN	
VINYL ACETATE	108-05-4	ND	UG/KG	5.0	08/30/95DN	
VINYL CHLORIDE	75-01-4	ND	UG/KG	5.0	08/30/95DN	
XYLENE (TOTAL)	1330-20-7	ND	UG/KG	5.0	08/30/95DN	
4-BROMOFLUOROBENZENE	-	88	125	75		
1,2-DICHLOROETHANE-D4	-	117	125	75		
TOLUENE-D8	-	92	125	75		

ND=NONE DETECTED
MDL=MINIMUM DETECTION LIMIT
SU=STANDARD UNITS
BACKGROUND CONTAMINATION
SUR=SURROGATE

APPROVED BY: Terry Koester
TERRY KOESTER
LABORATORY DIRECTOR

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Christopher Steel

Table(s)
Analytical Data Table(s)

TABLE 1

SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE I SOIL BORING SAMPLES

ANALYTE	BENZENE	ETHYLBENZENE	TOLUENE	XYLENES	TPH
MDL	0.250 mg/kg	0.250 mg/kg	0.250 mg/kg	0.750 mg/kg	5 mg/kg
KDHE ACTION LEVEL	1.4 mg/kg	-	-	-	100 mg/kg
MW-1 (4'-9')	ND	ND	ND	ND	ND
MW-1 (9'-14')	ND	ND	ND	ND	ND
MW-2 (0'-4')	ND	ND	ND	ND	ND
MW-2 (4'-9')	ND	ND	ND	ND	8
MW-3 (3'-4')	ND	ND	ND	ND	ND
MW-3 (4'-9')	ND	ND	ND	ND	ND
MW-4 (4'-9')	ND	ND	ND	ND	ND
MW-4 (9'-14')	ND	ND	ND	ND	ND

ND: Not detected at or above the MDL
Note: Analyzed November 9 to 12, 1992

TABLE 2

SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE 1 GROUND WATER SAMPLES

ANALYTE	BENZENE	ETHYLBENZENE	TOLUENE	XYLENES	TCE	TTCE	1,2-DCA
MDL	5 μg/l	5 μg/l	5 μg/l	5 μg/l	5 μg/l	5 μg/l	5 μg/l
KDHE ACTION LEVEL	5	680	2,000	440	5	5	5
MW-1	ND	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	6	ND
MW-3	ND	ND	ND	ND	18	ND	ND
MW-4	1,400	ND(50)	ND(50)	310	ND(50)	ND(50)	ND
MW-5	97	170	440	670	ND(25)	ND(25)	ND
MW-6	ND	ND	ND	ND	ND	ND	ND
COMPRESSOR WELL	ND	ND	ND	ND	ND	ND	ND

ND: Not detected at or above the MDL
TCE: Trichloroethylene
TTCE: Tetrachloroethylene
( ): Elevated MDL
Note: Analyzed November 12 and 13, 1992

TABLE 3

SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE I SURFACE SOIL SAMPLES

ANALYTE	MDL	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8
BARIUM	0.50 mg/kg	23.0	96.0	11,600	22.2	-	-	-	-
CADMIUM	0.05 mg/kg	0.25	0.45	36.7	ND	-	-	-	-
CHROMIUM	0.50 mg/kg	17.0	30.1	1,200	865	-	-	-	-
LEAD	2.5 mg/kg	38.0	270	6,380	44.5	-	-	-	-
SILVER	1.5 mg/kg	ND	ND	ND	1.95	-	-	-	-
ARSENIC	0.30 mg/kg	0.313	3.84	1.68	40.3	-	-	-	-
BENZENE	250 μg/kg	-	-	-	-	-	ND	ND	-
ETHYLBENZENE	250 μg/kg	-	-	-	-	-	ND	ND	-
TOLUENE	250 μg/kg	-	-	-	-	-	ND	ND	-
XYLENE	750 μg/kg	-	-	-	-	-	ND	ND	-
TPH	5 mg/kg	-	-	-	-	ND	-	-	ND

ND: Not detected at or above the MDL
- : Not analyzed for this compound
Note: Analyzed November 11 and 20, 1992

TABLE 4

SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE 2 MW-3 GROUND WATER SAMPLE

ANALYTE	MINERAL SPIRITS	GASOLINE	DIESEL FUEL	FUEL OIL	MOTOR OIL	BNAs
MDL	0.4 mg/L	0.4 mg/L	0.4 mg/L	0.4 mg/L	0.4 mg/L	10-50 μg/L
MW-3	12	ND	ND	ND	ND	ND

ND: Not detected at or above the MDL
Note: Analyzed December 22, 1992

TABLE 5

MONITORING WELL AND GROUND WATER ELEVATIONS

WELL I.D.	TOP OF CASING (feet)	GROUND LEVEL (feet)	DEPTH TO GROUND WATER (feet)	GROUND WATER ELEVATION (feet)
MW-1	1303.40	1300.58	15.61	1287.79
MW-2	1300.94	1301.34	13.80	1287.14
MW-3	1299.93	1300.36	12.68	1287.25
MW-4	1303.32	1300.34	16.48	1286.84
MW-5	1302.99	1300.10	-	-
MW-6	1300.45	1299.65	13.78	1286.67

Note: The elevation reference mark used for determining these elevations was a City of Wichita brass rod in concrete post, 23 feet south and 37 feet east of the centerline of Washington and 9th Street; elevation 112.90 (City Datum), 1300.30 (M.S.L.).

TABLE 6

SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE 4 SOIL BORING SAMPLES

ANALYTE	MDL	SB93-2 (2.5'-5')	SB93-8 (0'-2.5')	SB93-15 (10'-12')
MINERAL SPIRITS	10 mg/kg	ND	NR	-
GASOLINE	10 mg/kg	ND	NR	-
JET FUEL	10 mg/kg	ND	NR	-
KEROSENE	10 mg/kg	ND	NR	-
DIESEL FUEL	10 mg/kg	ND	ND	-
FUEL OIL	10 mg/kg	ND	ND	-
MOTOR OIL	10 mg/kg	ND	ND	-
TPH	10 mg/kg	ND	200	-
VOCs[1]	1,200/620 μg/kg	-	ND	-
ARSENIC[2]	0.25 mg/L	-	-	ND
CHROMIUM[2]	0.25mg/L	-	-	ND
LEAD[2]	0.25 mg/L	-	-	ND

ND: Not detected at or above the MDL
NR: Not reported
- : Not analyzed for this analyte
1 : Sample analyzed at medium level due to the presence of high levels of hydrocarbons
2 : TCLP analysis
Note: Analyzed November 19 to December 13, 1993

TABLE 7
SUMMARY OF OFF-SITE ANALYTICAL RESULTS
PHASE 4 WELL POINT GROUND WATER SAMPLES

ANALYTE	LEAD	BENZENE	TCE	TTCE	1,2-DCA
MDL	0.005 mg/L	5 μg/L	5 μg/L	5 μg/L	5 μg/L
KDHE ACTION LEVEL	0.050	5	5	5	5
HP-1 (13.4)	0.254	ND	ND	ND	ND
HP-2 (11)	0.274	ND	ND	ND	ND
HP-3 (22.5)	0.677	ND	ND	ND	ND
HP-4 (14.5)	0.344	ND	ND	ND	ND
HP-5 (22.5)	0.193	ND	ND	ND	ND
HP-6 (22.5)	0.160	ND	ND	ND	ND
HP-7 (22.5)	0.232	ND	ND	ND	ND
HP-8 (22.5)	0.346	ND	ND	ND	ND
HP-9 (22.5)	0.114	ND	ND	ND	ND
HP-10 (22.5)	0.106	6	ND	ND	ND
HP-11 (22.5)	0.138	ND	ND	ND	ND
HP-12 (22.5)	0.403	ND	ND	ND	ND

ND: Not detected at or above the MDL
TCE: Trichloroethylene
TTCE: Tetrachloroethylene
( ): Sample Depth in feet
Note: Each well point sample was collected from a depth of 20 feet.
Samples analyzed November 24 and 30, 1993

TABLE 8

SUMMARY OF OFF-SITE TCLP ANALYTICAL RESULTS
PHASE 4 SOIL SAMPLES

ANALYTE	MDL	RCRA REGULATORY LEVEL	N. Found. Comp.	PSSA Composite	Bldg. G. Surface
ARSENIC	0.25 mg/L	5	ND	ND	ND
CHROMIUM	0.25 mg/L	5	ND	0.642	ND
LEAD	0.25 mg/L	5	3.56	ND	ND

ND: Not detected at or above the MDL
Note: Analyzed December 8 to 13, 1993

Appendix L-10
Former Coastal Boneyard Facility

PRP Evaluation Summary

Former Coastal Boneyard Facility
Northwest of 29th and Emporia Circle

Potential Source Area PRP and Work Plan Addendum Map ID - 02A

Contaminants of Concern - TCE, TCA and their degradation products, additionally, petroleum hydrocarbons

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Former Coastal Boneyard Facility

TCE and TCA Contamination

Analytical results for samples collected from the shallow aquifer at this location indicate that this area is a potential source of chlorinated VOC contamination. As early as 1984, groundwater sampling data have shown a marked increase in concentrations of TCE along the groundwater flow path through this area. Early data indicating presence of a source area at this location, mainly dissolved chlorinated solvent increases in groundwater, are found in USGS reports of investigations conducted during the mid 1980s (USGS 1984, USGS 1986). The USGS 1986 report *Narrative Report for the Site Investigation of the Former Golden Rule Refinery* provides data from an upgradient Derby Oil Company observation well identified as MW-10 (screened from 13 - 18 feet) in the USGS report. Data from this well indicates that in 1985 groundwater containing only 13 µg/L TCE was flowing into Area 02A from the north. At upgradient well MW-10, 1,1,1-TCA was not detected during the 1985 sampling event. Data from the 1984 USGS *Site Investigation Report* conducted at Wichita Brass and Aluminum shows a monitoring well identified as MW-6 (screened from 20 to 25 feet) indicated concentrations of 1,935 µg/L TCE, and 216 µg/L 1,1,1-TCA leaving the area. To integrate the wells, used by the USGS in the Golden Rule Refinery investigation, into the NIC database, MW-6 and MW-10 are referred to on maps and in the database as GRR-06 and GRR-10, respectively.

More recent sampling (CDM 2000) at locations GPA05-3 (20' and 33') and at GP02A-07 (28') indicates that groundwater containing between 160 and 440 µg/L TCE is leaving area 02A. Sampling at locations GP02A-01 (23' and 32'), -02 (17', 28', and 29'), and -03 (17' and 31') indicated that upgradient groundwater TCE concentrations were less than 50 µg/L throughout the aquifer. Further investigation may be needed at this suspected source area to confirm these results.

Petroleum Hydrocarbon Contamination

Data indicate that this area and the Wichita Brass and Aluminum facility are impacted by petroleum hydrocarbon contamination. The source of the contamination is most

likely from the former Golden Rule Refinery operation. The refinery has not been in operation for several decades and it appears that the majority of the volatile components of the hydrocarbons have degraded and/or volatilized. The presence of the petroleum hydrocarbon contamination appears to have significantly enhanced the degradation of the chlorinated solvent contamination. Note the decrease in TCE concentrations between 1984 and 2000.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southeast on the facility but due south, south of 29th. Localized groundwater flow direction in the vicinity of the Coastal Boneyard is not well defined, but groundwater plume data appear to indicate a due south groundwater flow direction.

References

USGS 1984, *Site Investigation Report*. Prepared by the United States Geological Survey for Kansas Department of Health and Environment Bureau of Environmental Remediation.

USGS 1986, *Narrative Report for the Site Investigation of the Former Golden Rule Refinery*, Prepared by the United States Geological Survey for Kansas Department of Health and Environment Bureau of Environmental Remediation.

USGS 1986, *Narrative Report for the Site Investigation of Wichita Brass and Aluminum*. Prepared by the United States Geological Survey for Kansas Department of Health and Environment Bureau of Environmental Remediation.

CDM 2000, Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas. Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Excerpts from Report(s) Prepared by Others

USGS, 1985

NARRATIVE REPORT FOR THE SITE INVESTIGATION OF

WICHITA BRASS AND ALUMINUM, WICHITA, KANSAS

CONTAINS:

SITE MAP SHOWING MW-10, MW-6

MW-10 CONST. DATA

MW-10 ANALYTICAL DATA

WATER TABLE MAP 10/30/85

RECEIVED
BUREAU OF
MAY 29 1986
WASTE
MANAGEMENT

T\ MIC\NEW_DATA

1985

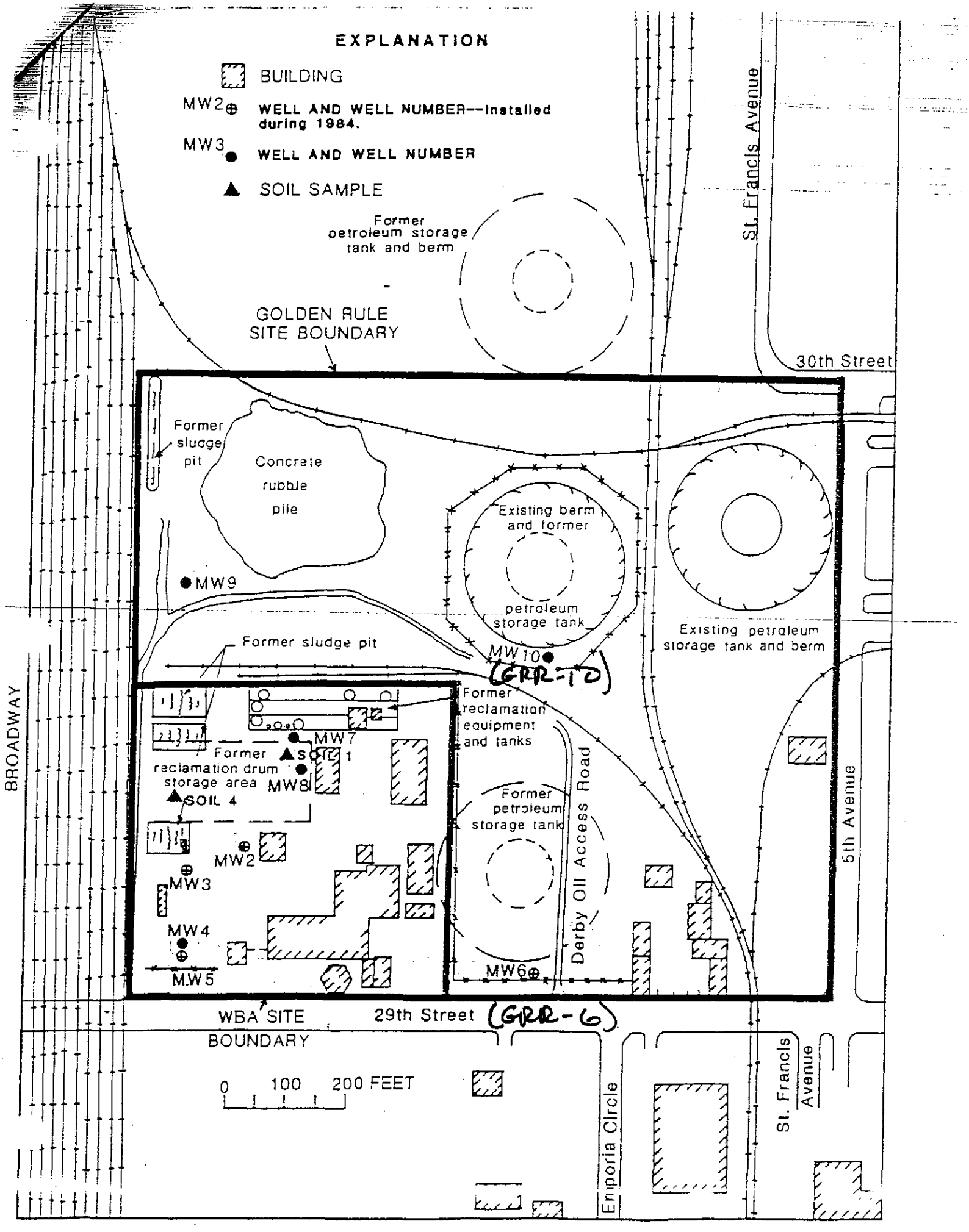


Figure 2. Location and detailed characteristics of the Richita Press and Aluminum site (WBA).

Table 1. Records of wells sampled on Wichita Brass and Aluminum, Colman Pole Refinery, Bernsdall Refinery, and off site, September - October 1985.

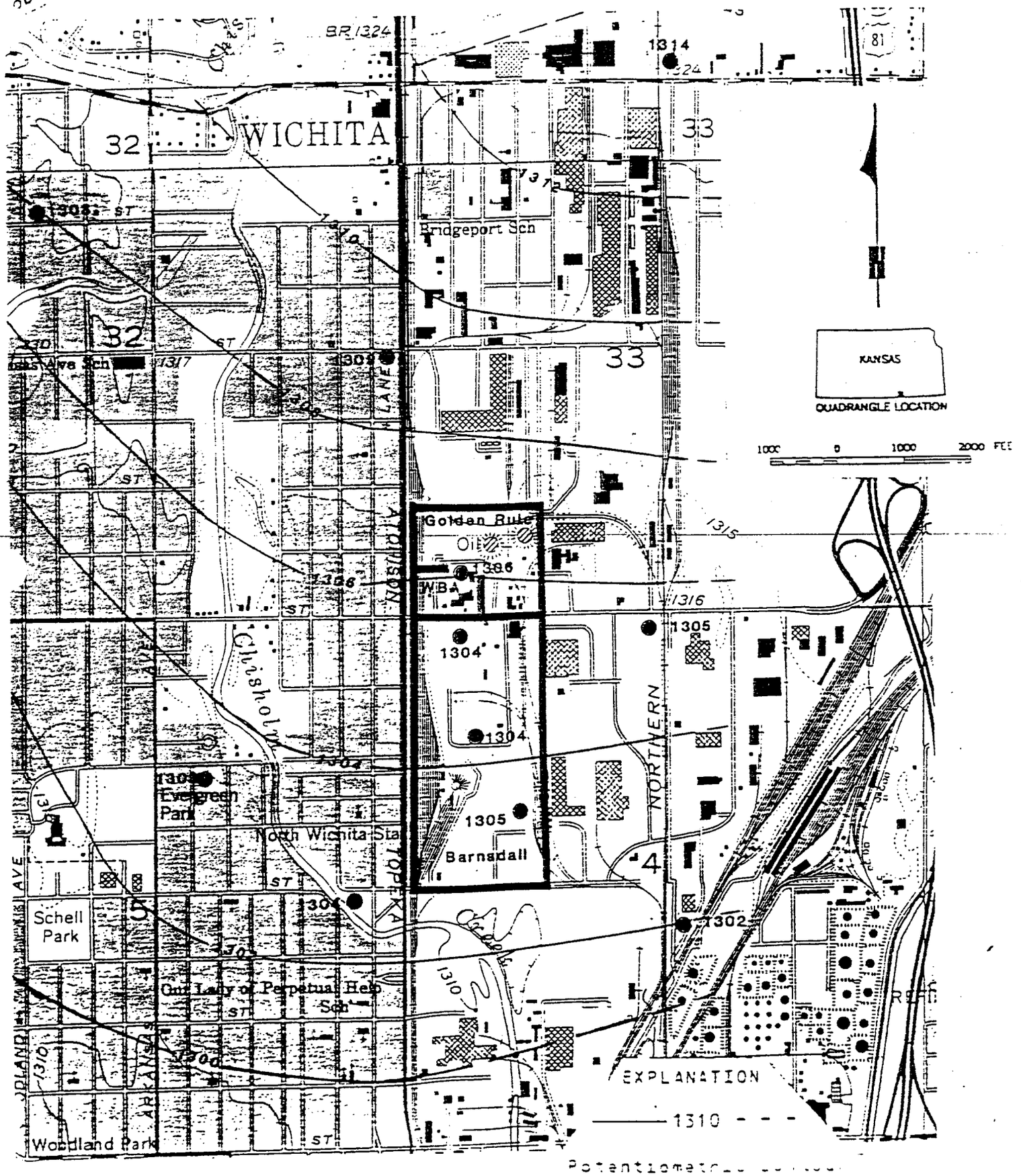
Well No.	Legal description	Owner or tenant	Type of well 1/	Depth of well (feet)	Diameter of well (inches)	Geologic source 2/	Depth to water below land surface (feet)	Date of measurement	Height of land surface above mean sea level (feet)
				TD	SD				
MW1	28S-1E-33CCD	City of Wichita	Obs	25	2	Al	-	-	-
MW4	28S-1E-33CCC	Wichita Brass and Aluminum	Obs	15	2	Al	11.6	10-30-85	1315.7
MW7	28S-1E-33CCC	Wichita Brass and Aluminum	Obs	20	2	Al	12.1	10-30-85	1316.4
MW3	28S-1E-33CCC	Wichita Brass and Aluminum	Obs	20	2	Al	12.1	10-30-85	1316.4
MW9	28S-1E-33CCC	Dolese Bros.	Obs	17	2	Al	8.9	10-30-85	1314.2
GRR-10	28S-1E-33CCA	Derby Oil	Obs	18 (18)	2	Al	11.3	10-30-85	1315.8
MW10 - Ind	28S-1E-33CAB	Coleman Co.	Ind	44 D	12	Al	-	-	-
MW12	27S-1E-[illegible]	Glickman, Inc.	Obs	17	2	Al	10.6	10-30-85	1314.3
MW13	27S-1E-[illegible]	Kansas Metals	Obs	16	2	Al	10.1	10-30-85	1312.5
MW14	27S-1E-[illegible]	Glickman, Inc.	Obs	11	2	Al	9.2	10-30-85	1312.1
MW16	27S-1E-[illegible]	City of Wichita	Obs	27	2	Al	11.3	10-30-85	1312.5
Ind7	27S-1E-[illegible]	Excel Corp.	Ind	-	-	Al	-	-	-
Ind8	28S-1E-33CCC	Piping and Equipment Co. Inc.	Ind	-	-	Al	-	-	-
Ind9	27S-1E-[illegible]	Van Trailer	Ind	40 D	10	Al	-	-	-
L20	27S-1E-[illegible]	Wilbert Vault Co.	Nu	27	1 1/4	Al	11.4	10-30-85	1312.2
21	28S-1E-[illegible]	Name unknown 627 Koppin St.	D	-	-	Al	-	-	-
L22	27S-1E-[illegible]	Harold Hoffmaser	Li	32 D	5	Al	12.3	10-30-85	1314.3
MW23	27S-1E-[illegible]	Excel Corp.	Obs	13.5	2	Al	9.2	10-30-85	1315.2

1/ Obs - Observation; Ind - Industrial; D - Domestic; Li - Lawn and garden; Nu - not used.
2/ Al - Alluvium

Table 1. Results of water quality analysis of round-water wells, September 24 - October 9, 1985.
(NOTE: "<3" concentrations less than lower detection limits.)

	SELECTED VOLATILE ORGANICS (UG/L)	BKGRD MW1	MW4	MW7	MW8	MW9	GRRND MW10	IN11	MW12	MW13	MW14	MW16	IN17	IN18	IN19	LG20	D21	D22	MW23
		WELL NUMBERS																	
CCl_4	CARBON TETRACHLORIDE	<3	<3	<3	<3	<3	<3	64	<3	<3	<3	<3	110	<3	<3	<3	<3	<3	<3
12DCA	1,2-DICHLOROETHANE	<3	<3	<3	1.9	<3	<3	<3	<3	<3	<3	<3	4.8	<3	<3	<3	<3	<3	<3
T	TOLUENE	<3	<3	4.2	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
B	BENZENE	<3	<3	25	17	<3	<3	<3	<3	<3	3.0	<3	11	<3	<3	<3	<3	<3	<3
EB	ETHYLBENZENE	<3	<3	19	32	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
MC	METHYLENE CHLORIDE	<3	<3	<3	<3	<3	73	<3	<3	20	<3	<3	<3	<3	<3	10	<3	<3	<3
11DCA	1,1-DICHLOROETHANE	<3	<3	<3	3.0	<3	<3	13	<3	<3	3.2	<3	6.6	<3	<3	<3	<3	<3	<3
Chloroethylene	CHLOROETHYLENE	<3	<3	21	15	<3	<3	220	<3	20	410	<3	300	<3	11	<3	<3	4.6	<3
VC	VINYL CHLORIDE	<3	<3	44	25	<3	<3	4.6	<3	<3	<3	<3	2.4	<3	<3	<3	<3	<3	<3
TCE	TRICHLOROETHYLENE	4.3	<3	<3	<3	<3	11 (13)	940	<3	21	3.0	<3	1400	<3	290	470	<3	20	<3
11DCE	1,1-DICHLOROETHYLENE	<3	<3	<3	<3	<3	<3	140	<3	<3	<3	<3	190	<3	<3	<3	<3	<3	<3
111TCA	1,1,1-TRICHLOROETHANE	<3	<3	<3	<3	<3	<3	250	<3	<3	<3	<3	450	<3	<3	<3	<3	<3	<3
PCE	TETRACHLOROETHYLENE	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	4.8	<3	3.6	<3	<3	<3	<3

Figure 6. Potentiometric surface for the alluvial aquifer during October 30, 1995.



Potentiometric surface

Shows altitude of potentiometric surface. Contour interval 2 feet. National Geodetic Vertical Datum of 1929.

Environmental Protection Agency

Washington, DC 20460

July, 1981

USGS 1984 DATA

EPA

Potential Hazardous Waste Site

Site Inspection Report

Wichita Brass & Al

MW-6 LOG AND DATA

Wichita Brass Aluminum - Golden Rule MW-

WATER WELL RECORD Form WWC-5 KSA 3-1212

1 LOCATION OF WATER WELL:	Fraction	Section Number	Township Number	Range Number
County: Sedgwick	SE ¼ SW ¼ SW ¼	33	T 26 S	R 1 E

Distance and direction from nearest town or city street address of well if located within city? (GRR-6)

E. 21st Street N. - Wichita, KS. - Pipe storage area in back

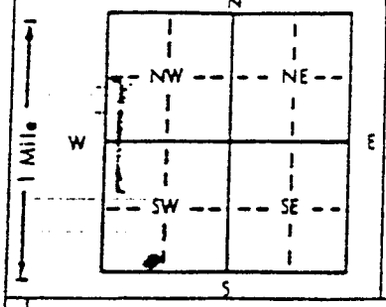
2 WATER WELL OWNER: KANSAS Department of Health and Environment

RR#, St. Address, Box # :

City, State, ZIP Code : Topeka, KS.

Board of Agriculture, Division of Water Res. Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:



4 DEPTH OF COMPLETED WELL 25 ft. ELEVATION: 1316. (TOPO)

Depth(s) Groundwater Encountered 1. 14 ft. 2. ft. 3.

WELL'S STATIC WATER LEVEL 13.19 ft. below land surface measured on mo/day/yr

Pump test data: Well water was ft. after hours pumping

Est. Yield gpm: Well water was ft. after hours pumping

Bore Hole Diameter in. to ft., and in. to

WELL WATER TO BE USED AS: 1 Domestic 2 Irrigation 3 Feedlot 4 Industrial 5 Public water supply 6 Oil field water supply 7 Lawn and garden only 8 Air conditioning 9 Dewatering 10 Observation well 11 Injection well 12 Other (Specify below)

Was a chemical/bacteriological sample submitted to Department? Yes ✓ No; If yes, mo/day/yr sample was submitted

Water Well Disinfected? Yes No

5 TYPE OF BLANK CASING USED: 1 Steel 2 PVC 3 RMP (SR) 4 ABS 5 Wrought iron 6 Asbestos-Cement 7 Fiberglass 8 Concrete tile 9 Other (specify below)

CASING JOINTS: Glued Clamped Welded Threaded ✓

Blank casing diameter 2 in. to 20 ft., Dia in. to ft., Dia in. to

Casing height above land surface 13.5 in., weight lbs./ft. Wall thickness or gauge No. 40

TYPE OF SCREEN OR PERFORATION MATERIAL: 1 Steel 2 Brass 3 Stainless steel 4 Galvanized steel 5 Fiberglass 6 Concrete tile 7 PVC 8 RMP (SR) 9 ABS 10 Asbestos-cement 11 Other (specify) 12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE: 1 Continuous slot 2 Louvered shutter 3 Mill slot 4 Key punched 5 Gauzed wrapped 6 Wire wrapped 7 Torch cut 8 Saw cut 9 Drilled holes 10 Other (specify) 11 None (open hole)

SCREEN-PERFORATED INTERVALS: From 20 ft. to 25 ft., From ft. to

From ft. to ft., From ft. to

GRAVEL PACK INTERVALS: From 15 ft. to 25 ft., From ft. to

From ft. to ft., From ft. to

6 GROUT MATERIAL: 1 Neat cement 2 Cement grout 3 Bentonite 4 Other

Grout Intervals: From 0 ft. to 10 ft., From 10 ft. to 15 ft., From ft. to

What is the nearest source of possible contamination:

1 Septic tank 2 Sewer lines 3 Watertight sewer lines 4 Lateral lines 5 Cess pool 6 Seepage pit 7 Pit privy 8 Sewage lagoon 9 Feedyard 10 Livestock pens 11 Fuel storage 12 Fertilizer storage 13 Insecticide storage 14 Abandoned water well 15 Oil well/Gas well 16 Other (specify below) Old oil storage tanks

Direction from well? How many feet?

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	8	Yellow clay - Black first four inches			
8	10	Sandy clay			
10	28	Fine yellow SAND			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and completed on (mo/day/year) 11/16/89 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. This Water Well Record was completed on (mo/day/yr) 1-26-89 under the business name of by (signature) [signature]

INSTRUCTIONS: Use typewriter or ball point pen, PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send three copies to Kansas Department of Health and Environment, Division of Environment, Environmental Geology Section, Topeka, KS 66620. Send one to WATER WELL OWNER and retain one for your records.

WICHITA BRASS, ALUMINUM MW#6 (GRR-6)

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
LABORATORY SERVICES AND RESEARCH
ENVIRONMENTAL ORGANIC LABORATORY
TOPEKA, KANSAS 66620

GC/MS ANALYSIS REPORT

REPORT TO: CARL BIRNS
ADDRESS: FORBES BLDG. 321, TOPEKA, KS. 66620

LAB NUMBER: 5003930C
REPORT DATE: 11-27-84

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION NUMBER: NW #6
SAMPLE TYPE: WATER
COLLECTION SITE: WICHITA BRASS AND ALUMINUM
COLLECTED BY: TIM SPRUILL
DATE COLLECTED: 11-16-84

RESULTS OF ANALYSIS

PRIORITY POLLUTANT VOLATILE COMPOUNDS	CONCENTRATION (UG/L <PPB>)	DETECTION LIMIT (UG/L <PPB>)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	6.9	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	137	0.9
1,1-DICHLOROETHYLENE	40.3	0.6
1,1-DICHLOROETHANE	3.1	0.5
TRANS 1,2-DICHLOROETHYLENE	33.3	0.5
CHLOROFORM	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	216	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.4
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	193.5	0.6
BENZENE	1.0	0.4
DIBROMOCHLOROMETHANE	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	0.4	0.4
CHLOROBENZENE	NOT DETECTED	0.4
ETHYLBENZENE	NOT DETECTED	0.7

NOTE: CIS 1,2-DICHLOROETHYLENE IS REPORTED AS TRANS 1,2-DICHLOROETHYLENE.

ANALYST: RUSSELL BROXTERMAN RB

ROGER H. CARLSON, PH.D., DIRECTOR

Figure(s)
Aerial Photographs and Sample Location Map(s)

CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Coastal Boneyard Facility

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Coastal Boneyard Facility

Table(s)
Analytical Data Table(s)

Former Coastal Boneyard Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Investigation Phase	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#53-2	S/18	PH1	06/03/98		µg/L	<1	<1	<1	<1	<1	**1.2**	<1	<1	<1	<1	<5.4
GP#53-2	D/36	PH1	06/03/98		µg/L	<1	**24**	**2**	<1	<1	<1	<1	<1	**2.7**	<1	<5.4
GP#53-3	S/15	PH1	06/03/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#53-3	D/36	PH1	06/03/98		µg/L	<1	**6**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#67-1	S/20	PH1	01/15/98		µg/L	<1	<1	**2**	<1	<1	<1	<1	<1	<1	**3**	7.4
GP#67-1	D/39	PH1	01/15/98		µg/L	<1	<1	**1.3**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#67-4	S/20	PH1	01/15/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**39**	43.9
GP#67-4	D/32	PH1	01/15/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**2.6**	7
GP02A-01	M/23	PH2	03/08/00		µg/L	<1	**36**	**2**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-01	D/32	PH2	03/08/00		µg/L	<1	**47**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-02	S/17	PH2	03/08/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-02	D/39	PH2	03/08/00		µg/L	<1	**3.9**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-02	D/28	PH2	03/08/00		µg/L	<1	**27**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-03	S/17	PH2	03/08/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-03	D/31	PH2	03/08/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-04	S/17	PH2	10/28/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-04	D/27	PH2	10/28/99		µg/L	<1	**64 JH**	**12**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-05	S/17	PH2	10/28/99		µg/L	<1	**5**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-05	D/35	PH2	10/28/99		µg/L	<1	**20**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-06	S/17	PH2	10/28/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-06	D/44	PH2	10/28/99		µg/L	<1	**9**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-07	S/17	PH2	01/17/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-07	D/28	PH2	01/17/00		µg/L	<1	**440**	**9.8**	<1	**1.1**	<1	**3.4**	<1	**2.5**	<1	<5.4
GP08B-01	S/17	PH2	12/13/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08B-01	D/29	PH2	12/13/99		µg/L	<1	**5.9**	<1	<1	<1	<1	<1	<1	<1	<1	**8.7**
GP08B-04	S/17	PH2	12/10/99		µg/L	<1	<1	**4.1**	<1	<1	**1.5**	**1.3**	<1	<1	**1.1**	**5.5**
GP08B-04	D/30	PH2	12/10/99		µg/L	<1	**6.9**	**9.6**	<1	<1	**1.4**	<1	<1	<1	**0.7 J**	**5.1**
GP08B-05	S/17	PH2	12/10/99		µg/L	<1	**2.8**	<1	**2.7**	<1	**36**	**13**	<1	<1	**1.9**	**6.3**
GP08B-05	D/34	PH2	12/10/99		µg/L	<1	**13**	**3.1**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA05-2	S/20	PH1	12/15/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA05-2	D/33	PH1	12/15/97		µg/L	<1	**40**	**29**	**8.9**	<1	**1.4**	<1	<1	<1	**2**	**6.4**
GPA05-3	S/20	PH1	12/15/97		µg/L	<1	**260**	**3.9**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA05-3	S/20	PH2	10/15/99		µg/L	<1	**160**	**6.4**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA05-3	D/33	PH1	12/15/97		µg/L	<1	**29**	**1.8**	<1	<1	<1	<1	**1.7**	**3.3**	<1	<5.4
WND-12D	D		12/01/97		µg/L	<1	**37 JDB**	**3.3 JDB**	<1	**2.1**	**4.9**	**5.7**	**2.2**	**4.2**	<1	**6.7**
WND-12D	D		05/03/01		µg/L	<1.0	**18**	**1.4**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
WND-12S	S		12/01/97		µg/L	**3.4**	**13 JDB**	**3.7 JDB**	**16**	**100**	**670**	**300**	<1	**2.3**	**2.2**	**14.4**
WND-12S	S		05/03/01		µg/L	<1.0	**1.4**	**3.7**	**7.1**	**1.5**	**43**	**33**	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-11
Compressed Gases Facility

PRP Evaluation Summary

Compressed Gases Facility
602 East 29th Street, North (29th and Emporia)

Potential Source Area PRP and Work Plan Addendum Map ID - 08B

Contaminants of Concern - 1,1,1-TCA and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Degradation Pathways
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Compressed Gases (CGI) Facility

TCA Contamination

Data indicate that concentrations of 1,1,1-TCA and its degradation byproducts, 1,1-DCA, 1,1-DCE, and chloroethane (CA), increase along the groundwater flow path across this area. Groundwater samples collected from the shallow (17 to 20 feet bgs) aquifer at upgradient locations GP08B-01 and -02 and GP#53-1 contained no detectable concentrations of 1,1,1-TCA or its degradation products. Samples collected from the shallow aquifer (17 to 20 feet bgs) downgradient of the CGI facility at locations GP08B-03, -04, and -05 contained concentrations of 1,1,1-TCA degradation products. The shallow sample from GP08B-05, located directly downgradient of facility's main buildings, contained 1,1-DCA and 1,1-DCE at concentrations of 36 and 13 µg/L, respectively.

Groundwater analytical data collected from shallow monitoring well WND-12S during Phase 1/1A of the NIC investigation (CDM 2000) indicate concentrations of 1,1,1-TCA, 1,1-DCA, 1,1-DCE, and CA of 100, 670, 300, and 35 µg/L, respectively, in 1997. Groundwater analytical data collected from WND-12S during the 29th and Mead investigation in 1991 (GTI 1991) revealed concentrations of 1,1,1-TCA, 1,1-DCA, 1,1-DCE, and CA of <0.2, 44, 330, and 110 µg/L, respectively. These data indicate the likelihood of an active source as early as 1991. Presence of petroleum hydrocarbons in the vicinity is the probable agent of the degradation of 1,1,1-TCA to 1,1-DCA, 1,1-DCE, and CA via reductive dechlorination.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south and southeast, respectively. However, facility-specific groundwater flow is not well defined. Groundwater plume data appear to indicate a due south groundwater flow direction.

References

GTI 1992, *Remedial Investigation Report, 29th and Mead RI/FS*, Groundwater Technology, Inc. Prepared for Wichita North Industrial District, August 27, 1991, revised June 12, 1992.

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Name of Company: Compressed Gases Inc

Name and/or Contact Person:

Street Address of Company: ~~602 E 29th St. N.~~ P.O. Box 1456

City, State, and Zip Code: Wichita, KS ~~67219~~ 67201-1456

Regarding the Following Property:

Phone Number of Contact Person:

History:		
	1995	Compressed Gases Inc
	1990	Same
	1984-5	Wichita Welding Supply Inc
	1980	Same
	1975	Same
	1970	Air Reduction Sales Co
	1965	Same
	1962	Same
		National Carbide Corp

RCRA Info: No KDHE RCRA file.

note in file re: Problem c̄ lagoons

Name of Company: Air Reduction / National Carbide Corp.

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, Ks

Regarding Property at Address: 602 E. 29th N.

History: 1949 to 1970

RCRA Info: NO RCRA FILE

Name of Company: Wichita Welding Supply Inc.

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code:

Regarding Property at Address: 602 E. 29th N.

History: 1975 to 1984

RCRA Info: Waste Water Lagoon used on site for discharge of water generated after manufacturing of acetylene.

Name of Company: Compressed Gases

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, KS

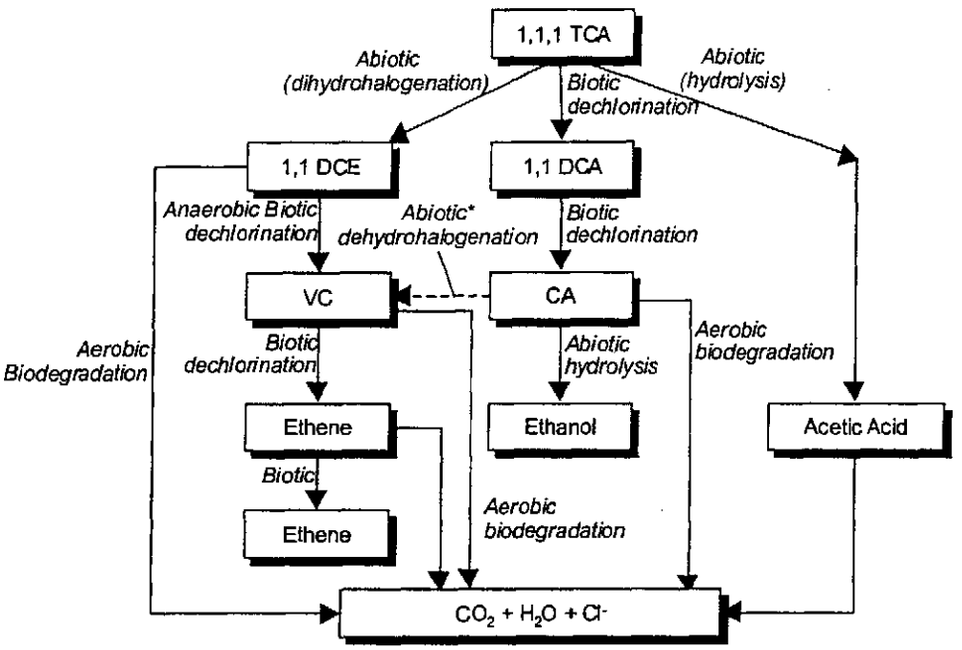
Regarding Property at Address: 602 E. 29th N.

History: 1986 to current

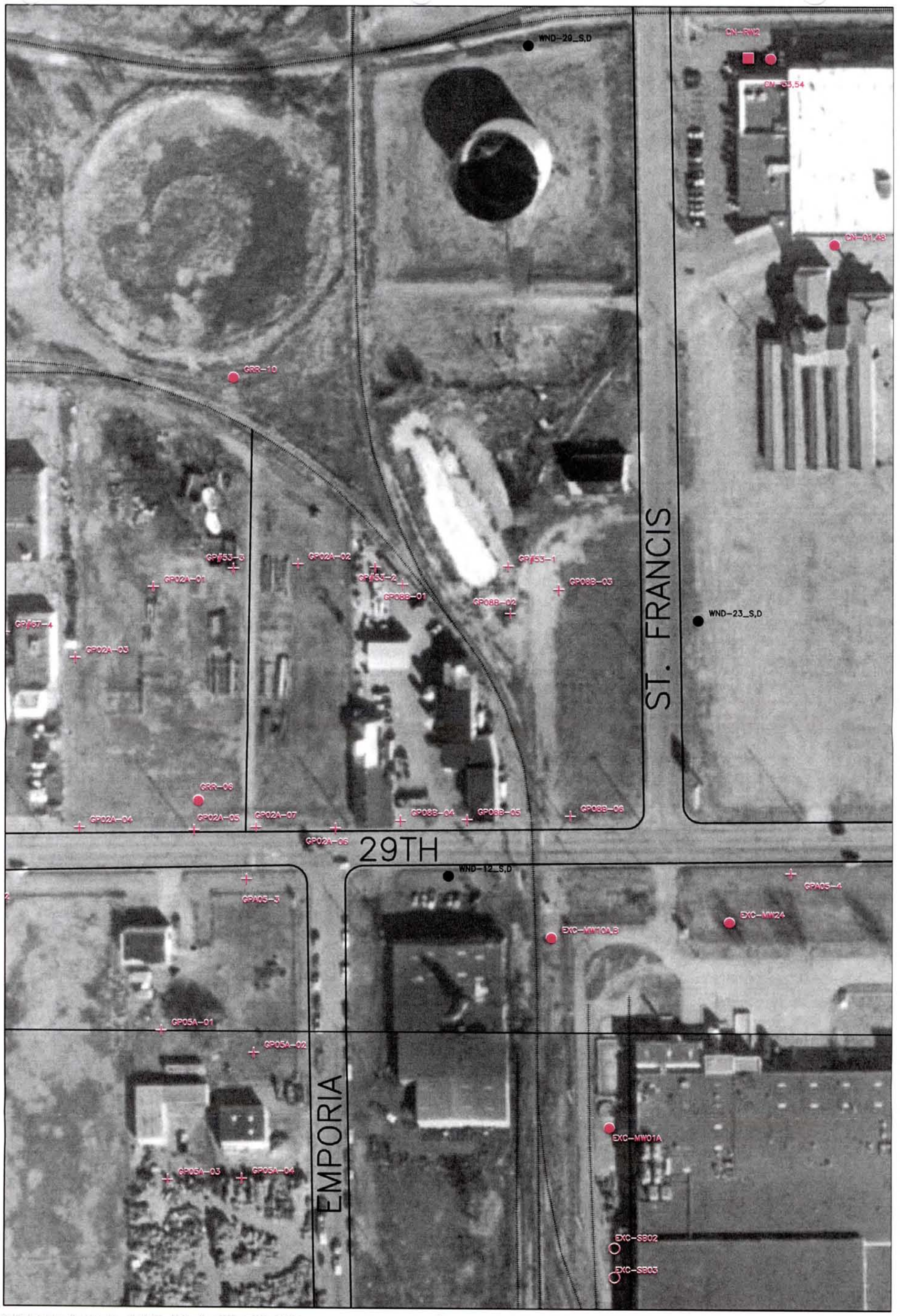
RCRA Info: NO RCRA FILE

Degradation Pathways

1,1,1-TCA Degradation Pathways



Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Compressed Gases Facility

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Compressed Gases Facility

Table(s)
Analytical Data Table(s)

Compressed Gases Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#53-1	S/18	06/03/98		µg/L	<1	**2.3**	<1	<1	<1	<1	<1	<1	<1	**1.1**	**5.5**
GP#53-1	D/36	06/03/98		µg/L	<5	**9.4**	<5	<5	<5	<5	<5	<5	<5	<5	**27**
GP#53-2	S/18	06/03/98		µg/L	<1	<1	<1	<1	<1	**1.2**	<1	<1	<1	<1	<5.4
GP#53-2	D/36	06/03/98		µg/L	<1	**24**	**2**	<1	<1	<1	<1	<1	**2.7**	<1	<5.4
GP02A-02	S/17	03/08/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-02	D/39	03/08/00		µg/L	<1	**3.9**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-02	D/28	03/08/00		µg/L	<1	**27**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-06	S/17	10/28/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-06	D/44	10/28/99		µg/L	<1	**9**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08B-01	S/17	12/13/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08B-01	D/29	12/13/99		µg/L	<1	**5.9**	<1	<1	<1	<1	<1	<1	<1	<1	**8.7**
GP08B-02	S/20	12/10/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08B-02	D/28	12/10/99		µg/L	<1	**2.3**	<1	<1	<1	<1	<1	<1	<1	**1.1**	**5.5**
GP08B-03	S/20	12/10/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**1.1**	**5.5**
GP08B-03	D/29	12/10/99		µg/L	<1	**2.4**	<1	<1	<1	<1	<1	<1	<1	**0.71 J**	**5.11**
GP08B-04	S/17	12/10/99		µg/L	<1	<1	**4.1**	<1	<1	**1.5**	**1.3**	<1	<1	**1.1**	**5.5**
GP08B-04	D/30	12/10/99		µg/L	<1	**6.9**	**9.6**	<1	<1	**1.4**	<1	<1	<1	**0.7 J**	**5.1**
GP08B-05	S/17	12/10/99		µg/L	<1	**2.8**	<1	**2.7**	<1	**36**	**13**	<1	<1	**1.9**	**6.3**
GP08B-05	D/34	12/10/99		µg/L	<1	**13**	**3.1**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08B-06	S/20	12/10/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08B-06	D/26	12/10/99		µg/L	<1	**4.9**	**1.6**	<1	<1	<1	<1	<1	<1	**0.87 J**	**5.27**
WND-12D	D	12/01/97		µg/L	<1	**37 JDB**	**3.3 JDB**	<1	**2.1**	**4.9**	**5.7**	**2.2**	**4.2**	<1	**6.7**
WND-12D	D	05/03/01		µg/L	<1.0	**18**	**1.4**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
WND-12S	S	12/01/97		µg/L	**3.4**	**13 JDB**	**3.7 JDB**	**16**	**100**	**670**	**300**	<1	**2.3**	**2.2**	**14.4**
WND-12S	S	05/03/01		µg/L	<1.0	**1.4**	**3.7**	**7.1**	**1.5**	**43**	**33**	<1.0	<1.0	<1.0	**5.4**
WND-23S	S	05/08/01		µg/L	<1.0	**9.5**	**5.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroether
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-12
Former Copeland International Trucks Facility

PRP Evaluation Summary

Former Copeland International Trucks Facility

1770 N. Broadway (17th and Broadway)

Potential Source Area PRP and Work Plan Addendum Map ID - 04E

Contaminants of Concern – PCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Application for Certification and Release
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Copeland International Trucks Facility

PCE Contamination

Data indicate that the Copeland International Trucks facility (CIT) at 1770 North Broadway is a potential source of low level chlorinated VOC contamination. Groundwater sampling data collected by Copeland (TerraTech 1999), the City of Wichita, and by CDM during the NIC Phase 2 Investigation have shown an increase in concentrations of PCE along the groundwater flow path through this area.

To integrate data collected at the CIT facility into the NIC database, the identity of groundwater sampling locations referred to in the CIT investigation has been modified to provide the facility identifier and to correlate the sample location as noted in the facility's investigation. In the case of CIT, this nomenclature is implemented as such: the CIT investigation's sample location GW-1, collected by Geoprobe methods, is referred to as CIT-GP01. Sample locations GW-1 through GW-15 are renamed CIT-GP01 through CIT-GP15, inclusive. Samples collected during the NIC investigation conducted by the City of Wichita are identified by the prefix "GPA", "GP#", or "GP04E".

During Copeland's investigation, onsite field analyses were conducted along with offsite laboratory confirmation analysis of a subset of samples. Samples were also split with the City and sent to an offsite laboratory for analysis. In general, onsite analytical results were greater than offsite laboratory results by a factor of 10. Unless otherwise noted, only offsite laboratory results will be considered in this discussion.

Sampling at upgradient locations CIT-GP01, -GP02 and -GP03 indicated no detectable concentrations of PCE in the shallow groundwater. At downgradient locations CIT-GP12, and -GP13, PCE was detected at concentrations of 1.7 and 2.8 μg/L, respectively, in shallow groundwater. Onsite analyses of the same two samples indicated concentrations of 24 and 28 μg/L, respectively. At locations CIT-GP07, -GP08, and -GP09, PCE was detected in shallow groundwater at concentrations of <1, 1.4, and

1.8 μg/L, respectively by Copeland (Terratech 1999). Samples split with the City from the same locations contained 0.6, 1.6, and 2.4 μg/L, respectively. At downgradient sample location GP04E-01, a shallow groundwater sample yielded 7.9 μg/L PCE. Though these concentrations are near or below the MCL of 5 μg/L for PCE, the data strongly indicate that a PCE release to the environment has occurred at this facility.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southwest and south-southwest, respectively. Localized groundwater flow direction in the vicinity of CIT is not well defined, but groundwater plume data appear to indicate a south-southwest groundwater flow direction.

References

TerraTech, 1999, *Final Report, Phase II Groundwater Sampling Investigation - Copeland International Truck, Inc. June 1999,* Prepared for Kaplan, McMillan, & Harris, Wichita, Kansas by TerraTech Environmental Service, Inc.

Polk Directory Review and RCRA Information Summary

3/99

Name of Company: Copeland International Inc

Name and/or Contact Person: HAROLD COPELAND - SINCE 1978

Street Address of Company: 1770 N. Broadway Bob Kaplan

City, State, and Zip Code: Wichita, KS 67214

Regarding the Following Property:

Phone Number of Contact:

History:

1995	Copeland International Trucks INc
1990	Same
1984-5	Copeland International Co
1980	International Harvester Co
1975	Same
1970	Same
1965	Same
1961	Same

RCRA Info: KDHE RCRA file shows D001-(Barton Solvents- Naptha); F002-spent halogenated solvents, waste carburetor cleaner.

ADDITIONAL INFO

Raymond Gross Trash Service - Property acquired. Baldwin Family. 1996 purchase.

Application for Certification and Release

APPLICATION FOR CERTIFICATE AND RELEASE FOR ENVIRONMENTAL CONDITIONS (North Industrial Corridor Redevelopment District)

Submitted to the City of Wichita/ Sedgwick County Health Department

on behalf of

HAROLD D. COPELAND

c/o Copeland International Trucks, Inc.
1770 North Broadway
Wichita, Kansas 67214

by

KAPLAN, McMILLAN & HARRIS

Attorneys at Law
Charles E. Hill
430 N. Market
Wichita, Kansas 67202
(316) 262-5175

Send to Darron B. CDM Dt

RECEIVED JUL 2 5 1999 7/27/99

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Harold D. Copeland,

(insert legal name(s) of party seeking certificate)

c/o Copeland International Trucks, Inc.
1770 North Broadway
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:

1770 North Broadway
Wichita, Kansas 67214

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Fee simple ownership in Harold D. Copeland. Mr. Copeland leases said property to Copeland International Trucks, Inc., which operates a heavy truck dealership on the premises.

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: _____

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: Harold D. Copeland
(signature)

Name: Harold D. Copeland
(print or type)

c/o Copeland International Trucks, Inc.
1770 N. Broadway

Wichita, Kansas 67214

Address (print or type)

Date: July 22, 1999

Subscribed and sworn to before me this 22nd day of July, 1999.

NOTARY PUBLIC - State of Kansas
SARA ERICKSON
My Appt. Exp. 10-30-2002

Sara Erickson
Notary Public

My appointment expires: 10-30-2002

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for **Commercial/Industrial property** only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant Harold D. Copeland Date July 22, 1999

Business Phone (316) 262-8413 Home Phone (405) 722-6268

Legal Description Lots 1 through 12 on Broadway and Lots 13 through 25 on Topeka, Ketzler's Addition to Wichita Property Tax Key # B-01559, B-01560, B-01561 B-01563 and B-01563

Street Address of Property 1770 N. Broadway

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS SEE ATTACHED EXHIBIT 1.

OWNER	DATES	TYPE OF BUSINESS/SITE USE
	From:____ To: Present	
	From:____ To:____	
	From:____ To:____	
	From:____ To:____	

(b) SITE OCCUPANTS SEE ATTACHED EXHIBIT 1.

OCCUPANTS/LESSEES	DATES	TYPE OF BUSINESS/SITE USE
	From:____ To: Present	
	From:____ To:____	
	From:____ To:____	
	From:____ To:____	

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☐Yes ☒No ☐Unknown

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses? ☒Yes ☐No ☐Unknown SEE ATTACHED RCRA FILE LABELED EXHIBIT 2.

(d) Has any type of environmental study been performed on this property? ☒Yes ☐No ☐Unknown
If yes, please identify and include a copy of the report. SEE ATTACHED REPORT FROM TERRA TECH ENVIRONMENTAL SERVICES DATED JUNE, 1999 as EXHIBIT 3.

(2) Disposal of Wastes.

(a) Are liquid or sludge wastes generated and/or stored on property? ☒Yes ☐No ☐Unknown

(b) What do the liquid wastes consist of? WASTE OIL.

(c) Has any type of characterization of these liquid wastes been conducted? ☒Yes ☐No ☐Unknown
If yes, include copy of results. SEE ATTACHED REPORT FROM REDDI ROOTER LABELED EXHIBIT 4.

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☒No ☐Unknown *See attached statement.

(b) Has the property ever been owned by any entity that used hazardous substances on the site?
☐Yes ☒No ☐Unknown

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant.

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☐Yes ☒No ☐Unknown

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☒No ☐Unknown *See attached statement.

If yes, give name, phone number and contact person, for each transporter utilized.

1. Reddi Rooter, 681-3382, Bart Tyson.
2. Radium Oil, Wichita, Kansas - no longer in business.

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.

A mixture of waste oil and solvent has been burned in a waste oil heater on the premises since 1989.

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property?
☒Yes ☐No ☐Unknown If yes, include copy of results.

SEE TERRA TECH REPORT, EXHIBIT 3.

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☒No ☐Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☒No ☐Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored on the property?
☒Yes ☐No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.

See attached Material Safety Data Sheets labeled as Exhibit 5 on products used for engine repair and service.

(b) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☒Yes ☐No ☐Unknown

(c) If such reports were filed, do they meet federal, state and local requirements?
☐Yes ☐No ☐Unknown State the names of individuals familiar with the filings and the location of the files.

Dennis Geiger, Copeland International Trucks, Inc., 1770 North Broadway, Wichita, Kansas 67214

ATTACHMENT TO PAGE C2

EXPLANATORY STATEMENT REGARDING QUESTIONS 3(a) and 3(e).

In regard to the above referenced questions, applicant is submitting herewith material safety data sheets on chemicals used in engine repair and servicing, and has listed in answer to question 6(a) all petroleum products which are stored and used on the premises.

The applicant is not certain whether or not any of these items constitute a "hazardous substance" as defined in the application. Having fully identified such substances, applicant requests that if, in the opinion of the officials examining this application such items are felt to be within the definition of a hazardous substance, the examining officials consider this statement to constitute an amendment of his answers to questions 3(a) and 3(e).

(5) Status of Water Pollution Control.
(a) Does the facility have any wastewater? ☐Yes ☒No ☐Unknown

How is it managed or treated at present? In past?

(b) Are there any pits, ponds, lagoons, tanks? ☐Yes ☒No ☐Unknown

If yes, indicate how and when the structures were used, and what compounds have been stored in them.

(c) Is the property connected to the City sewage treatment system? ☒Yes ☐No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☒No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☒No ☐Unknown
State the location of such records and the individuals familiar with them.

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☐Yes ☒No ☐Unknown
If yes, where?

6) Status of Compliance with Requirements Relating to Petroleum Products.
(a) Are any petroleum products stored at the facility? ☒Yes ☐No ☐Unknown
If yes, how much and where are they stored? One 55 gallon drum transmission fluid, One 55 gallon drum gear lube, three 55 gallon drums transmission lube, two 55 gallon drums motor oil, two 30 gallon drums hydraulic fluid and one 5,000 gallon waste oil tank. All above ground on premises.
(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown

Have they been registered with the Kansas Department of Health and Environment of other state, federal, or local agency?
☐Yes ☐No If registered, please attach a copy of the State Certificate.

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.

(d) Have the tanks been tested? ☐Yes ☐No ☐Unknown Results?

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property?
☒Yes ☐No ☐Unknown If yes, please describe.

See attached Certificate of Permanent Tank Abandonment filed with KDHE on August 1, 1991, labeled Exhibit 6.

(f) Have any tanks presently or previously located at the property leaked or spilled?
☐Yes ☒No ☐Unknown If yes, please describe.

(7) Are there any water-wells on the property? ☐Yes ☒No If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☐Unknown If yes, please explain.

(a) If known, what was the water-well used for in the past?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(b) What is the water-well used for currently?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☐Unknown

(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results.

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes ☒No
If yes, list those corporate predecessors.

(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes ☒No
Is there a sale pending the Release for Environmental Conditions? ☐Yes ☒No
If yes, please indicate closing date _____.

Other comments:

PROPERTY OWNERSHIP HISTORY.

Legal Description of Property for which Release is sought:

Lots 1 through 12 on Broadway, and Lots 13 through 25 on Topeka, all in Ketzler's addition to Wichita, Sedgwick County, Kansas.

CURRENT OWNERSHIP

Harold D. Copeland

Prior Ownership History:

Lots 1, 2, & 3 and part of Lot 4 on Broadway

To International Harvester Company of America from Sodema Ketzler 12/20/34.
To International Harvester Co. from International Harvester Company of America 10/30/39.

Part of Lot 4 and Lots 5, 6, 7, & 8 on Broadway

To International Harvester Company from R.G. Campbell 5/18/45.

Lots 9 & 10 on Broadway

To International Harvester Company from C.D. Broadhead 7/3/47.

Lots 1 through 10 on Broadway

To Harold D. Copeland from Navistar International Transportation Corp. (Successor to I.H. Co.) 10/27/88.

Lots 11 & 12 on Broadway

To Elmer E. Curts from Tena Sante 10/17/46 (recorded 4/6/55)
To John D. McEwen by Sheriff's Deed 7/14/64
To Philip and Christine Ganzer from John D. McEwen 4/21/77
To Alfred Baldwin and Raymond Gross from Philip and Christine Ganzer7/2/82.
One-half undivided interest to Harold D. Copeland by Administrator's Deed for Alfred Baldwin, deceased, 3/23/93
To Harold D. Copeland from Raymond Gross 6/20/96.

(Continued on following page)

EXHIBIT "1"

Part of Lot 21 and Lots 22, 23, & 24 on Topeka

To International Harvester Company of America from Sodema Ketzler 12/20/34.
To International Harvester Company from International Harvester Company of America 10/30/39

Lots 17, 18, 19, 20, & Part of Lot 21, on Topeka

To International Harvester Company from R.S. Campbell 5/19/45

Lots 15 & 16 on Topeka

To International Harvester Company from C.D. Broadhead 7/3/47

Lots 15 through 24 on Topeka

To Harold D. Copeland from Navistar International Transportation Corp. (Successor to I.H. Co.) 10/27/88

Lot 25 on Topeka

Held by Krehbiel family from May, 1968.
To Krehbiel Properties from Paul Krehbiel 11/5/85
To Harold D. Copeland from Krehbiel Properties 12/7/90

Lots 13 & 14 on Topeka

To John D. McEwen from Durant 1/31/68
To Philip and Christine Ganzer from McEwen 4/20/77
To Raymond Gross and Alfred Baldwin from Philip and Christine Ganzer 7/2/82
One-half undivided interest to Harold D. Copeland by Administrators Deed for Alfred Baldwin, deceased 3/23/93
To Harold D. Copeland from Raymond Gross 6/20/96

(See following page for History of Property Use.)

KNOWN HISTORY OF USES OF PROPERTY.

From the ownership history, it appears that International Harvester first acquired approximately 6 lots for use as a heavy truck dealership in December of 1934. (Lots 1,2,3 and part of Lot 4 on Broadway, and part of Lot 21 and Lots 22, 23 and 24 on Topeka)

The dealership property was expanded in 1945 by the purchase of the rest of Lot 4, and lots 5, 6, 7, & 8 on Broadway and the rest of Lot 21 and lots 17, 18, 19 and 20 on Topeka.

The dealership property was next expanded in 1947 by the purchase of Lots 9 & 10 on Broadway and Lots 15 & 16 on Topeka.

All of these above listed lots were transfered to the current owner, Harold D. Copeland in 1988. Mr. Copeland has continued to operate Copeland International Trucks, Inc. on this portion of the property since that time. The corporation leases the premises from Mr. Copeland.

Mr. Copeland expanded his ownership of the property in 1990 with the purchase of Lot 25 on Topeka Avenue from Krehbiel Properties. The lot was vacant at the time of purchase, and Mr. Copeland has no knowledge of any prior use.

Mr. Copeland's last purchase of property which is part of the tract for which a Certificate of Release is sought involved Lots 11 & 12 on Broadway and Lots 13 and 14 on Topeka. Mr. Copeland purchased an undivided one-half interest in that property from the Estate of Alfred Baldwin in May, 1993. At that time, the property was used as the office and truck storage lot of Raymond Gross Trash Service. In June, 1996, Mr. Copeland purchased the undivided one-half interest of Mr. Gross in those lots and took physical control of those 4 lots for the first time. Said lots, along with a portion of a vacated street, have been incorporated into the Copeland Tract, and are used primarily for vehicle parking. The use of these four lots prior to their acquisition by Mr. Gross and Mr. Baldwin in 1982 is unknown.

All of the above referenced property now comprises the premises of Copeland International Trucks, Inc., under lease from Mr. Copeland. The premises are used as a full service heavy truck dealership for truck sales, parts sales and truck service.

Excerpts from Report(s) Prepared by Others

TERRATECH®
ENVIRONMENTAL SERVICE, INC.

1305 E. Waterman, Suite A, Wichita, Kansas 67211
Office: (316) 264-6066 Fax: (316) 262-6557

FINAL REPORT
PHASE-II GROUNDWATER SAMPLING INVESTIGATION-
Copeland International Truck , Inc.

June, 1999

Prepared for:

Kaplan, McMillan & Harris
430 North Market
Wichita, Kansas 67202

Prepared by:

TerraTech Environmental Service, Inc.
1305 East Weatherman Suite A
Wichita, Kansas 67211

EXHIBIT "3"

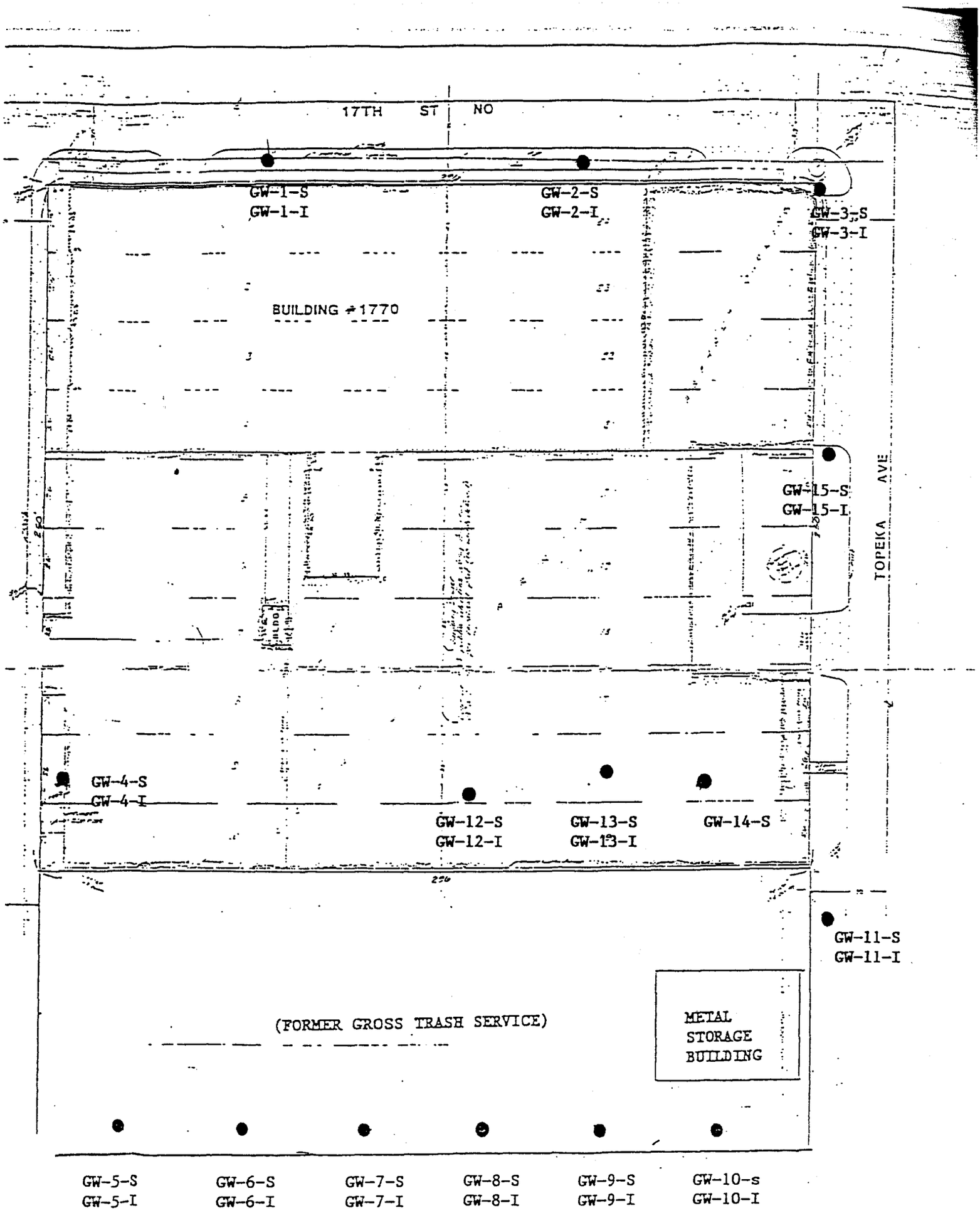


FIGURE-1.

APP. SCALE:

IV. FIELD ANALYTICAL FINDINGS

The field analytical data is summarized in the following table.
All findings are reported in uG/L (PPB).

Location/depth	1,1,1-TCA	TCE	PCE	Other
GW-1, 20'	ND	4	<1.0	?
GW-1, 28'	ND	29	<1.0	?
GW-2, 20'	ND	3	2	?
GW-2, 28'	ND	53	<1.0	?
GW-3, 20'	ND	26	<1.0	?
GW-3, 28'	ND	80	<1.0	?
GW-4 20'	ND	17	ND	?
GW-4 28'	ND	37	ND	?
GW-5 20'	ND	16	ND	?
GW-5 28'	ND	32	ND	?
GW-6 20'	ND	5	1.3	?
GW-6 28'	ND	56	ND	?
GW-7 20"	ND	37	2	?
GW-7 28'	ND	163	ND	?
GW-8 20'	ND	20	10	?
GW-8 28"	ND	191	ND	?
GW-9 20'	ND	28	8	?
GW-9 28'	ND	55	5	?
GW-10 20'	ND	13	<1.0	?
GW-10 28'	ND	93	1.1	?
GW-11 20'	ND	27	<1.0	?
GW-11 28'	ND	81	1.2	?
GW-12 20'	ND	31	24	?
GW-12 28'	ND	61	5	?
GW-13 20'	ND	20	28	?
GW-13 28'	ND	73	4	?
GW-14 17'	ND	19	29	?
GW-14 21'	ND	68	13	?
GW-15 20'	ND	52	18	?
GW-15 28'	ND	96	6	?

V. LABORATORY FINDINGS

Method SW8260A Findings

All findings are reported in uG/L (PPB).

Location	VC	tranDCE	cisDCE	111TCA	TCE	PCE
GW-1, 20'	ND	ND	ND	ND	1.2	ND
GW-2, 20'	ND	ND	ND	ND	ND	ND
GW-2, 28'	ND	ND	6.6	ND	23	ND
GW-3, 20'	ND	ND	1.1	ND	6.2	ND
GW-3, 28'	ND	ND	7.5	ND	34	ND
GW-4 20'	ND	ND	1.6	ND	7	ND
GW-5 20'	ND	ND	1.5	ND	5.2	ND
GW-6 20'	ND	ND	ND	ND	1.5	ND
GW-7 20'	ND	ND	3.6	ND	11	ND
GW-8 20'	ND	ND	1	ND	4.5	1.4
GW-8 28'	ND	1.5	19	ND	46	ND
GW-9 20	ND	ND	1.7	ND	9.5	1.8
GW-10 20'	ND	ND	3.1	ND	8.1	ND
GW-11 20'	ND	ND	3.1	ND	8.4	ND
GW-11 28'	ND	ND	6.6	ND	23	ND
GW-12 20'	ND	ND	ND	ND	3.9	1.7
GW-12 28'	ND	ND	8.2	ND	25	ND
GW-13 20'	ND	ND	ND	ND	2.4	2.8
GW-13 28'	ND	ND	9.6	ND	36	ND
GW-14 21'	ND	ND	4	ND	13	ND
GW-15 20'	ND	ND	1.1	ND	6.8	ND
GW-15 28'	1	ND	7.5	ND	29	ND

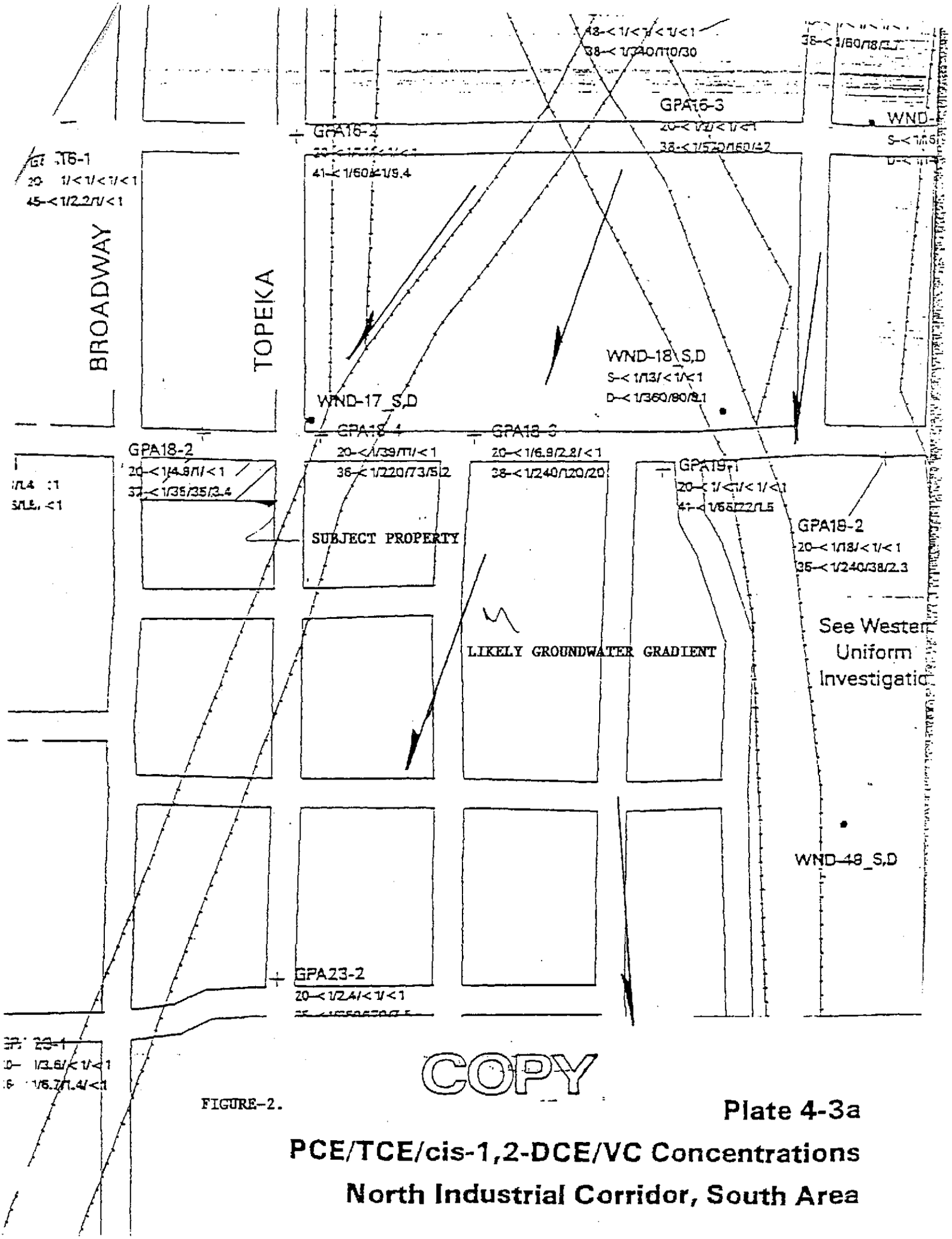


FIGURE-2.

Plate 4-3a

PCE/TCE/cis-1,2-DCE/VC Concentrations

North Industrial Corridor, South Area

Alpha Analytical, Inc.
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Sacramento, California
(916) 366-9089
FAX: (916) 366-9128

ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#: Copeland Truck
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99052204-08A
Client I.D. Number: GW-8-S 18-20 Feet

Sampled: 5/20/99
Received: 5/22/99
Analyzed: 5/27/99

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration µg/L	Reporting Limit	
1	Dichlorodifluoromethane	ND	1.0	µg/L
2	Chloromethane	ND	2.0	µg/L
3	Vinyl chloride	ND	1.0	µg/L
4	Chloroethane	ND	1.0	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	1.0	µg/L
7	1,1-Dichloroethene	ND	1.0	µg/L
8	Dichloromethane	ND	2.0	µg/L
9	trans-1,2-Dichloroethene	ND	1.0	µg/L
10	1,1-Dichloroethane	ND	1.0	µg/L
11	cis-1,2-Dichloroethene	1.0	1.0	µg/L
12	Bromochloromethane	ND	1.0	µg/L
13	Chloroform	ND	1.0	µg/L
14	2,2-Dichloropropane	ND	1.0	µg/L
15	1,2-Dichloroethane	ND	1.0	µg/L
16	1,1,1-Trichloroethane	ND	1.0	µg/L
17	1,1-Dichloropropene	ND	1.0	µg/L
18	Carbon tetrachloride	ND	1.0	µg/L
19	Benzene	ND	1.0	µg/L
20	Dibromomethane	ND	1.0	µg/L
21	1,2-Dichloropropane	ND	1.0	µg/L
22	Trichloroethene	4.5	1.0	µg/L
23	Bromodichloromethane	ND	1.0	µg/L
24	cis-1,3-Dichloropropene	ND	1.0	µg/L
25	trans-1,3-Dichloropropene	ND	1.0	µg/L
26	1,1,2-Trichloroethane	ND	1.0	µg/L
27	Toluene	ND	1.0	µg/L
28	1,3-Dichloropropane	ND	1.0	µg/L
29	Dibromochloromethane	ND	1.0	µg/L
30	1,2-Dibromoethane	ND	2.0	µg/L
31	Tetrachloroethene	1.4	1.0	µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0	µg/L
33	Chlorobenzene	ND	1.0	µg/L
34	Ethylbenzene	ND	1.0	µg/L
35	m,p-Xylene	ND	1.0	µg/L
36	Bromoform	ND	1.0	µg/L
37	Styrene	ND	1.0	µg/L
38	o-Xylene	ND	1.0	µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0	µg/L
40	1,2,3-Trichloropropane	ND	2.0	µg/L
41	Isopropylbenzene	ND	1.0	µg/L
42	Bromobenzene	ND	1.0	µg/L
43	n-Propylbenzene	ND	1.0	µg/L
44	4-Chlorotoluene	ND	1.0	µg/L
45	2-Chlorotoluene	ND	1.0	µg/L
46	1,3,5-Trimethylbenzene	ND	1.0	µg/L
47	tert-Butylbenzene	ND	1.0	µg/L
48	1,2,4-Trimethylbenzene	ND	1.0	µg/L
49	sec-Butylbenzene	ND	1.0	µg/L
50	1,3-Dichlorobenzene	ND	1.0	µg/L
51	1,4-Dichlorobenzene	ND	1.0	µg/L
52	4-Isopropyltoluene	ND	1.0	µg/L
53	1,2-Dichlorobenzene	ND	1.0	µg/L
54	n-Butylbenzene	ND	1.0	µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L
56	1,2,4-Trichlorobenzene	ND	2.0	µg/L
57	Naphthalene	ND	2.0	µg/L
58	Hexachlorobutadiene	ND	2.0	µg/L
59	1,2,3-Trichlorobenzene	ND	2.0	µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/1/99

Roger L. Scholl, Ph.D.
Laboratory Director

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3	Vinyl chloride	ND	1.0	µg/L
4	Chloroethane	ND	1.0	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	1.0	µg/L
7	1,1-Dichloroethene	ND	1.0	µg/L
8	Dichloromethane	ND	2.0	µg/L
9	trans-1,2-Dichloroethene	ND	1.0	µg/L
10	1,1-Dichloroethane	ND	1.0	µg/L
11	cis-1,2-Dichloroethene	1.7	1.0	µg/L
12	Bromochloromethane	ND	1.0	µg/L
13	Chloroform	ND	1.0	µg/L
14	2,2-Dichloropropane	ND	1.0	µg/L
15	1,2-Dichloroethane	ND	1.0	µg/L
16	1,1,1-Trichloroethane	ND	1.0	µg/L
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18	Carbon tetrachloride	ND	1.0	µg/L
19	Benzene	ND	1.0	µg/L
20	Dibromomethane	ND	1.0	µg/L
21	1,2-Dichloropropane	ND	1.0	µg/L
22	Trichloroethene	9.5	1.0	µg/L
23	Bromodichloromethane	ND	1.0	µg/L
24	cis-1,3-Dichloropropene	ND	1.0	µg/L
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29	Dibromochloromethane	ND	1.0	µg/L
30	1,2-Dibromoethane	ND	2.0	µg/L
31	Tetrachloroethene	1.8	1.0	µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0	µg/L
33	Chlorobenzene	ND	1.0	µg/L
34	Ethylbenzene	ND	1.0	µg/L
35	m,p-Xylene	ND	1.0	µg/L
36	Bromoform	ND	1.0	µg/L
37	Styrene	ND	1.0	µg/L
38	o-Xylene	ND	1.0	µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0	µg/L
40	1,2,3-Trichloropropane	ND	2.0	µg/L
41	Isopropylbenzene	ND	1.0	µg/L
42	Bromobenzene	ND	1.0	µg/L
43	n-Propylbenzene	ND	1.0	µg/L
44	4-Chlorotoluene	ND	1.0	µg/L
45	2-Chlorotoluene	ND	1.0	µg/L
46	1,3,5-Trimethylbenzene	ND	1.0	µg/L
47	tert-Butylbenzene	ND	1.0	µg/L
48	1,2,4-Trimethylbenzene	ND	1.0	µg/L
49	sec-Butylbenzene	ND	1.0	µg/L
50	1,3-Dichlorobenzene	ND	1.0	µg/L
51	1,4-Dichlorobenzene	ND	1.0	µg/L
52	4-Isopropyltoluene	ND	1.0	µg/L
53	1,2-Dichlorobenzene	ND	1.0	µg/L
54	n-Butylbenzene	ND	1.0	µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L
56	1,2,4-Trichlorobenzene	ND	2.0	µg/L
57	Naphthalene	ND	2.0	µg/L
58	Hexachlorobutadiene	ND	2.0	µg/L
59	1,2,3-Trichlorobenzene	ND	2.0	µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/1/99

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FAX: (916) 366-9138

ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#:
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99061525-01A
Client I.D. Number: GW-12-S,18-20ft.

Sampled: 6/11/99
Received: 6/15/99
Analyzed: 6/19/99

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration µg/L	Reporting Limit	
1	Dichlorodifluoromethane	ND	1.0	µg/L
2	Chloromethane	ND	2.0	µg/L
3	Vinyl chloride	ND	1.0	µg/L
4	Chloroethane	ND	1.0	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	1.0	µg/L
7	1,1-Dichloroethane	ND	1.0	µg/L
8	Dichloromethane	ND	2.0	µg/L
9	trans-1,2-Dichloroethene	ND	1.0	µg/L
10	1,1-Dichloroethane	ND	1.0	µg/L
11	cis-1,2-Dichloroethene	ND	1.0	µg/L
12	Bromochloromethane	ND	1.0	µg/L
13	Chloroform	ND	1.0	µg/L
14	2,2-Dichloropropane	ND	1.0	µg/L
15	1,2-Dichloroethane	ND	1.0	µg/L
16	1,1,1-Trichloroethane	ND	1.0	µg/L
17	1,1-Dichloropropene	ND	1.0	µg/L
18	Carbon tetrachloride	ND	1.0	µg/L
19	Benzene	ND	1.0	µg/L
20	Dibromomethane	ND	1.0	µg/L
21	1,2-Dichloropropane	ND	1.0	µg/L
22	Trichloroethene	3.9	1.0	µg/L
23	Bromodichloromethane	ND	1.0	µg/L
24	cis-1,3-Dichloropropene	ND	1.0	µg/L
25	trans-1,3-Dichloropropene	ND	1.0	µg/L
26	1,1,2-Trichloroethane	ND	1.0	µg/L
27	Toluene	ND	1.0	µg/L
28	1,3-Dichloropropane	ND	1.0	µg/L
29	Dibromochloromethane	ND	1.0	µg/L
30	1,2-Dibromoethane	ND	2.0	µg/L
31	Tetrachloroethene	1.7	1.0	µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0	µg/L
33	Chlorobenzene	ND	1.0	µg/L
34	Ethylbenzene	ND	1.0	µg/L
35	m,p-Xylene	ND	1.0	µg/L
36	Bromoform	ND	1.0	µg/L
37	Styrene	ND	1.0	µg/L
38	o-Xylene	ND	1.0	µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0	µg/L
40	1,2,3-Trichloropropane	ND	2.0	µg/L
41	Isopropylbenzene	ND	1.0	µg/L
42	Bromobenzene	ND	1.0	µg/L
43	n-Propylbenzene	ND	1.0	µg/L
44	4-Chlorotoluene	ND	1.0	µg/L
45	2-Chlorotoluene	ND	1.0	µg/L
46	1,3,5-Trimethylbenzene	ND	1.0	µg/L
47	tert-Butylbenzene	ND	1.0	µg/L
48	1,2,4-Trimethylbenzene	ND	1.0	µg/L
49	sec-Butylbenzene	ND	1.0	µg/L
50	1,3-Dichlorobenzene	ND	1.0	µg/L
51	1,4-Dichlorobenzene	ND	1.0	µg/L
52	4-Isopropyltoluene	ND	1.0	µg/L
53	1,2-Dichlorobenzene	ND	1.0	µg/L
54	n-Butylbenzene	ND	1.0	µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L
56	1,2,4-Trichlorobenzene	ND	2.0	µg/L
57	Naphthalene	ND	2.0	µg/L
58	Hexachlorobutadiene	ND	2.0	µg/L
59	1,2,3-Trichlorobenzene	ND	2.0	µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/21/99
Roger L. Scholl, Ph.D.
Laboratory Director

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
(775) 355-1044
FAX: (775) 355-0406
1-800-283-1183

Wichita, Kansas
(316) 722-5890
FAX: (316) 722-6008

Las Vegas, Nevada
(702) 498-3312
FAX: (702) 736-7523
Sacramento, California
(916) 366-9089
FAX: (916) 366-9138

ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#:
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99061525-03A
Client I.D. Number: GW-13-S,18-20ft.

Sampled: 6/11/99
Received: 6/15/99
Analyzed: 6/19/99

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration µg/L	Reporting Limit
1	Dichlorodifluoromethane	ND	1.0 µg/L
2	Chloromethane	ND	2.0 µg/L
3	Vinyl chloride	ND	1.0 µg/L
4	Chloroethane	ND	1.0 µg/L
5	Bromomethane	ND	1.0 µg/L
6	Trichlorofluoromethane	ND	1.0 µg/L
7	1,1-Dichloroethene	ND	1.0 µg/L
8	Dichloromethane	ND	2.0 µg/L
9	trans-1,2-Dichloroethene	ND	1.0 µg/L
10	1,1-Dichloroethane	ND	1.0 µg/L
11	cis-1,2-Dichloroethene	ND	1.0 µg/L
12	Bromochloromethane	ND	1.0 µg/L
13	Chloroform	ND	1.0 µg/L
14	2,2-Dichloropropane	ND	1.0 µg/L
15	1,2-Dichloroethane	ND	1.0 µg/L
16	1,1,1-Trichloroethane	ND	1.0 µg/L
17	1,1-Dichloropropene	ND	1.0 µg/L
18	Carbon tetrachloride	ND	1.0 µg/L
19	Benzene	ND	1.0 µg/L
20	Dibromomethane	ND	1.0 µg/L
21	1,2-Dichloropropane	ND	1.0 µg/L
22	Trichloroethene	2.4	1.0 µg/L
23	Bromodichloromethane	ND	1.0 µg/L
24	cis-1,3-Dichloropropene	ND	1.0 µg/L
25	trans-1,3-Dichloropropene	ND	1.0 µg/L
26	1,1,2-Trichloroethane	ND	1.0 µg/L
27	Toluene	ND	1.0 µg/L
28	1,3-Dichloropropane	ND	1.0 µg/L
29	Dibromochloromethane	ND	1.0 µg/L
30	1,2-Dibromoethane	ND	2.0 µg/L
31	Tetrachloroethene	2.8	1.0 µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0 µg/L
33	Chlorobenzene	ND	1.0 µg/L
34	Ethylbenzene	ND	1.0 µg/L
35	m,p-Xylene	ND	1.0 µg/L
36	Bromoform	ND	1.0 µg/L
37	Styrene	ND	1.0 µg/L
38	o-Xylene	ND	1.0 µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
40	1,2,3-Trichloropropane	ND	2.0 µg/L
41	Isopropylbenzene	ND	1.0 µg/L
42	Bromobenzene	ND	1.0 µg/L
43	n-Propylbenzene	ND	1.0 µg/L
44	4-Chlorotoluene	ND	1.0 µg/L
45	2-Chlorotoluene	ND	1.0 µg/L
46	1,3,5-Trimethylbenzene	ND	1.0 µg/L
47	tert-Butylbenzene	ND	1.0 µg/L
48	1,2,4-Trimethylbenzene	ND	1.0 µg/L
49	sec-Butylbenzene	ND	1.0 µg/L
50	1,3-Dichlorobenzene	ND	1.0 µg/L
51	1,4-Dichlorobenzene	ND	1.0 µg/L
52	4-Isopropyltoluene	ND	1.0 µg/L
53	1,2-Dichlorobenzene	ND	1.0 µg/L
54	n-Butylbenzene	ND	1.0 µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0 µg/L
56	1,2,4-Trichlorobenzene	ND	2.0 µg/L
57	Naphthalene	ND	2.0 µg/L
58	Hexachlorobutadiene	ND	2.0 µg/L
59	1,2,3-Trichlorobenzene	ND	2.0 µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/21/99

Roger L. Scholl, Ph.D.
Laboratory Director

Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052125
Sample Description: NIC-COP-GP-6D-28

Date Sampled: 05/19/1999
Time Sampled: 1603

Analysis	Concentration	Units	Date Analyzed	Book/Page
Purgeable Halocarbons 1,1,1 TCA (also 1,1,1 TCE)			05/27/1999	
1,1,1-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-Tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethylene	0.6	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-Dichloroethane	ND(0.5)	µg/L		4061/242
cis-1,2-Dichloroethylene	11.8	µg/L		4061/242
trans-1,2-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Methylene chloride	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	27.6	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	ND(0.5)	µg/L		4061/242

1,1,1 Trichloroethane

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
Purgeable Halocarbons	NA	1GC4147	JTJ	601/8021B

Laboratory analyses were performed on samples utilizing procedures published in Title 40 of the Code of Federal Regulations, Parts 136 or 141, or in EPA Publication, SW-846, 3rd edition, September, 1986 and the latest promulgated update. ND(), where noted, indicates none detected with the reporting limit in parentheses. Samples will be retained for thirty days unless otherwise notified.

CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
Laboratory Director

Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052126
Sample Description: NIC-COP-GP-6S-20

Date Sampled: 05/19/1999
Time Sampled: 1540

Analysis	Concentration	Units	Date Analyzed	Book/Page
Volatile Organics by GC			05/27/1999	
1,1,1-trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-dichloroethane	ND(0.5)	µg/L		4061/242
1,2-dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Benzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,2-dichloroethylene	1.1	µg/L		4061/242
cis-1,3-dichloropropene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Ethylbenzene	ND(0.5)	µg/L		4061/242
Methylene chloride/DCM	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	0.7	µg/L		4061/242
Toluene	ND(0.5)	µg/L		4061/242
trans-1,2-dichloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	4.2	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	ND(0.5)	µg/L		4061/242
Xylenes	ND(0.5)	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
GC Priority Pollutant Volatile	NA	1GC4147	JTJ	601/602/8021B

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CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
Laboratory Director

1804 GLENDALE ROAD • SALINA, KANSAS 67401-6675
785-827-1273 • 800-535-3076 • FAX 785-823-7830

Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052127
Sample Description: NIC-COP-GP-7S-20

Date Sampled: 05/20/1999
Time Sampled: 0930

Analysis	Concentration	Units	Date Analyzed	Book/Page
Volatile Organics by GC			05/27/1999	
1,1,1-trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-dichloroethane	ND(0.5)	µg/L		4061/242
1,2-dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Benzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,2-dichloroethylene	3.7	µg/L		4061/242
cis-1,3-dichloropropene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Ethylbenzene	ND(0.5)	µg/L		4061/242
Methylene chloride/DCM	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	0.6	µg/L		4061/242
Toluene	ND(0.5)	µg/L		4061/242
trans-1,2-dichloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	11.2	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	ND(0.5)	µg/L		4061/242
Xylenes	ND(0.5)	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
GC Priority Pollutant Volatile	NA	1GC4147	JTJ	601/602/8021B

Laboratory analyses were performed on samples utilizing procedures published in Title 40 of the Code of Federal Regulations, Parts 136 or 141, or in EPA Publication, SW-846, 3rd edition, September, 1986 and the latest promulgated update. ND(), where noted, indicates none detected with the reporting limit in parentheses. Samples will be retained for thirty days unless otherwise notified.

CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
Laboratory Director

1804 Glendale Road • Salina, Kansas 67401-6675
785-827-1273 • 800-535-3076 • FAX 785-823-7830

Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052128
Sample Description: NIC-COP-GP-7D-28

Date Sampled: 05/20/1999
Time Sampled: 0943

Analysis	Concentration	Units	Date Analyzed	Book/Page
Purgeable Halocarbons			05/27/1999	
1,1,1-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-Tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	0.6	µg/L		4061/242
1,1-Dichloroethylene	1.0	µg/L		4061/242
1,2-Dichlorobenzene (ortho)	ND(0.5)	µg/L		4061/242
1,2-Dichloroethane	ND(0.5)	µg/L		4061/242
cis-1,2-Dichloroethylene	21.9	µg/L		4061/242
trans-1,2-Dichloroethylene	0.5	µg/L		4061/242
1,2-Dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Methylene chloride	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	36.1	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	0.8	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
Purgeable Halocarbons	NA	1GC4147	JTJ	601/8021B

Laboratory analyses were performed on samples utilizing procedures published in Title 40 of the Code of Federal Regulations, Parts 136 or 141, or in EPA Publication, SW-846, 3rd edition, September, 1986 and the latest promulgated update. ND(), where noted, indicates none detected with the reporting limit in parentheses. Samples will be retained for thirty days unless otherwise notified.

CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
Clifford J. Baker
Laboratory Director

1804 GLENDALE ROAD • SALINA, KANSAS 67401-6675
785-827-1273 • 800-535-3076 • FAX 785-823-7830

Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052129
Sample Description: NIC-COP-GP-8S-18

Date Sampled: 05/20/1999
Time Sampled: 1023

Analysis	Concentration	Units	Date Analyzed	Book/Page
Volatile Organics by GC			05/27/1999	
1,1,1-trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-dichloroethane	ND(0.5)	µg/L		4061/242
1,2-dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Benzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,2-dichloroethylene	1.2	µg/L		4061/242
cis-1,3-dichloropropene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Ethylbenzene	ND(0.5)	µg/L		4061/242
Methylene chloride/DCM	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	1.6	µg/L		4061/242
Toluene	ND(0.5)	µg/L		4061/242
trans-1,2-dichloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	5.2	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	ND(0.5)	µg/L		4061/242
Xylenes	ND(0.5)	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
GC Priority Pollutant Volatile	NA	1GC4147	JTJ	601/602/8021B

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CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
Laboratory Director

1804 GLENDALE ROAD • SALINA, KANSAS 67401-6675
785-827-1273 • 800-535-3076 • FAX 785-823-7830

Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052130
Sample Description: NIC-COP-GP-8D-28

Date Sampled: 05/20/1999
Time Sampled: 1040

Analysis	Concentration	Units	Date Analyzed	Book/Page
Purgeable Halocarbons			05/28/1999	
1,1,1-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-Tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	0.6	µg/L		4061/242
1,1-Dichloroethylene	1.1	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-Dichloroethane	ND(0.5)	µg/L		4061/242
cis-1,2-Dichloroethylene	18.5	µg/L		4061/242
trans-1,2-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Methylene chloride	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	42.8	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	0.7	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
Purgeable Halocarbons	NA	1GC4147	JTJ	601/8021B

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CONTINENTAL ANALYTICAL SERVICES, INC.

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Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052131
Sample Description: NIC-COP-GP-99-20

Date Sampled: 05/20/1999
Time Sampled: 1110

Analysis	Concentration	Units	Date Analyzed	Book/Page
Volatile Organics by GC			05/28/1999	
1,1,1-trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-dichloroethane	ND(0.5)	µg/L		4061/242
1,2-dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Benzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,2-dichloroethylene	2.1	µg/L		4061/242
cis-1,3-dichloropropene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Ethylbenzene	ND(0.5)	µg/L		4061/242
Methylene chloride/DCM	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	2.4	µg/L		4061/242
Toluene	ND(0.5)	µg/L		4061/242
trans-1,2-dichloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	10.9	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	ND(0.5)	µg/L		4061/242
Xylenes	ND(0.5)	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
GC Priority Pollutant Volatile	NA	1GC4147	JTJ	601/602/8021B

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Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052132
Sample Description: NIC-COP-GP-9D-28

Date Sampled: 05/20/1999
Time Sampled: 1133

Analysis	Concentration	Units	Date Analyzed	Book/Page
Purgeable Halocarbons			05/28/1999	
1,1,1-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-Tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-Trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-Dichloroethane	ND(0.5)	µg/L		4061/242
cis-1,2-Dichloroethylene	4.5	µg/L		4061/242
trans-1,2-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Methylene chloride	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	1.2	µg/L		4061/242
trans-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	18.2	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	ND(0.5)	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
Purgeable Halocarbons	NA	1GC4147	JTJ	601/8021B

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Continental
Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052133
Sample Description: NIC-COP-GP-10S-18

Date Sampled: 05/20/1999
Time Sampled: 1301

Analysis	Concentration	Units	Date Analyzed	Book/Page
Volatile Organics by GC			05/28/1999	
1,1,1-trichloroethane	ND(0.5)	µg/L		4061/242
1,1,2,2-tetrachloroethane	ND(0.5)	µg/L		4061/242
1,1,2-trichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethane	ND(0.5)	µg/L		4061/242
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/242
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/242
1,2-dichloroethane	ND(0.5)	µg/L		4061/242
1,2-dichloropropane	ND(0.5)	µg/L		4061/242
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/242
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/242
Benzene	ND(0.5)	µg/L		4061/242
Bromodichloromethane	ND(0.5)	µg/L		4061/242
Bromoform	ND(0.5)	µg/L		4061/242
Bromomethane	ND(0.5)	µg/L		4061/242
Carbon tetrachloride	ND(0.5)	µg/L		4061/242
Chlorobenzene	ND(0.5)	µg/L		4061/242
Chloroethane	ND(0.5)	µg/L		4061/242
Chloroform	ND(0.5)	µg/L		4061/242
Chloromethane	ND(0.5)	µg/L		4061/242
cis-1,2-dichloroethylene	2.5	µg/L		4061/242
cis-1,3-dichloropropene	ND(0.5)	µg/L		4061/242
Dibromochloromethane	ND(0.5)	µg/L		4061/242
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/242
Ethylbenzene	ND(0.5)	µg/L		4061/242
Methylene chloride/DCM	ND(0.5)	µg/L		4061/242
Tetrachloroethylene	ND(0.5)	µg/L		4061/242
Toluene	ND(0.5)	µg/L		4061/242
trans-1,2-dichloroethylene	ND(0.5)	µg/L		4061/242
trans-1,3-dichloropropylene	ND(0.5)	µg/L		4061/242
Trichloroethylene	5.4	µg/L		4061/242
Trichlorofluoromethane	ND(0.5)	µg/L		4061/242
Vinyl chloride	ND(0.5)	µg/L		4061/242
Xylenes	ND(0.5)	µg/L		4061/242

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
GC Priority Pollutant Volatile	NA	1GC4147	JTJ	601/602/8021B

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CONTINENTAL ANALYTICAL SERVICES, INC.

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Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052135
Sample Description: NIC-COP-GP-11S-18

Date Sampled: 05/20/1999
Time Sampled: 1407

Analysis	Concentration	Units	Date Analyzed	Book/Page
Volatile Organics by GC			05/28/1999	
1,1,1-trichloroethane	ND(0.5)	µg/L		4061/246
1,1,2,2-tetrachloroethane	ND(0.5)	µg/L		4061/246
1,1,2-trichloroethane	ND(0.5)	µg/L		4061/246
1,1-Dichloroethane	ND(0.5)	µg/L		4061/246
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/246
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/246
1,2-dichloroethane	ND(0.5)	µg/L		4061/246
1,2-dichloropropane	ND(0.5)	µg/L		4061/246
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/246
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/246
Benzene	ND(0.5)	µg/L		4061/246
Bromodichloromethane	ND(0.5)	µg/L		4061/246
Bromoform	ND(0.5)	µg/L		4061/246
Bromomethane	ND(0.5)	µg/L		4061/246
Carbon tetrachloride	ND(0.5)	µg/L		4061/246
Chlorobenzene	ND(0.5)	µg/L		4061/246
Chloroethane	ND(0.5)	µg/L		4061/246
Chloroform	ND(0.5)	µg/L		4061/246
Chloromethane	ND(0.5)	µg/L		4061/246
cis-1,2-dichloroethylene	3.7	µg/L		4061/246
cis-1,3-dichloropropene	ND(0.5)	µg/L		4061/246
Dibromochloromethane	ND(0.5)	µg/L		4061/246
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/246
Ethylbenzene	ND(0.5)	µg/L		4061/246
Methylene chloride/DCM	ND(0.5)	µg/L		4061/246
Tetrachloroethylene	ND(0.5)	µg/L		4061/246
Toluene	ND(0.5)	µg/L		4061/246
trans-1,2-dichloroethylene	ND(0.5)	µg/L		4061/246
trans-1,3-dichloropropylene	ND(0.5)	µg/L		4061/246
Trichloroethylene	9.3	µg/L		4061/246
Trichlorofluoromethane	ND(0.5)	µg/L		4061/246
Vinyl chloride	ND(0.5)	µg/L		4061/246
Xylenes	ND(0.5)	µg/L		4061/246

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
GC Priority Pollutant Volatile	NA	1GC4148	JTJ	601/602/8021B

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CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
Clifford J. Baker
Laboratory Director

Continental
Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052136
Sample Description: NIC-COP-GP-11D-28

Date Sampled: 05/20/1999
Time Sampled: 1426

Analysis	Concentration	Units	Date Analyzed	Book/Page
Purgeable Halocarbons			05/28/1999	
1,1,1-Trichloroethane	ND(0.5)	µg/L		4061/246
1,1,2,2-Tetrachloroethane	ND(0.5)	µg/L		4061/246
1,1,2-Trichloroethane	ND(0.5)	µg/L		4061/246
1,1-Dichloroethane	ND(0.5)	µg/L		4061/246
1,1-Dichloroethylene	0.5	µg/L		4061/246
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/246
1,2-Dichloroethane	ND(0.5)	µg/L		4061/246
cis-1,2-Dichloroethylene	6.5	µg/L		4061/246
trans-1,2-Dichloroethylene	ND(0.5)	µg/L		4061/246
1,2-Dichloropropane	ND(0.5)	µg/L		4061/246
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/246
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/246
Bromodichloromethane	ND(0.5)	µg/L		4061/246
Bromoform	ND(0.5)	µg/L		4061/246
Bromomethane	ND(0.5)	µg/L		4061/246
Carbon tetrachloride	ND(0.5)	µg/L		4061/246
Chlorobenzene	ND(0.5)	µg/L		4061/246
Chloroethane	ND(0.5)	µg/L		4061/246
Chloroform	ND(0.5)	µg/L		4061/246
Chloromethane	ND(0.5)	µg/L		4061/246
cis-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/246
Dibromochloromethane	ND(0.5)	µg/L		4061/246
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/246
Methylene chloride	ND(0.5)	µg/L		4061/246
Tetrachloroethylene	ND(0.5)	µg/L		4061/246
trans-1,3-Dichloropropylene	ND(0.5)	µg/L		4061/246
Trichloroethylene	24.9	µg/L		4061/246
Trichlorofluoromethane	ND(0.5)	µg/L		4061/246
Vinyl chloride	ND(0.5)	µg/L		4061/246

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
Purgeable Halocarbons	NA	1GC4148	JTJ	601/8021B

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CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
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Laboratory Director

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Continental Analytical Services, Inc.

Client: City of Wichita
Attn: Brian Fisher
1900 E. Ninth
Wichita, KS 67214

Date Sample Rptd: 06/11/1999
Date Sample Recd: 05/25/1999
Continental File No: 5535
Continental Order No: 55987
Client P.O.:

Lab Number: 99052135
Sample Description: NIC-COP-GP-11S-18

Date Sampled: 05/20/1999
Time Sampled: 1407

Analysis	Concentration	Units	Date Analyzed	Book/Page
Volatile Organics by GC			05/28/1999	
1,1,1-trichloroethane	ND(0.5)	µg/L		4061/246
1,1,2,2-tetrachloroethane	ND(0.5)	µg/L		4061/246
1,1,2-trichloroethane	ND(0.5)	µg/L		4061/246
1,1-Dichloroethane	ND(0.5)	µg/L		4061/246
1,1-Dichloroethylene	ND(0.5)	µg/L		4061/246
1,2-Dichlorobenzene(ortho)	ND(0.5)	µg/L		4061/246
1,2-dichloroethane	ND(0.5)	µg/L		4061/246
1,2-dichloropropane	ND(0.5)	µg/L		4061/246
1,3-Dichlorobenzene	ND(0.5)	µg/L		4061/246
1,4-Dichlorobenzene	ND(0.5)	µg/L		4061/246
Benzene	ND(0.5)	µg/L		4061/246
Bromodichloromethane	ND(0.5)	µg/L		4061/246
Bromoform	ND(0.5)	µg/L		4061/246
Bromomethane	ND(0.5)	µg/L		4061/246
Carbon tetrachloride	ND(0.5)	µg/L		4061/246
Chlorobenzene	ND(0.5)	µg/L		4061/246
Chloroethane	ND(0.5)	µg/L		4061/246
Chloroform	ND(0.5)	µg/L		4061/246
Chloromethane	ND(0.5)	µg/L		4061/246
cis-1,2-dichloroethylene	3.7	µg/L		4061/246
cis-1,3-dichloropropene	ND(0.5)	µg/L		4061/246
Dibromochloromethane	ND(0.5)	µg/L		4061/246
Dichlorodifluoromethane	ND(0.5)	µg/L		4061/246
Ethylbenzene	ND(0.5)	µg/L		4061/246
Methylene chloride/DCM	ND(0.5)	µg/L		4061/246
Tetrachloroethylene	ND(0.5)	µg/L		4061/246
Toluene	ND(0.5)	µg/L		4061/246
trans-1,2-dichloroethylene	ND(0.5)	µg/L		4061/246
trans-1,3-dichloropropylene	ND(0.5)	µg/L		4061/246
Trichloroethylene	9.3	µg/L		4061/246
Trichlorofluoromethane	ND(0.5)	µg/L		4061/246
Vinyl chloride	ND(0.5)	µg/L		4061/246
Xylenes	ND(0.5)	µg/L		4061/246

Analysis	Date Prepared	QC Batch	Analyst	Method(s)
GC Priority Pollutant Volatile	NA	1GC4148	JTJ	601/602/8021B

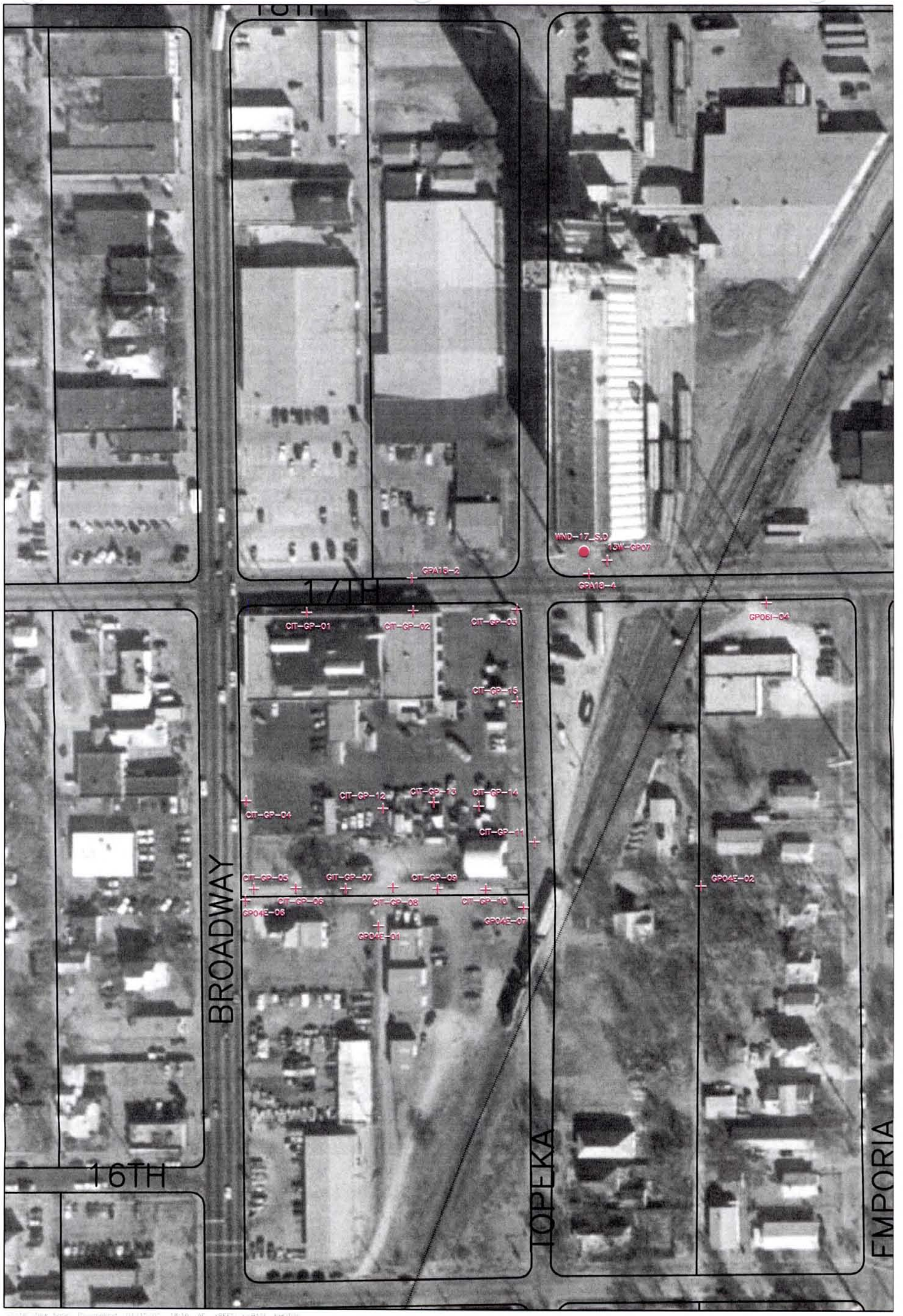
Laboratory analyses were performed on samples utilizing procedures published in Title 40 of the Code of Federal Regulations, Parts 136 or 141, or in EPA Publication, SW-846, 3rd edition, September, 1986 and the latest promulgated update. ND(), where noted, indicates none detected with the reporting limit in parentheses. Samples will be retained for thirty days unless otherwise notified.

CONTINENTAL ANALYTICAL SERVICES, INC.

Clifford J. Baker
Laboratory Director

1804 Glendale Road • Salina, Kansas 67401-6675
785-827-1273 • 800-535-3076 • FAX 785-823-7830

Figure(s)
Aerial Photographs and Sample Location Map(s)



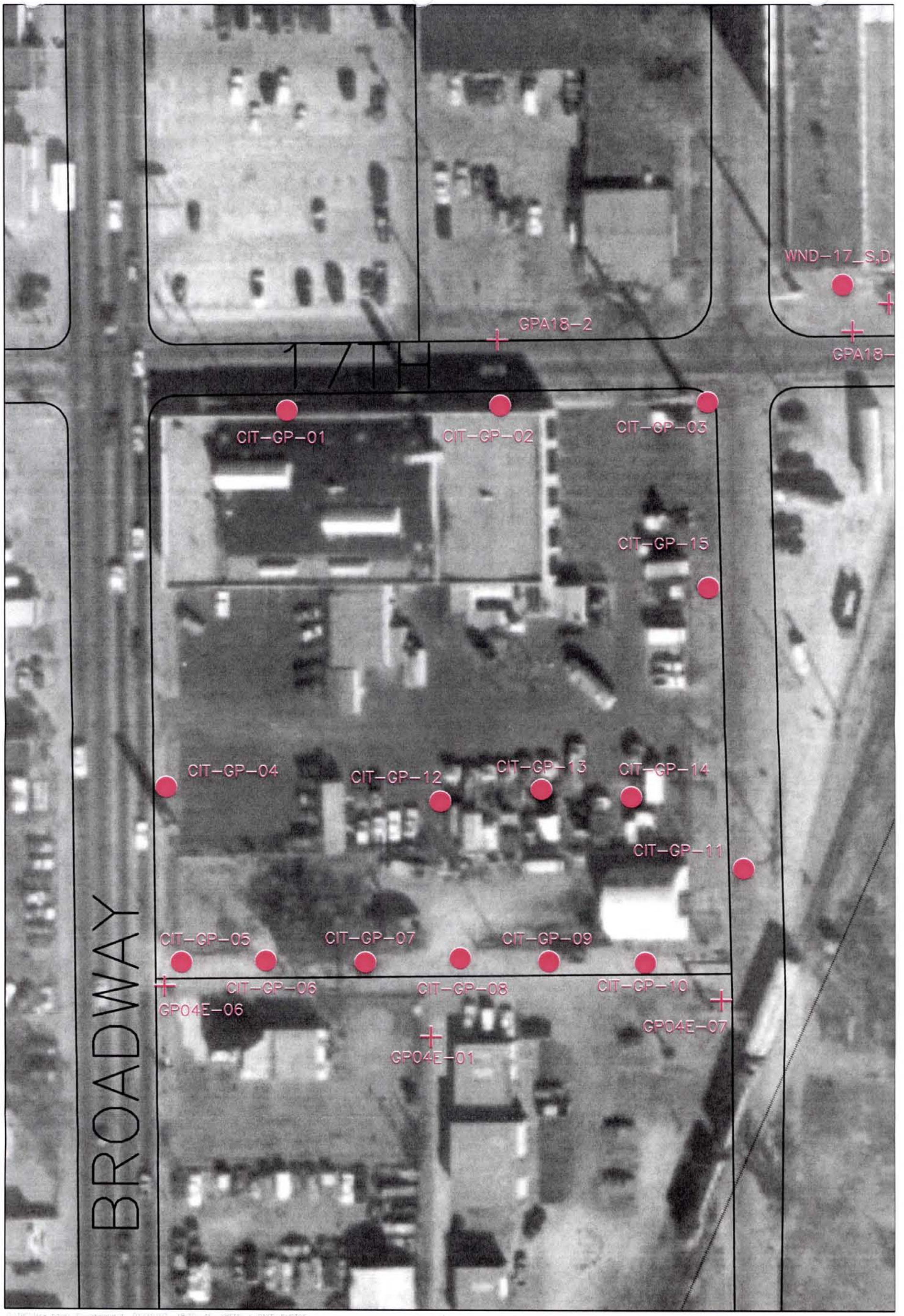
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Copeland Facility



CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Copeland Facility

Table(s)
Analytical Data Table(s)

Former Copeland International Trucks Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP04E-01	S/17	10/26/99		µg/L	**7.9**	**1.5**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04E-01	D/29	10/26/99		µg/L	<1	**49**	**33**	**2.6**	<1	<1	<1	<1	<1	<1	<5.4
GP04E-01	D/29	10/26/99	DUP	µg/L	<1	**61**	**31**	**2.5**	<1	<1	<1	<1	<1	<1	<5.4
GP04E-06	S/17	12/03/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04E-06	D/44	12/03/99		µg/L	<1	**8.4**	**22**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04E-07	S/17	12/09/99		µg/L	<1	**1.2**	**2.5**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04E-07	D/30	12/09/99		µg/L	<1	**62**	**17**	**1.3**	<1	**0.58 J**	<1	<1	<1	<1	<5.4
GP04E-07	D/30	12/09/99	DUP	µg/L	<1	**54**	**16**	**1.2**	<1	**0.57 J**	<1	<1	<1	<1	<5.4
GPA18-2	S/20	12/19/97		µg/L	<1 JH	**4.9**	**1**	<1 JH	<1 JH	<1 JH	<1 JH	<1 JH	<1 JH	<1 JH	<5.4
GPA18-2	D/37	12/19/97		µg/L	<1 JH	**35**	**35**	**3.4 JH**	<1 JH	<1 JH	**1.4 JH**	<1 JH	<1 JH	<1 JH	<5.4
GPA18-4	S/20	12/29/97		µg/L	<1	**39**	**11**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA18-4	S/20	10/15/99		µg/L	<1	**27**	**5.2**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA18-4	D/36	12/29/97		µg/L	<1	**220**	**73**	**5.2**	<1	**2.1**	**5.4**	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethe
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-13
Former Dold Foods Facility

PRP Evaluation Summary

Former Dold Foods Facility
421 East 21st Street North (SE of 21st and Topeka)

Potential Source Area PRP and Work Plan Addendum Map ID - 04C
Contaminants of Concern - TCE and its degradation products
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

Evaluation of Former Dold Foods Facility

TCE Contamination

Data indicate that the TCE concentration increases along the groundwater flow path across the former Dold Foods facility (DLDS). The groundwater samples collected from shallow (17 to no more than 20 feet bgs) aquifer at upgradient locations GP04C-01 -02, -03, -04, GP#50-06, GPA11-2 and WND-02S contained TCE concentration of less than 10 μg/L. A downgradient shallow groundwater sample collected from GP#34-07, located at the southern boundary of DLDS contained 120 μg/L. These data indicate that a release has occurred at the facility.

Dold Foods used to operate at this facility and would have required the use of solvents to maintain and clean equipment. Additional data, possibly acquired through a KDHE request for information, is needed to determine what types of solvents were utilized at the facility.

Groundwater Flow

Localized groundwater flow direction is not well defined in this area and is complicated by the apparent pumping activities to the southeast of the DLDS. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southwest and south-southeast, respectively.

Reference

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Name of Company: Trailer Parts Supply (FORMER DOLD FOODS)

Name and/or Contact Person:

Street Address of Company: 421 E 21st St N

City, State, and Zip Code: Wichita, KS 67214

Regarding the Following Property:

Phone Number of Contact:

History:		
	1995	Trailer Parts Supply Inc
	1990	Same
	1984-5	Same
	1980	Same
	1975	Vacant
	1970	Dold Packing Co INc
	1965	Fred Dold & Sons Packing Co
	1961	Same

RCRA Info: No KDHE RCRA file.

Application for Certification and Release

Jms 10/15/14

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Trailer Parts Supply, Inc.

(insert legal name(s) of party seeking certificate)

421 East 21st Street North
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
421 East 21st Street North
Wichita, KS

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: _____

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third-party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: _____
(signature)

Name: Scott C. Alter
(print or type)

421 East 21st

Wichita, KS 67214
Address (print or type)

Date: 10/6/97

Subscribed and sworn to before me this 6th day of October, 1997.

GLORIA J. SMITH
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 12/15/2000

_____
Notary Public

My appointment expires: December 15, 2000

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for **Commercial/Industrial property** only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant Trailer Parts Supply, Inc. Date _____

Business Phone 316/262-3701 Home Phone _____

Legal Description See attached sheet

Property Tax Key # 96-0-B-02149; 96-0-B-02152; 96-0-B-B083; 96-0-B-13086

Street Address of Property 421 East 21st Street North

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER	DATES	TYPE OF BUSINESS/SITE USE
Trailer Parts Supply, Inc.	From: 1977 To: Present	Wholesale distributor of mobile home & r.v. parts
Urban Renewal	From: ? To: 1977	?
Dold Foods	From: ? To: ?	?
	From: To:	

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES	DATES	TYPE OF BUSINESS/SITE USE
Trailer Parts Supply, Inc.	From: 1977 To: Present	Wholesale distributor of mobile home & r.v. parts
Urban Renewal	From: ? To: 1977	?
Dold Foods	From: ? To: ?	?
	From: To:	

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☒Yes ☐No ☐Unknown
→ only as a participant in wind group [per email effort 10/27/97]

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☐Yes ☒No ☐Unknown

(d) Has any type of environmental study been performed on this property? ☐Yes ☒No ☐Unknown
If yes, please identify and include a copy of the report.

(2) Disposal of Wastes.

(a) Are liquid or sludge wastes generated and/or stored on property? ☐Yes ☒No ☐Unknown

(b) What do the liquid wastes consist of? N/A

(c) Has any type of characterization of these liquid wastes been conducted? ☐Yes ☐No ☐Unknown
If yes, include copy of results. N/A

ATTACHMENT TO
COMMERCIAL INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Legal Description:

Lots 12-13-14-15-16 and West ½ Vac. St. Adj. on and ½ Vac. Alley Adj. on South – even Lots 12 -32 Inc and West ½ Vac. St. Adj. on East and ½ Vac. Alley Adj.; Lots 17-18 and West 4.701 feet Lot 19 and East ½ Vac. St. Adj. on West and ½ Vac. Alley Adj. on South; West 54.7 feet odd Lots 11-31 Inc and East ½ Vac. St. Adj. on West and South ½ Vac. Alley Adj. on North Emporia Avenue

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☒No ☐Unknown

(b) Has the property even been owned by any entity that used hazardous substances on the site?
☐Yes ☐No ☒Unknown

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant. Not aware of any releases of hazardous substances

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☐Yes ☒No ☐Unknown

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☐No ☐Unknown None used or disposed of

If yes, give name, phone number and contact person, for each transporter utilized.
N/A

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.
N/A

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property? ☐Yes ☒No ☐Unknown If yes, include copy of results.

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☒No ☐Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☒No ☐Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored on the property?
☐Yes ☒No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.
N/A

(b) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☐Yes ☐No ☐Unknown N/A

(c) If such reports were filed, do they meet federal, state and local requirements? N/A
☐Yes ☐No ☐Unknown State the names of individuals familiar with the filings and the location of the files.

(5) Status of Water Pollution Control.
(a) Does the facility have any wastewater? ☐Yes ☒No ☐Unknown

How is it managed or treated at present? In past? N/A

(b) Are there any pits, ponds, lagoons, tanks? ☐Yes ☒No ☐Unknown

If yes, indicate how and when the structures were used, and what compounds have been stored in them.
N/A

(c) Is the property connected to the City sewage treatment system? ☒Yes ☐No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☒No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☒No ☐Unknown
State the location of such records and the individuals familiar with them.
N/A

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☐Yes ☒No ☐Unknown
If yes, where?

6) Status of Compliance with Requirements Relating to Petroleum Products.
(a) Are any petroleum products stored at the facility? ☐Yes ☒No ☐Unknown
If yes, how much and where are they stored?
N/A

(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown

Have they been registered with the Kansas Department of Health and Environment of other state, federal, or local agency?
☐Yes ☐No If registered, please attach a copy of the State Certificate.
N/A

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.
N/A

(d) Have the tanks been tested? ☐Yes ☐No ☐Unknown Results?
N/A

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property? ☐Yes ☐No ☐Unknown If yes, please describe. N/A

(f) Have any tanks presently or previously-located at the-property leaked or spilled?
☐Yes ☐No ☐Unknown If yes, please describe.
N/A

(7) Are there any water-wells on the property? ☐Yes XXNo If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☐Unknown If yes, please explain.
N/A

(a) If known, what was the water-well used for in the past? N/A
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(b) What is the water-well used for currently? N/A
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☐Unknown N/A

(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results. N/A

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes XXNo
If yes, list those corporate predecessors.

(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes XXNo
Is there a sale pending the Release for Environmental Conditions? ☐Yes XXNo
If yes, please indicate closing date _____.

Other comments:

Excerpts from Report(s) Prepared by Others

albertson architects planners

434 N. MARKET • SUITE 210 • WICHITA, KANSAS 67202 • 316/264-8315

January 11, 1977

Mr. Steve Potucek
Urban Renewal Agency
City Hall - 2nd Floor
455 North Main
Wichita, Kansas 67202

RE: Renovation of "Old Dold Packing Plant" by Trailer Parts Supply Inc.

Dear Steve:

The following is a list of physical improvements, of which Trailer Parts Supply Inc., have agreed to perform as a part of their purchase contract with the Urban Renewal Agency. I have attached copies of floor plans and building elevations taken from an Appraisal Report made for the Wichita Urban Renewal Agency on March 3, 1971 by Homer R. Atkins and Associates. I have made reference to the above plans to note locations of our improvements. Improvements shall be as follows:

1. OFFICE AREA (Rooms #1 through #9)

   Approximately 3,000 sq. ft. shall be remodeled in the above area into new corporate offices and display area. The existing room layouts, toilets, plumbing and electrical system shall all be removed. The new space shall contain three offices, a supply storage area, display area, and a mens and womens toilet.

   The area will have a suspended metal acoustical ceiling, partitioned with metal studs with 5/8" fire code sheetrock on each side to be painted, carpeted, heated and air conditioned.

2. The site, including gravel surface area enclosed by fence and building, gravel parking area directly east of the building, and the paved parking area east and north of the building shall be cleaned and have all debris, grass, etc. removed.

3. The chain link fence on the 21st Street side extending eastwardly from the building to the east property line, thence in a northern direction towards 21st Street shall have visual strips inserted in the fence. In addition a new chain link fence with visual strips shall be extended from the existing fence on the east property line

in a northern direction stopping at the north property line. See attached drawing.

4. The 10' X 38' pump house building noted on attached plans as Room #29 shall be demolished and removed from the site.

5. A concrete topping shall be poured over the existing floor in partial areas of Rooms #10, #11, and #54, to adequately level these floors for warehousing purposes.

6. The exterior masonry walls shall have all joints pointed as required to maintain a weatherproof structure as determined by the Architect.

   The existing masonry wall between Rooms #13 and #14 shall be remodeled to comply with local building code requirements of a 4 hour area separation wall.

7. A minimum of two existing stairways leading from the basement to the main level shall be remodeled to comply with current building codes.

8. Rooms #16 and #17 shall have a plywood floor laid over the existing wood floor.

9. New built-up roofing shall be applied over the existing roof as determined to be necessary by the Architect.

10. PAINTING REQUIREMENTS - North Elevation

    All exposed steel, including steel columns, beams, handrails at stairways and the underside of the steel decking. Exposed concrete below elevation 100.

    East elevation - Exposed concrete below elevation 100 shall be painted back to the existing fence starting at the northeast corner of the building. The exterior wood siding and lightweight concrete block shall be painted on Rooms #16 and #17.

    South elevation - Exposed metal flashing at roof lines.

    West elevation - Exposed concrete below elevation 100 shall be painted back to the dock area starting from the northwest corner, and shall include the north face of the dock area. The exterior wood siding and lightweight concrete block shall be painted on Rooms #16 and #17.

11. The front east and west service elevators shall be repaired and certified for operation.

12. Space heaters shall be provided in areas 10, 11, 12, and 19 through 27. All other areas shall not be heated or air conditioned unless otherwise noted.

13. Broken glass shall be replaced in all windows.

14. All existing unusable equipment shall be salvaged and removed from the site.

All work performed shall be in accordance with local building codes and regulations and shall be acceptable to Central Inspection of Wichita, Kansas.

The above list of improvements shall be completed in two phases:

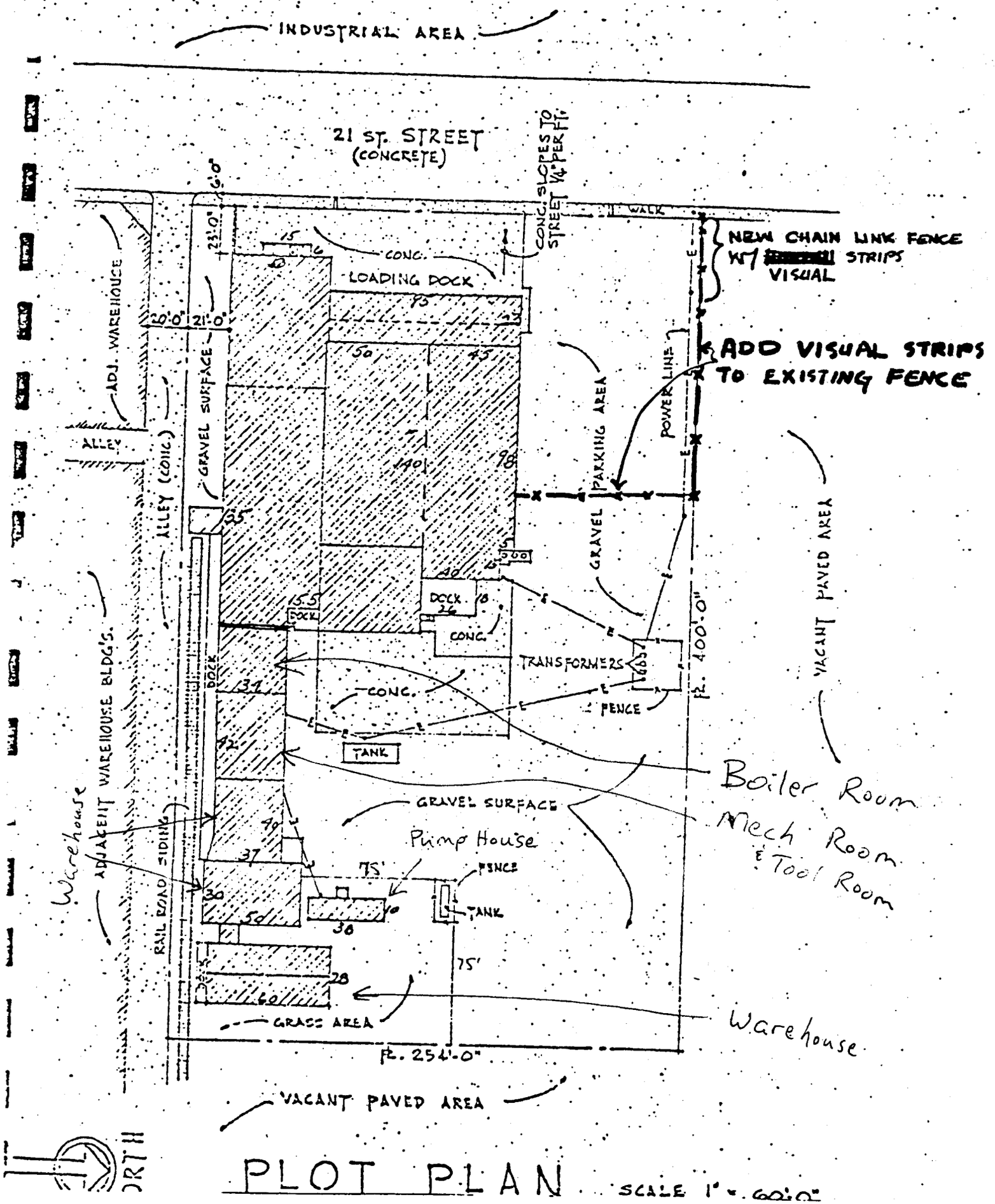
Phase I shall include all those improvements relevant to Rooms #14, #15, #16, #17 and #18, and shall be completed by March 1977. The Owner will use this area as warehousing for his on-going business, Trailer Parts Supply Inc.

In Phase II, architectural drawings shall be prepared and construction performed on all remaining improvements for the project. Phase II shall be accomplished during the period of March 1977 through August 1977. All improvements shall be made and the Owner totally moved in by December 1, 1977.

Please be informed that the above listed improvements represent the total commitment of the Owner for renovation of this project, however, if additional improvements should be warranted during Phase I or Phase II, a list of said improvements shall be sent to the Urban Renewal Agency of Wichita, Kansas and shall become part of these contract documents as if first included herein.

Upon approval of all items stated above, the Owner shall commence immediately with Phase I of this project.

James R. Albertson, Jr., A.I.A.



PLOT PLAN

SCALE 1" = 60'-0"

NOTE: The following are Dold Foods, Inc. responses to an EPA 104e Request for Information regarding the property at 2829 N. Ohio, not 421 E. 21st St. However, responses to questions 14 and 16 provide some historical information on company's past ownership. Polk Directory information indicates that the Dold Foods company at 421 E. 21st St. ceased plant operations at 421 E. 21st Street in the by 1975. The 104e response indicates that the 421 E. 21st Street operations shifted to 2829 N. Ohio around 1975.

ANSWERS TO INFORMATION REQUEST

1. Secretary; See Bylaws in Exhibit "G"; P.O. Box 800, Austin, MN 55912; (507) 437-5248.

2. Chlorinated organic solvents are not used in the manufacturing or processing activities at the facility. However, it is believed that Certified Lab Saf-Sol contains chlorinated organic solvents, which was used to clean parts, paint brushes, and printing head for code dating. Now, Stoddard solvent mineral spirits is used for the same purpose, which is believed not to contain chlorinated organic solvents. It is estimated that the change was made in April of 1988. The chemical name of the new parts cleaner is petroleum hydrocarbon naphtha or solvent. In addition, see Exhibit "A" attached with a listing of chemicals used in the facility that may contain chlorinated organic solvents.

3. See Exhibits "A" and "B" for identification of hazardous substances used in the facility. In addition, Material Safety Data Sheets identifying the person who supplied the chemicals and other information will be provided upon request. It is believed that the only hazardous waste generated at the facility is used solvent described in response to 2. above. Used oil is also generated. Caustic is used for cleaning, which changes its hazard characteristic of corrosivity by chemical reaction and dilution so that is becomes nonhazardous.

4. a. See Exhibit "C" for chemical composition and characteristic of used solvent. Physical state is liquid.

   b. See Exhibit "C".

   c. The solvents were purchased in 55 gallon drums. See answer to 2. above. It has been stored for recycling and shipped offsite for recycling.

   d. From July or August of 1984, when the facility was purchased by Geo. A. Hormel & Company.

   e. It was used in the shop and stored outside the engine room in the facility. The waste oil and used solvent was transported for recycling to Midland Refining, 5755 N. Broadway, Wichita, Kansas, KSD #082462128; Oklahoma City, OK via Waste Oil Service

Co., OKD #065-423014; and Kansas City, Kansas via Radium Petroleum Company, KSD #000690081.

f. Approximately 150 gallons/year of solvent are purchased and used. Approximately 60 gallons/year are stored or shipped offsite for recycling. The rest volatilizes during use or storage.

5. Other than general information relating to groundwater contamination on the Site received from the State, this respondent is not aware of any. Specifically with respect to the facility and property owned by Dold Foods, the respondent is not aware of any leaks, spills or releases of hazardous substances to the environment.

   a. - g. N/A.

6. N/A.

7. See Exhibit "D" for Comprehensive General Liability and Directors' and Officers' insurance policy information. There are not currently nor have there been any Environmental Impairment Liability insurance policies. This will confirm a phone conversation with Ken Rapplean, Pre-Remedial and State Program Section, Superfund Branch-Waste Management Division, on March 13, 1989, and that he said it was acceptable to provide the requested insurance information for the period from 1984 through the present inasmuch as the Dold Foods facility was owned and operated by a different company until July-August of 1984.

8. See Exhibits "E" and "F". This will confirm a phone conversation with Ken Rapplean on March 13, 1989 that copies of the parent corporation's most recent Annual Report and Form 10-K may be submitted in lieu of the information requested in this numbered request. Copies of these documents for the fiscal year ended October 31, 1988, are enclosed. See pages 44-60 for financial information in the Annual Report and pages F-5 - F-10 in the Form 10-K.

9. See Exhibits "E" and "F". This will confirm a phone conversation with Ken Rapplean on March 13, 1989 that copies of the parent corporation's most recent Annual Report and Form 10-K may be submitted in lieu of the information requested in this numbered request. Copies of these documents for the fiscal year ended October 31, 1988, are enclosed. See pages 44-60 for financial information in the Annual Report and pages F-5 - F-10 in the Form 10-K.

10. Dold Foods, Inc., a corporation organized under the laws of the State of Kansas, is a wholly owned subsidiary of Geo. A. Hormel & Company, a Delaware corporation.

11. See Exhibit "G".

12.

W. R. Hunter	Sole Director, Chairman of the Board, and C.E.O.
Joseph P. Schneider, Jr.	President
Jerry A. Haas	Treasurer
Kevin C. Jones	Secretary

Shareholder: Geo. A. Hormel & Company.

See Bylaws in Exhibit "G" for a description of management duties of each of the foregoing officers. In addition, Mr. Joseph P. Schneider, Jr. is the facility manager and Mr. Jerry A. Haas is the office manager for the facility.

13. Other than employees of Dold Foods who used solvent for parts cleaning, etc. in the Dold Foods facility as described above, persons who generated hazardous substances is unknown. With respect to disposal of hazardous substances at the Site, unknown.

14. With respect to activities at the facility prior to July of 1984 when it was acquired by Geo. A. Hormel & Company, the prior owner may be able to provide additional information or documents responsive to the questions in the Information Request. Such owner was Dold Foods, Inc., a subsidiary of or owned by Murfin Drilling Company, 250 North Water, Suite 300, Wichita, KS 67202; (316) 267-3241. Dold Foods, Inc., a subsidiary of Murfin Drilling Company, was a separate entity from Dold Foods, Inc., a wholly owned subsidiary of Geo. A. Hormel & Company, the latter of which was incorporated in 1987.

15. See response to No. 14 above. Otherwise, not applicable.

16. The facility has been operated as a meat packing facility owned and operated by Dold Foods, Inc., a wholly owned subsidiary of Geo. A. Hormel & Company, beginning November 1, 1987. The facility was owned and operated as a meat packing facility by Geo. A. Hormel & Company beginning August 6, 1984, up to and including October 31, 1987. The facility was operated and leased as a meat packing facility by Geo. A. Hormel & Company from Dold

Foods, Inc., a subsidiary of or owned by Murfin Drilling Company, from July 13, 1984 to August 6, 1984.

Based on the information contained in Exhibit "H" attached hereto, the property currently owned by Dold Foods, Inc., a wholly owned subsidiary of Hormel, was conveyed by the Urban Renewal Agency of the Wichita, Kansas, Metropolitan Area, to Dold Packing Company, Inc., later called Dold Foods, Inc., a subsidiary of or owned by Murfin Drilling Company, in 1975. It is believed that the existing meat packing facility was built in 1975 or shortly thereafter, and was operated as a meat packing facility by Dold Packing Company, Inc. and/or Dold Foods, Inc. from that time until it was leased to Geo. A. Hormel & Company in July of 1984. Based on the information contained in Exhibit "H", prior to its acquisition by the Urban Renewal Agency in 1968 and 1969, the property was used only for residential purposes. It is believed that the property was held by the City of Wichita from the time it was acquired by the Urban Renewal Agency until it was sold to Dold Packing Company, Inc. in 1975.

17. We are not aware of any hazardous waste or materials sent to our facility for treatment, storage or disposal. See Exhibits "A" - "C" for a description of hazardous materials used in the operation at the facility. If additional information is required, material safety data sheets can also be provided with respect to the identified chemicals in Exhibits "A" - "C".

18. Other than as referred to in response to previous questions in the Information Request, unknown.

19. Various maintenance employees under the supervision of Doug Shockley, plant engineer, are responsible for maintenance of storage of used solvent. Otherwise, N/A.

20. See Exhibit "I" with groundwater test results from the wells on Dold Foods' property and a site investigation report regarding abandoned underground storage tanks on said property.

EXHIBIT "A"

	Aliphatic Petroleum Distillate	8032-32-4
	Perchlorethylene	127-18-4
CHEMICAL NAME:	Mellylene Chloride	CAS NO.: 75-09-2
CONCENTRATION:	100 PPM / 50 PPM / 100 PPM	
GENERIC NAME :	-------	
TRADE NAME :	Saf - Sol	
MANUFACTURER :	Certified Lab. Div. of NCH Corp.	
	Box 152170	
	Irving, TX 75015	
	Phone: (214) 438-4144 Ext. 013	

1-800-527-991

MSDS ON FILE: Yes X No ____

USE: Parts & Misc. Washing

QUANTITY/DAY ____
QUANTITY/MONTH 3.5 gallons
QUANTITY/YEAR 110 gallons
MAX. QUANTITY STORED 40 gallons

STORAGE:

LOCATION Outside, West Wall Engine Room EPA CATEGORY NO. (1) 2, 3, 4, 5

Area MS
Bldg. 171
Floor 1

MANNER OF STORAGE (Letter designation) D SIZE CONTAINER 55

Dole Foods

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: Petroleum Hydrocarbon Naphtha CAS NO.: 64741-48-9
CONCENTRATION: 100%
GENERIC NAME :
TRADE NAME : Stoddard Solvent White Spirits
MANUFACTURER : Triangle Refineries Inc.
3020 Knight Str. Suite 130
Shreveport, Louisianna 71105
Phone: 800-548-3417
318-861-0954

TIER II

REPORTABLE

MSDS ON FILE: Yes X No ____

USE: Parts Cleaner

QUANTITY/DAY ____
QUANTITY/MONTH ____
QUANTITY/YEAR Approx. 85 gal.
MAX. QUANTITY STORED 55 Gal.

STORAGE:
LOCATION Engine Room - Outside West Wall EPA CATEGORY NO. (1), 2, (3), 4, 5

Area MS
Bldg. 171
Floor 1

MANNER OF STORAGE (Letter designation) D SIZE CONTAINER 55 gal.

* * * * *

DOLD FOODS - W

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: Mixture - Alcohol / Ketone
CAS NO.: 123-42-2 / 111-90-0 / 252-65-71-8 &
CONCENTRATION: ---
GENERIC NAME : Bolmark Roller Stencil Ink
TRADE NAME : Bolmark Roller Stencil Ink
MANUFACTURER : Marsh Stencil Machine Company
707 E. B Street
Belleville, Il. 62222
Phone:

MSDS ON FILE: Yes X No ____

USE: Marking Ink

QUANTITY/DAY ____
QUANTITY/MONTH 1.5 gallons
QUANTITY/YEAR 16 - 20 gallons
MAX. QUANTITY STORED 6 gallons

STORAGE:
LOCATION Warehouse / Maintenance Shop
EPA CATEGORY NO. (1) 2

Area WH
Bldg. 136
Floor 1

MANNER OF STORAGE (Letter designation) N SIZE CONTAINER 1

FACILITY: DOLD FOODS - WICHITA, KS

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: Aliphatic Petroleum Distillates CAS NO.: 8030-30-6
CONCENTRATION: 40%
GENERIC NAME : ------
TRADE NAME : Titan Hand Cleaner
MANUFACTURER : Oxford Chemical
P.O. Box 80202
Atlanta, GA 30366
Phone: (404) 452-1100

MSDS ON FILE: Yes X No ____

USE: Hand Soap for Mechanics

QUANTITY/DAY ____
QUANTITY/MONTH 5.5 lbs.
QUANTITY/YEAR 24 cans
MAX. QUANTITY STORED 1 can

STORAGE:
LOCATION Maintenance Dept., Lockerroom EPA CATEGORY NO. (1), 2, 3, 4,

Area MS
Bldg. 135A
Floor 1

MANNER OF STORAGE (Letter designation) E SIZE CONTAINER 3 lbs.

* * * * *

FACILITY: DOLD FOODS - WICHITA

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: 112 Trichloro

CAS NO.: 76-13-1

CONCENTRATION: 1000 PPM

GENERIC NAME : ———

TRADE NAME : Dylek Aerosol

MANUFACTURER : Certified Lab Div of NCH Corp
Box 152170
Irving, TX 75015
Phone: (214) 4144 Ext. 013

MSDS ON FILE: Yes X No ____

USE: Electrical Equipment Spray

QUANTITY/DAY ____
QUANTITY/MONTH 10 lbs.
QUANTITY/YEAR 14 doz.
MAX. QUANTITY STORED 2 1/2 doz.

STORAGE:

LOCATION Maintenance Department

EPA CATEGORY NO. (1), 2, 3

Area MS
Bldg. 135
Floor 1

MANNER OF STORAGE (Letter designation) F SIZE CONTAINER 12

* * * * *

FACILITY: DOLD FOODS - WICHITA

HAZARDOUS MATERIAL DATA SHEET

Pyrethrins 8003-34-7
Odorless Mineral Spirits 64742-48-9

CHEMICAL NAME: Trichlordethane CAS NO.: 71-55-6
CONCENTRATION: 1.0% / 13.66% /45%
GENERIC NAME :
TRADE NAME : Zermeter Mist Insect Killer
MANUFACTURER : Zep Manufacturing Company
P.O. Box 2015
Atlanta, GA 30301
Phone: (404) 352-1680

MSDS ON FILE: Yes X. No ____

USE: Fly Control

QUANTITY/DAY ____
QUANTITY/MONTH ____
QUANTITY/YEAR 24 cans = 288 ozs.
MAX. QUANTITY STORED 12 cans = 144 ozs.

STORAGE:
LOCATION Office Supply Room EPA CATEGORY NO. (1), 2, 3,

Area WE
Bldg. 162
Floor 1

MANNER OF STORAGE (Letter designation) F SIZE CONTAINER 12 oz

* * * * *

DOLD FOODS - WICHITA, KS

CHEMICAL NAME: Potassium Hydroxide
Potassium Cresylates
Clorinated Solvents
Sodium Potassium Chromate

CAS NO.: 1310-58-3
1319-77-3
127-18-42 - 75-09-25
105-88-019

CONCENTRATION: 1.5%, 12.20%, 30.50%, .2%

GENERIC NAME :

TRADE NAME : Hydro Seal H/D Cold Parts Cleaner HS-5K

MANUFACTURER : Radiator Speciality Company
1400 W. Independence Blvd.
Charlotte, NC 28208
Phone: (704) 377-6555

MSDS ON FILE: Yes X No ____

USE: Parts Cleaning Fluid

QUANTITY/DAY ____
QUANTITY/MONTH ____
QUANTITY/YEAR 1 gallon
MAX. QUANTITY STORED None

STORAGE:

LOCATION Maintenance Department

EPA CATEGORY NO. (1), 2, 3, 4

Area MS
Bldg. 135
Floor 1

MANNER OF STORAGE (Letter designation) F SIZE CONTAINER 1 gallon

Figure(s)
Aerial Photographs and Sample Location Map(s)

Table(s)
Analytical Data Table(s)

Former Dold Foods Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#34-7	S/18	06/08/98		µg/L	<1	**120**	**160**	**3.3**	<1	**4.3**	**8.6**	<1	<1	<1	<5.4
GP#34-7	S/18	10/21/99		µg/L	<1	**37**	**55**	<1	<1	**1.4**	**1.7**	<1	<1	<1	<5.4
GP#34-7	D/36	06/08/98		µg/L	<1	**52**	**220**	**18**	<1	**4.4**	**14**	<1	<1	<1	<5.4
GP#34-7	D/36	06/08/98	DUP	µg/L	<1	**51**	**220**	**17**	<1	**4.4**	**14**	<1	<1	<1	<5.4
GP#34-8	S/18	06/08/98		µg/L	<1	**20**	**14**	<1	<1	<1	**1.7**	<1	<1	<1	<5.4
GP#34-8	D/36	06/08/98		µg/L	<1	**150**	**130**	**30**	<1	**4.4**	**13**	<1	<1	<1	<5.4
GP#50-4	S/20	01/09/98		µg/L	<1	<1	**1.7**	**2.3**	<1	<1	<1	<1	<1	**5.3**	**9.7**
GP#50-4	D/36	01/09/98		µg/L	<1	**41**	**23**	**11**	<1	<1	**1.4**	<1	<1	<1	<5.4
GP#50-6	S/20	06/04/98		µg/L	<1 JH	<1 JH	<1 JH	**4 JH**	<1 JH	<1 JH	<1 JH	<1 JH	<1 JH	<1 JH	<5.4
GP#50-6	D/37	06/04/98		µg/L	<1	**27**	**20**	**6.6**	<1	<1	**1.3**	<1	<1	<1	<5.4
GP04C-01	S/17	11/24/99		µg/L	**1.2**	**3**	**3.7**	**1.7**	<1	<1	<1	<1	<1	<1	<5.4
GP04C-01	D/38	11/24/99		µg/L	<1	**17**	**14**	**6.1**	<1	<1	<1	<1	<1	<1	**10.1**
GP04C-02	S/17	11/24/99		µg/L	<1	**4.8**	**21**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04C-02	D/31	11/24/99		µg/L	<1	**29**	**56**	**9.7**	<1	<1	**2.5**	<1	<1	<1	<5.4
GP04C-03	S/17	11/24/99		µg/L	<1	**7.6**	**51**	**2.3**	<1	**1.2**	**1.3**	<1	<1	<1	<5.4
GP04C-03	D/31	11/24/99		µg/L	<1	**29**	**31**	**6.9**	<1	<1	**1.4**	<1	<1	<1	<5.4
GP04C-04	S/20	01/14/00		µg/L	<1	**12**	**58**	**3.9**	<1	**1.4**	**2**	<1	<1	<1	<5.4
GP04C-04	D/29	01/14/00		µg/L	<1	<1	**58**	**5.3**	<1	<1	**2.3**	<1	<1	<1	<5.4
GP04D-01	S/20	10/26/99		µg/L	<1	<1	**3**	**2.2**	<1	<1	<1	<1	<1	<1	<5.4
GP04D-01	D/32	10/26/99		µg/L	<1	**16**	**32**	**7.5**	<1	<1	<1	<1	<1	<1	<5.4
GPA11-2	S/20	01/09/98		µg/L	<1	**1.4 JS**	**11**	**3**	<1 JS	<1	<1	<1 JS	<1	<1 JS	<5.4
GPA11-2	D/36	01/09/98		µg/L	<1	**68 JS**	**96**	**36**	<1	**2.9**	**3.4**	<1	<1	**1.1**	**5.5**
GPA13-3	S/20	01/06/98		µg/L	<1	<1	**260**	**11**	<1	**6.6**	**12**	<1	<1	**1.1**	**5.5**
GPA13-3	D/37	01/06/98		µg/L	<1	**110**	**180**	**32**	<1	**4.6**	**11**	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroether
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

PRP Evaluation Summary

Former Dold Foods Facility
421 East 21st Street North (SE of 21st and Topeka)

Potential Source Area PRP and Work Plan Addendum Map ID - 04C
Contaminants of Concern - TCE and its degradation products
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

Evaluation of Former Dold Foods Facility

TCE Contamination

Data indicate that the TCE concentration increases along the groundwater flow path across the former Dold Foods facility (DLDS). The groundwater samples collected from shallow (17 to no more than 20 feet bgs) aquifer at upgradient locations GP04C-01 -02, -03, -04, GP#50-06, GPA11-2 and WND-02S contained TCE concentration of less than 10 µg/L. A downgradient shallow groundwater sample collected from GP#34-07, located at the southern boundary of DLDS contained 120 µg/L. These data indicate that a release has occurred at the facility.

Dold Foods used to operate at this facility and would have required the use of solvents to maintain and clean equipment. Additional data, possibly acquired through a KDHE request for information, is needed to determine what types of solvents were utilized at the facility.

Groundwater Flow

Localized groundwater flow direction is not well defined in this area and is complicated by the apparent pumping activities to the southeast of the DLDS. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southwest and south-southeast, respectively.

Reference

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Name of Company: Trailer Parts Supply (FORMER DOLD FOODS)

Name and/or Contact Person:

Street Address of Company: 421 E 21st St N

City, State, and Zip Code: Wichita, KS 67214

Regarding the Following Property:

Phone Number of Contact:

History:

1995	Trailer Parts Supply Inc
1990	Same
1984-5	Same
1980	Same
1975	Vacant
1970	Dold Packing Co INc
1965	Fred Dold & Sons Packing Co
1961	Same

RCRA Info: No KDHE RCRA file.

Application for Certification and Release

Jms 10/15/94

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Trailer Parts Supply, Inc.

(insert legal name(s) of party seeking certificate)

421 East 21st Street North
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
421 East 21st Street North
Wichita, KS

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: _____

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third-party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: _____
(signature)

Name: Scott C. Alter
(print or type)

421 East 21st

Wichita, KS 67214

Address (print or type)

Date: 10/6/97

Subscribed and sworn to before me this 6th day of October, 1997.

GLORIA J. SMITH
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 12/15/2000

_____
Notary Public

My appointment expires: December 15, 2000

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for **Commercial/Industrial property** only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant Trailer Parts Supply, Inc. Date _____

Business Phone 316/262-3701 Home Phone _____

Legal Description See attached sheet

Property Tax Key # 96-0-B-02149; 96-0-B-02152; 96-0-B-B083; 96-0-B-13086

Street Address of Property 421 East 21st Street North

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER			DATES	TYPE OF BUSINESS/SITE USE
Trailer Parts Supply, Inc.	From: 1977	To: Present		Wholesale distributor of mobile home & r.v. parts
Urban Renewal	From: ?	To: 1977		?
Dold Foods	From: ?	To: ?		?
	From:	To:		

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES			DATES	TYPE OF BUSINESS/SITE USE
Trailer Parts Supply, Inc.	From: 1977	To: Present		Wholesale distributor of mobile home & r.v. parts
Urban Renewal	From: ?	To: 1977		?
Dold Foods	From: ?	To: ?		?
	From:	To:		

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☒Yes ☐No ☐Unknown
→ only as a participant and would know [per Chuck Effmann 10/24/94]

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☐Yes ☒No ☐Unknown

(d) Has any type of environmental study been performed on this property? ☐Yes ☒No ☐Unknown
If yes, please identify and include a copy of the report.

(2) Disposal of Wastes.

(a) Are liquid or sludge wastes generated and/or stored on property? ☐Yes ☒No ☐Unknown

(b) What do the liquid wastes consist of? N/A

(c) Has any type of characterization of these liquid wastes been conducted? ☐Yes ☐No ☐Unknown
If yes, include copy of results. N/A

ATTACHMENT TO
COMMERCIAL INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Legal Description:

Lots 12-13-14-15-16 and West ½ Vac. St. Adj. on and ½ Vac. Alley Adj. on South – even Lots 12 -32 Inc and West ½ Vac. St. Adj. on East and ½ Vac. Alley Adj.; Lots 17-18 and West 4.701 feet Lot 19 and East ½ Vac. St. Adj. on West and ½ Vac. Alley Adj. on South; West 54.7 feet odd Lots 11-31 Inc and East ½ Vac. St. Adj. on West and South ½ Vac. Alley Adj. on North Emporia Avenue

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☒No ☐Unknown

(b) Has the property even been owned by any entity that used hazardous substances on the site?
☐Yes ☐No ☒Unknown

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant. Not aware of any releases of hazardous substances

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☐Yes ☒No ☐Unknown

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☐No ☐Unknown None used or disposed of

If yes, give name, phone number and contact person, for each transporter utilized.
N/A

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.
N/A

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property? ☐Yes ☒No ☐Unknown If yes, include copy of results.

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☒No ☐Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☒No ☐Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored-on the property?
☐Yes ☒No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.
N/A

(h) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☐Yes ☐No ☐Unknown N/A

(c) If such reports were filed, do they meet federal, state and local requirements? N/A
☐Yes ☐No ☐Unknown State the names of individuals familiar with the filings and the location of the files.

(5) Status of Water Pollution Control.
(a) Does the facility have any wastewater? ☐Yes ☒No ☐Unknown

How is it managed or treated at present? In past? N/A

(b) Are there any pits, ponds, lagoons, tanks? ☐Yes ☒No ☐Unknown

If yes, indicate how and when the structures were used, and what compounds have been stored in them.
N/A

(c) Is the property connected to the City sewage treatment system? ☒Yes ☐No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☒No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☒No ☐Unknown
State the location of such records and the individuals familiar with them.
N/A

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☐Yes ☒No ☐Unknown
If yes, where?

6) Status of Compliance with Requirements Relating to Petroleum Products.
(a) Are any petroleum products stored at the facility? ☐Yes ☒No ☐Unknown
If yes, how much and where are they stored?
N/A

(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown

Have they been registered with the Kansas Department of Health and Environment of other state, federal, or local agency?
☐Yes ☐No If registered, please attach a copy of the State Certificate.
N/A

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.
N/A

(d) Have the tanks been tested? ☐Yes ☐No ☐Unknown Results?
N/A

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property? ☐Yes ☐No ☐Unknown If yes, please describe. N/A

(f) Have any tanks presently or previously located at the property leaked or spilled?
☐Yes ☐No ☐Unknown If yes, please describe.
N/A

(7) Are there any water-wells on the property? ☐Yes XXNo If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☐Unknown If yes, please explain.
N/A

(a) If known, what was the water-well used for in the past? N/A
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(b) What is the water-well used for currently? N/A
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☐Unknown N/A

(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results. N/A

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes XXNo
If yes, list those corporate predecessors.

(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes XXNo
Is there a sale pending the Release for Environmental Conditions? ☐Yes XXNo
If yes, please indicate closing date _____.

Other comments:

Excerpts from Report(s) Prepared by Others

albertson architects planners

434 N. MARKET • SUITE 210 • WICHITA, KANSAS 67202 • 316/264-8315

January 11, 1977

Mr. Steve Potucek
Urban Renewal Agency
City Hall - 2nd Floor
455 North Main
Wichita, Kansas 67202

RE: Renovation of "Old Dold Packing Plant" by Trailer Parts Supply Inc.

Dear Steve:

The following is a list of physical improvements, of which Trailer Parts Supply Inc., have agreed to perform as a part of their purchase contract with the Urban Renewal Agency. I have attached copies of floor plans and building elevations taken from an Appraisal Report made for the Wichita Urban Renewal Agency on March 3, 1971 by Homer R. Atkins and Associates. I have made reference to the above plans to note locations of our improvements. Improvements shall be as follows:

1. OFFICE AREA (Rooms #1 through #9)

   Approximately 3,000 sq. ft. shall be remodeled in the above area into new corporate offices and display area. The existing room layouts, toilets, plumbing and electrical system shall all be removed. The new space shall contain three offices, a supply storage area, display area, and a mens and womens toilet.

   The area will have a suspended metal acoustical ceiling, partitioned with metal studs with 5/8" fire code sheetrock on each side to be painted, carpeted, heated and air conditioned.

2. The site, including gravel surface area enclosed by fence and building, gravel parking area directly east of the building, and the paved parking area east and north of the building shall be cleaned and have all debris, grass, etc. removed.

3. The chain link fence on the 21st Street side extending eastwardly from the building to the east property line, thence in a northern direction towards 21st Street shall have visual strips inserted in the fence. In addition a new chain link fence with visual strips shall be extended from the existing fence on the east property line

in a northern direction stopping at the north property line. See attached drawing.

4. The 10' X 38' pump house building noted on attached plans as Room #29 shall be demolished and removed from the site.

5. A concrete topping shall be poured over the existing floor in partial areas of Rooms #10, #11, and #54, to adequately level these floors for warehousing purposes.

6. The exterior masonry walls shall have all joints pointed as required to maintain a weatherproof structure as determined by the Architect.

   The existing masonry wall between Rooms #13 and #14 shall be remodeled to comply with local building code requirements of a 4 hour area separation wall.

7. A minimum of two existing stairways leading from the basement to the main level shall be remodeled to comply with current building codes.

8. Rooms #16 and #17 shall have a plywood floor laid over the existing wood floor.

9. New built-up roofing shall be applied over the existing roof as determined to be necessary by the Architect.

10. PAINTING REQUIREMENTS - North Elevation

    All exposed steel, including steel columns, beams, handrails at stairways and the underside of the steel decking. Exposed concrete below elevation 100.

    East elevation - Exposed concrete below elevation 100 shall be painted back to the existing fence starting at the northeast corner of the building. The exterior wood siding and lightweight concrete block shall be painted on Rooms #16 and #17.

    South elevation - Exposed metal flashing at roof lines.

    West elevation - Exposed concrete below elevation 100 shall be painted back to the dock area starting from the northwest corner, and shall include the north face of the dock area. The exterior wood siding and lightweight concrete block shall be painted on Rooms #16 and #17.

11. The front east and west service elevators shall be repaired and certified for operation.

12. Space heaters shall be provided in areas 10, 11, 12, and 19 through 27. All other areas shall not be heated or air conditioned unless otherwise noted.

13. Broken glass shall be replaced in all windows.

14. All existing unusable equipment shall be salvaged and removed from the site.

All work performed shall be in accordance with local building codes and regulations and shall be acceptable to Central Inspection of Wichita, Kansas.

The above list of improvements shall be completed in two phases:

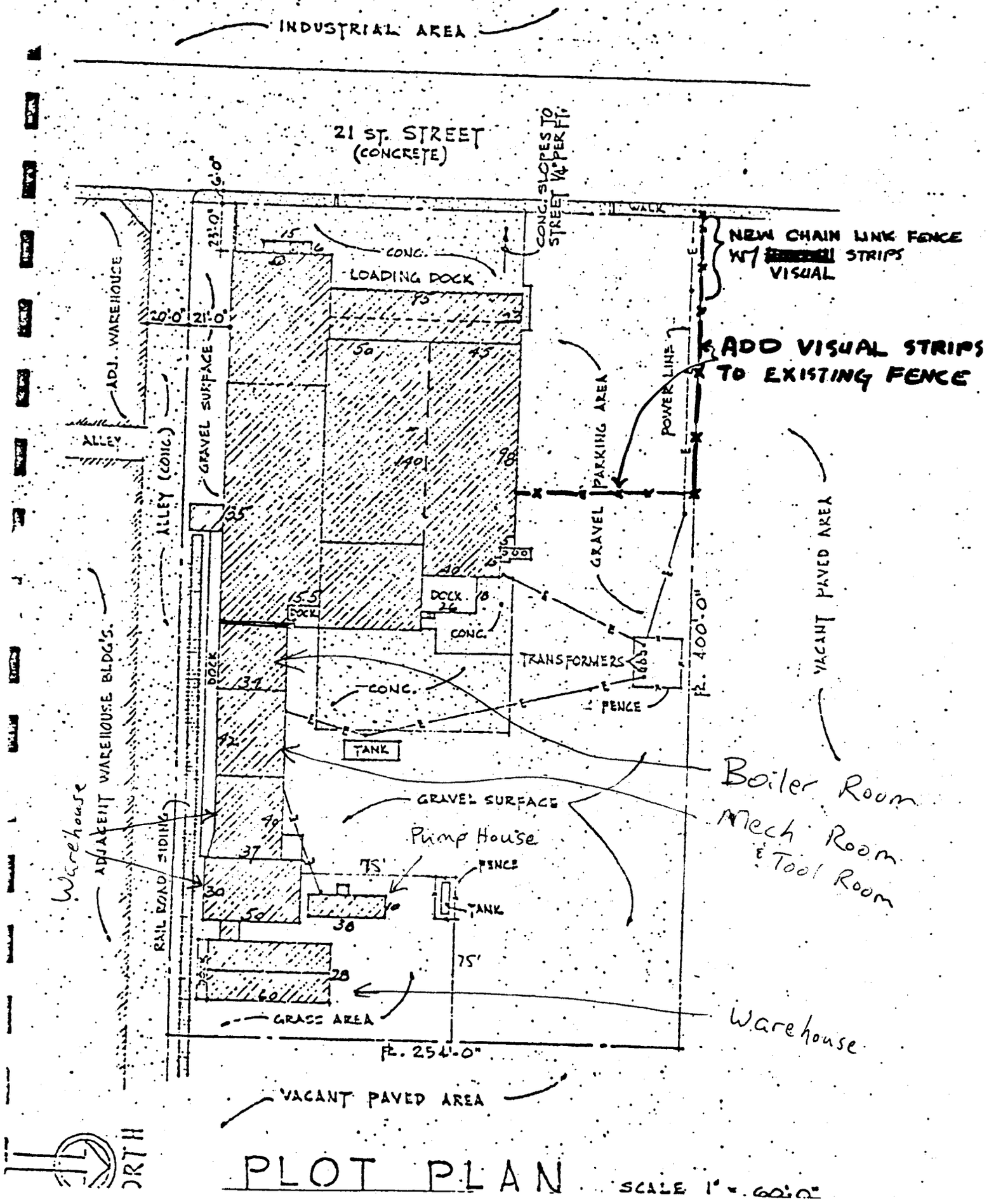
Phase I shall include all those improvements relevant to Rooms #14, #15, #16, #17 and #18, and shall be completed by March 1977. The Owner will use this area as warehousing for his on-going business, Trailer Parts Supply Inc.

In Phase II, architectural drawings shall be prepared and construction performed on all remaining improvements for the project. Phase II shall be accomplished during the period of March 1977 through August 1977. All improvements shall be made and the Owner totally moved in by December 1, 1977.

Please be informed that the above listed improvements represent the total commitment of the Owner for renovation of this project, however, if additional improvements should be warranted during Phase I or Phase II, a list of said improvements shall be sent to the Urban Renewal Agency of Wichita, Kansas and shall become part of these contract documents as if first included herein.

Upon approval of all items stated above, the Owner shall commence immediately with Phase I of this project.

James R. Albertson, Jr., A.I.A.



PLOT PLAN SCALE 1" = 60'-0"

NOTE: The following are Dold Foods, Inc. responses to an EPA 104e Request for Information regarding the property at 2829 N. Ohio, not 421 E. 21st St. However, responses to questions 14 and 16 provide some historical information on company's past ownership. Polk Directory information indicates that the Dold Foods company at 421 E. 21st St. ceased plant operations at 421 E. 21st Street in the by 1975. The 104e response indicates that the 421 E. 21st Street operations shifted to 2829 N. Ohio around 1975.

ANSWERS TO INFORMATION REQUEST

1. Secretary; See Bylaws in Exhibit "G"; P.O. Box 800, Austin, MN 55912; (507) 437-5248.

2. Chlorinated organic solvents are not used in the manufacturing or processing activities at the facility. However, it is believed that Certified Lab Saf-Sol contains chlorinated organic solvents, which was used to clean parts, paint brushes, and printing head for code dating. Now, Stoddard solvent mineral spirits is used for the same purpose, which is believed not to contain chlorinated organic solvents. It is estimated that the change was made in April of 1988. The chemical name of the new parts cleaner is petroleum hydrocarbon naphtha or solvent. In addition, see Exhibit "A" attached with a listing of chemicals used in the facility that may contain chlorinated organic solvents.

3. See Exhibits "A" and "B" for identification of hazardous substances used in the facility. In addition, Material Safety Data Sheets identifying the person who supplied the chemicals and other information will be provided upon request. It is believed that the only hazardous waste generated at the facility is used solvent described in response to 2. above. Used oil is also generated. Caustic is used for cleaning, which changes its hazard characteristic of corrosivity by chemical reaction and dilution so that is becomes nonhazardous.

4. a. See Exhibit "C" for chemical composition and characteristic of used solvent. Physical state is liquid.

   b. See Exhibit "C".

   c. The solvents were purchased in 55 gallon drums. See answer to 2. above. It has been stored for recycling and shipped offsite for recycling.

   d. From July or August of 1984, when the facility was purchased by Geo. A. Hormel & Company.

   e. It was used in the shop and stored outside the engine room in the facility. The waste oil and used solvent was transported for recycling to Midland Refining, 5755 N. Broadway, Wichita, Kansas, KSD #082462128; Oklahoma City, OK via Waste Oil Service

Co., OKD #065-423014; and Kansas City, Kansas via Radium Petroleum Company, KSD #000690081.

f. Approximately 150 gallons/year of solvent are purchased and used. Approximately 60 gallons/year are stored or shipped offsite for recycling. The rest volatilizes during use or storage.

5. Other than general information relating to groundwater contamination on the Site received from the State, this respondent is not aware of any. Specifically with respect to the facility and property owned by Dold Foods, the respondent is not aware of any leaks, spills or releases of hazardous substances to the environment.

   a. - g. N/A.

6. N/A.

7. See Exhibit "D" for Comprehensive General Liability and Directors' and Officers' insurance policy information. There are not currently nor have there been any Environmental Impairment Liability insurance policies. This will confirm a phone conversation with Ken Rapplean, Pre-Remedial and State Program Section, Superfund Branch-Waste Management Division, on March 13, 1989, and that he said it was acceptable to provide the requested insurance information for the period from 1984 through the present inasmuch as the Dold Foods facility was owned and operated by a different company until July-August of 1984.

8. See Exhibits "E" and "F". This will confirm a phone conversation with Ken Rapplean on March 13, 1989 that copies of the parent corporation's most recent Annual Report and Form 10-K may be submitted in lieu of the information requested in this numbered request. Copies of these documents for the fiscal year ended October 31, 1988, are enclosed. See pages 44-60 for financial information in the Annual Report and pages F-5 - F-10 in the Form 10-K.

9. See Exhibits "E" and "F". This will confirm a phone conversation with Ken Rapplean on March 13, 1989 that copies of the parent corporation's most recent Annual Report and Form 10-K may be submitted in lieu of the information requested in this numbered request. Copies of these documents for the fiscal year ended October 31, 1988, are enclosed. See pages 44-60 for financial information in the Annual Report and pages F-5 - F-10 in the Form 10-K.

10. Dold Foods, Inc., a corporation organized under the laws of the State of Kansas, is a wholly owned subsidiary of Geo. A. Hormel & Company, a Delaware corporation.

11. See Exhibit "G".

12.

W. R. Hunter	Sole Director, Chairman of the Board, and C.E.O.
Joseph P. Schneider, Jr.	President
Jerry A. Haas	Treasurer
Kevin C. Jones	Secretary

Shareholder: Geo. A. Hormel & Company.

See Bylaws in Exhibit "G" for a description of management duties of each of the foregoing officers. In addition, Mr. Joseph P. Schneider, Jr. is the facility manager and Mr. Jerry A. Haas is the office manager for the facility.

13. Other than employees of Dold Foods who used solvent for parts cleaning, etc. in the Dold Foods facility as described above, persons who generated hazardous substances is unknown. With respect to disposal of hazardous substances at the Site, unknown.

14. With respect to activities at the facility prior to July of 1984 when it was acquired by Geo. A. Hormel & Company, the prior owner may be able to provide additional information or documents responsive to the questions in the Information Request. Such owner was Dold Foods, Inc., a subsidiary of or owned by Murfin Drilling Company, 250 North Water, Suite 300, Wichita, KS 67202; (316) 267-3241. Dold Foods, Inc., a subsidiary of Murfin Drilling Company, was a separate entity from Dold Foods, Inc., a wholly owned subsidiary of Geo. A. Hormel & Company, the latter of which was incorporated in 1987.

15. See response to No. 14 above. Otherwise, not applicable.

16. The facility has been operated as a meat packing facility owned and operated by Dold Foods, Inc., a wholly owned subsidiary of Geo. A. Hormel & Company, beginning November 1, 1987. The facility was owned and operated as a meat packing facility by Geo. A. Hormel & Company beginning August 6, 1984, up to and including October 31, 1987. The facility was operated and leased as a meat packing facility by Geo. A. Hormel & Company from Dold

Foods, Inc., a subsidiary of or owned by Murfin Drilling Company, from July 13, 1984 to August 6, 1984.

Based on the information contained in Exhibit "H" attached hereto, the property currently owned by Dold Foods, Inc., a wholly owned subsidiary of Hormel, was conveyed by the Urban Renewal Agency of the Wichita, Kansas, Metropolitan Area, to Dold Packing Company, Inc., later called Dold Foods, Inc., a subsidiary of or owned by Murfin Drilling Company, in 1975. It is believed that the existing meat packing facility was built in 1975 or shortly thereafter, and was operated as a meat packing facility by Dold Packing Company, Inc. and/or Dold Foods, Inc. from that time until it was leased to Geo. A. Hormel & Company in July of 1984. Based on the information contained in Exhibit "H", prior to its acquisition by the Urban Renewal Agency in 1968 and 1969, the property was used only for residential purposes. It is believed that the property was held by the City of Wichita from the time it was acquired by the Urban Renewal Agency until it was sold to Dold Packing Company, Inc. in 1975.

17. We are not aware of any hazardous waste or materials sent to our facility for treatment, storage or disposal. See Exhibits "A" - "C" for a description of hazardous materials used in the operation at the facility. If additional information is required, material safety data sheets can also be provided with respect to the identified chemicals in Exhibits "A" - "C".

18. Other than as referred to in response to previous questions in the Information Request, unknown.

19. Various maintenance employees under the supervision of Doug Shockley, plant engineer, are responsible for maintenance of storage of used solvent. Otherwise, N/A.

20. See Exhibit "I" with groundwater test results from the wells on Dold Foods' property and a site investigation report regarding abandoned underground storage tanks on said property.

EXHIBIT "A"

Aliphatic Petroleum Distillate 8032-32-4
Perchlorethylene 127-18-4

CHEMICAL NAME: Mellylene Chloride CAS NO.: 75-09-2

CONCENTRATION: 100 PPM / 50 PPM / 100 PPM

GENERIC NAME : _____

TRADE NAME : Saf - Sol

MANUFACTURER : Certified Lab. Div. of NCH Corp.
Box 152170
Irving, TX 75015
Phone: (214) 438-4144 Ext. 013

1-800-527-991

MSDS ON FILE: Yes X No ____

USE: Parts & Misc. Washing

QUANTITY/DAY _____
QUANTITY/MONTH 3.5 gallons
QUANTITY/YEAR 110 gallons
MAX. QUANTITY STORED 40 gallons

STORAGE:

LOCATION Outside, West Wall Engine Room EPA CATEGORY NO. (1) 2, 3, 4, 5

Area MS
Bldg. 171
Floor 1

MANNER OF STORAGE (Letter designation) D SIZE CONTAINER 55

Delta Foods

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: Petroleum Hydrocarbon Naphtha CAS NO.: 64741-48-9
CONCENTRATION: 100%
GENERIC NAME :
TRADE NAME : Stoddard Solvent White Spirits
MANUFACTURER : Triangle Refineries Inc.
3020 Knight Str. Suite 130
Shreveport, Louisianna 71105
Phone: 800-548-3417
318-861-0954

TIER II
REPORTABLE

MSDS ON FILE: Yes X No ____

USE: Parts Cleaner

QUANTITY/DAY ____
QUANTITY/MONTH ____
QUANTITY/YEAR Approx. 85 gal.
MAX. QUANTITY STORED 55 Gal.

STORAGE:
LOCATION Engine Room - Outside West Wall EPA CATEGORY NO. (1), 2, (3), 4, 5

Area MS
Bldg. 171
Floor 1

MANNER OF STORAGE (Letter designation) D SIZE CONTAINER 55 gal.

* * * * *

DOLD FOODS - W

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: Mixture - Alcohol / Ketone

CAS NO.: 123-42-2 / 111-90-0 / 252-65-71-8 &

CONCENTRATION: _____

GENERIC NAME : Bolmark Roller Stencil Ink

TRADE NAME : Bolmark Roller Stencil Ink

MANUFACTURER : Marsh Stencil Machine Company
707 E. B Street
Belleville, Il. 62222
Phone: _____

MSDS ON FILE: Yes X No ____

USE: Marking Ink

QUANTITY/DAY _____
QUANTITY/MONTH 1.5 gallons
QUANTITY/YEAR 16 - 20 gallons
MAX. QUANTITY STORED 6 gallons

STORAGE:

LOCATION Warehouse / Maintenance Shop

EPA CATEGORY NO. (1) 2

Area WH
Bldg. 136
Floor 1

MANNER OF STORAGE (Letter designation) N SIZE CONTAINER I

FACILITY: DOLD FOODS - WICHITA, KS

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: Aliphatic Petroleum Distillates CAS NO.: 8030-30-6
CONCENTRATION: 40%
GENERIC NAME : ------
TRADE NAME : Titan Hand Cleaner
MANUFACTURER : Oxford Chemical
P.O. Box 80202
Atlanta, GA 30366
Phone: (404) 452-1100

MSDS ON FILE: Yes X No ____

USE: Hand Soap for Mechanics

QUANTITY/DAY ____
QUANTITY/MONTH 5.5 lbs.
QUANTITY/YEAR 24 cans
MAX. QUANTITY STORED 1 can

STORAGE:
LOCATION Maintenance Dept., Lockerroom EPA CATEGORY NO. (1), 2, 3, 4,

Area MS
Bldg. 135A
Floor 1

MANNER OF STORAGE (Letter designation) E SIZE CONTAINER 3 lbs.

* * * * *

FACILITY: DOLD FOODS - WICHITA

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: 112 Trichloro

CAS NO.: 76-13-1

CONCENTRATION: 1000 PPM

GENERIC NAME : ____

TRADE NAME : Dylek Aerosol

MANUFACTURER : Certified Lab Div of NCH Corp
Box 152170
Irving, TX 75015
Phone: (214) 4144 Ext. 013

MSDS ON FILE: Yes X No ____

USE: Electrical Equipment Spray

QUANTITY/DAY ____
QUANTITY/MONTH 10 lbs.
QUANTITY/YEAR 14 doz.
MAX. QUANTITY STORED 2 1/2 doz.

STORAGE:

LOCATION Maintenance Department

EPA CATEGORY NO. 1, 2, 3

Area MS
Bldg. 135
Floor 1

MANNER OF STORAGE (Letter designation) F SIZE CONTAINER 12

* * * * *

FACILITY: DOLD FOODS - WICHITA

HAZARDOUS MATERIAL DATA SHEET

CHEMICAL NAME: Pyrethrins / Odorless Mineral Spirits / Trichlordethane — CAS NO.: 8003-34-7 / 64742-48-9 / 71-55-6

CONCENTRATION: 1.0% / 13.66% /<5%

GENERIC NAME :

TRADE NAME : Zermeter Mist Insect Killer

MANUFACTURER : Zep Manufacturing Company
P.O. Box 2015
Atlanta, GA 30301
Phone: (404) 352-1680

MSDS ON FILE: Yes X. No ____

USE: Fly Control

QUANTITY/DAY ____
QUANTITY/MONTH ____
QUANTITY/YEAR 24 cans = 288 ozs.
MAX. QUANTITY STORED 12 cans = 144 ozs.

STORAGE:
LOCATION Office Supply Room — EPA CATEGORY NO. (1), 2, 3,

Area WE
Bldg. 162
Floor 1

MANNER OF STORAGE (Letter designation) F SIZE CONTAINER 12 oz

* * * * *

DOLD FOODS - WICHITA, KS

CHEMICAL NAME: Potassium Hydroxide
Potassium Cresylates
Clorinated Solvents
Sodium Potassium Chromate

CAS NO.: 1310-58-3
1319-77-3
127-18-42 - 75-09-25
105-88-019

CONCENTRATION: 1.5%, 12.20%, 30.50%, .2%

GENERIC NAME :

TRADE NAME : Hydro Seal H/D Cold Parts Cleaner HS-5K

MANUFACTURER : Radiator Speciality Company
1400 W. Independence Blvd.
Charlotte, NC 28208
Phone: (704) 377-6555

MSDS ON FILE: Yes X No ____

USE: Parts Cleaning Fluid

QUANTITY/DAY ____
QUANTITY/MONTH ____
QUANTITY/YEAR 1 gallon
MAX. QUANTITY STORED None

STORAGE:

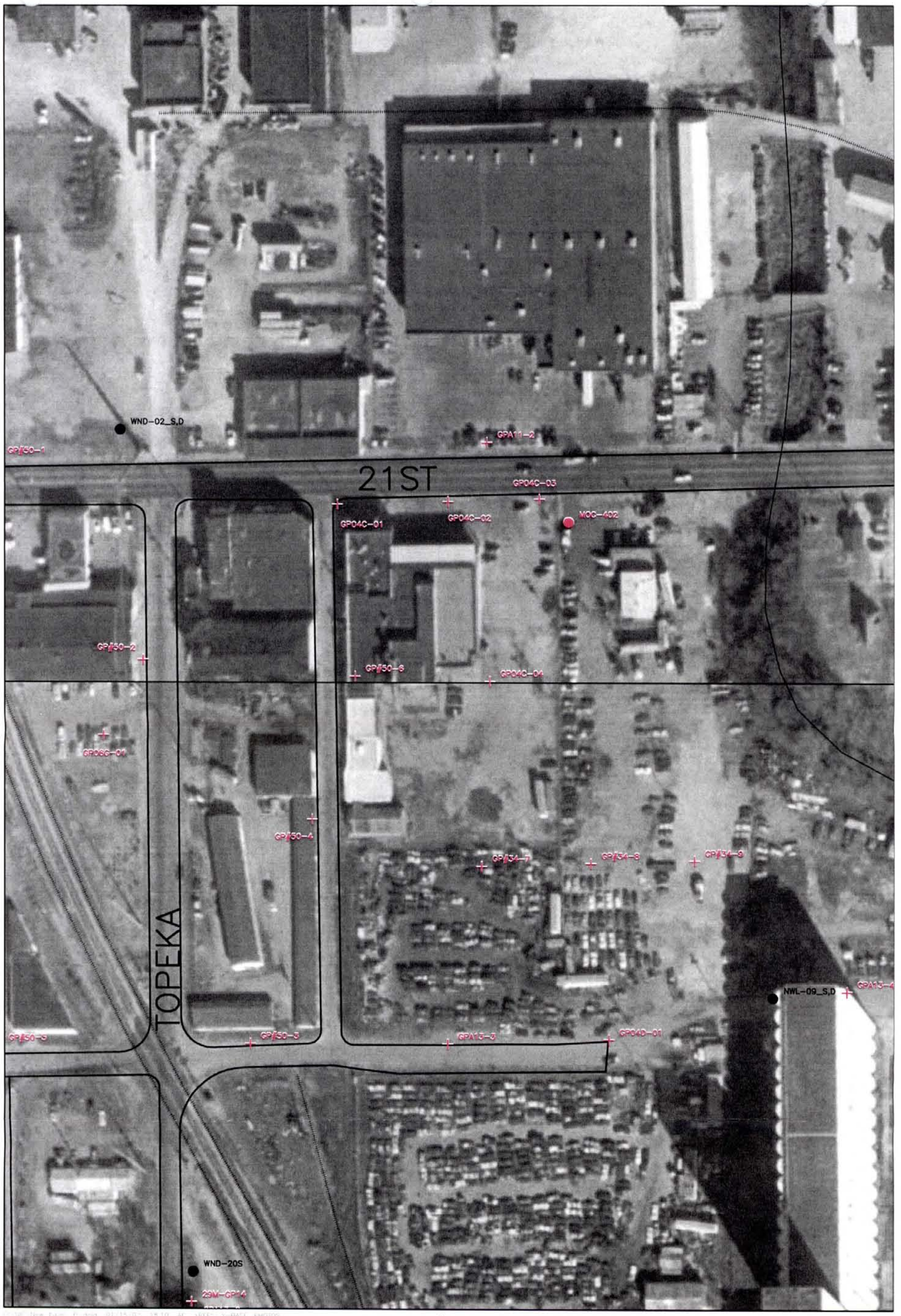
LOCATION Maintenance Department

EPA CATEGORY NO. (1), 2, 3, 4

Area MS
Bldg. 135
Floor 1

MANNER OF STORAGE (Letter designation) F SIZE CONTAINER 1 gallon

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Dold Foods Facility

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former Dold Foods Facility

Table(s)
Analytical Data Table(s)

Former Dold Foods Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#34-7	S/18	06/08/98		µg/L	<1	**120**	**160**	**3.3**	<1	**4.3**	**8.6**	<1	<1	<1	<5.4
GP#34-7	S/18	10/21/99		µg/L	<1	**37**	**55**	<1	<1	**1.4**	**1.7**	<1	<1	<1	<5.4
GP#34-7	D/36	06/08/98		µg/L	<1	**52**	**220**	**18**	<1	**4.4**	**14**	<1	<1	<1	<5.4
GP#34-7	D/36	06/08/98	DUP	µg/L	<1	**51**	**220**	**17**	<1	**4.4**	**14**	<1	<1	<1	<5.4
GP#34-8	S/18	06/08/98		µg/L	<1	**20**	**14**	<1	<1	<1	**1.7**	<1	<1	<1	<5.4
GP#34-8	D/36	06/08/98		µg/L	<1	**150**	**130**	**30**	<1	**4.4**	**13**	<1	<1	<1	<5.4
GP#50-4	S/20	01/09/98		µg/L	<1	<1	**1.7**	**2.3**	<1	<1	<1	<1	<1	**5.3**	**9.7**
GP#50-4	D/36	01/09/98		µg/L	<1	**41**	**23**	**11**	<1	<1	**1.4**	<1	<1	<1	<5.4
GP#50-6	S/20	06/04/98		µg/L	<1 JH	<1 JH	<1 JH	**4 JH**	<1 JH	<1 JH	<1 JH	<1 JH	<1 JH	<1 JH	<5.4
GP#50-6	D/37	06/04/98		µg/L	<1	**27**	**20**	**6.8**	<1	<1	**1.3**	<1	<1	<1	<5.4
GP04C-01	S/17	11/24/99		µg/L	**1.2**	**3**	**3.7**	**1.7**	<1	<1	<1	<1	<1	<1	<5.4
GP04C-01	D/38	11/24/99		µg/L	<1	**17**	**14**	**6.1**	<1	<1	<1	<1	<1	<1	**10.1**
GP04C-02	S/17	11/24/99		µg/L	<1	**4.8**	**21**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04C-02	D/31	11/24/99		µg/L	<1	**29**	**56**	**9.7**	<1	<1	**2.5**	<1	<1	<1	<5.4
GP04C-03	S/17	11/24/99		µg/L	<1	**7.6**	**51**	**2.3**	<1	**1.2**	**1.3**	<1	<1	<1	<5.4
GP04C-03	D/31	11/24/99		µg/L	<1	**29**	**31**	**6.9**	<1	<1	**1.4**	<1	<1	<1	<5.4
GP04C-04	S/20	01/14/00		µg/L	<1	**12**	**58**	**3.9**	<1	**1.4**	**2**	<1	<1	<1	<5.4
GP04C-04	D/29	01/14/00		µg/L	<1	<1	**58**	**5.3**	<1	<1	**2.3**	<1	<1	<1	<5.4
GP04D-01	S/20	10/26/99		µg/L	<1	<1	**3**	**2.2**	<1	<1	<1	<1	<1	<1	<5.4
GP04D-01	D/32	10/26/99		µg/L	<1	**16**	**32**	**7.5**	<1	<1	<1	<1	<1	<1	<5.4
GPA11-2	S/20	01/09/98		µg/L	<1	**1.4 JS**	**11**	**3**	<1 JS	<1	<1	<1 JS	<1	<1 JS	<5.4
GPA11-2	D/36	01/09/98		µg/L	<1	**68 JS**	**96**	**36**	<1	**2.9**	**3.4**	<1	<1	**1.1**	**5.5**
GPA13-3	S/20	01/06/98		µg/L	<1	<1	**260**	**11**	<1	**6.6**	**12**	<1	<1	**1.1**	**5.5**
GPA13-3	D/37	01/06/98		µg/L	<1	**110**	**180**	**32**	<1	**4.6**	**11**	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroether
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-14
DOW/Essex and Wil-Gro Facilities

PRP Evaluation Summary

Dow/Essex and Wil-Gro Facilities
2728 and 2808 North Ohio Avenue (26th and Ohio)

Potential Source Area 03A

Contaminants of Concern – TCE and its degradation products, petroleum hydrocarbons

List of Contaminants

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Dow/Essex and Wil-Gro Facilities

TCE Contamination

Data indicate that this area is a potential source of chlorinated VOC contamination. Groundwater sampling data have shown an increase in concentrations of TCE along the groundwater flow path through this area.

Groundwater samples collected from the shallow (17 to 20 feet bgs) aquifer upgradient of the Dow/Essex and Wil-Gro facilities (DEC/WG) locations at locations GP03A-5, GP03A-6, GP-03A-7 and monitoring well WND-14S during Phase 2 of the RI contained TCE concentrations of 40 µg/L, 64 µg/L, 17 µg/L and <1.0 µg/L. TCE concentrations in the shallow groundwater at downgradient sample locations GP03A-01 (Phase 2), GPA08-4 (Phase 1/1A) and GPA08-3 (Phase 1/1A) was reported at in at 56, 230 and 92 µg/L, respectively. TCE concentration in the deep groundwater upgradient of the facilities ranged between 48 µg/L at GP03A-05 to 240 µg/L at GP03A-07, and were 140 µg/L, 450 µg/L and 300 µg/L at downgradient locations GP03A-01, GPA08-4 (Phase 1/1A), and GPA08-3 (Phase 1/1A), respectively.

Petroleum Hydrocarbon Contamination

Data indicate that this area is also a potential source of petroleum hydrocarbon contamination. Groundwater sampling data have shown an increase in concentrations of BTEX along the groundwater flow path through this area.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south and south-southwest, respectively. Facility-specific groundwater flow is not well defined.

References

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 2808 N. Ohio

Current Owner/Business: Essex Chemical Corp.

Contact Person:

Mailing Address: % Dow Chemical / Tax Dept.
2301 Brazosport Blvd.
Freeport, TX 77541-3203

Phone Number:

Other information: Essex Chemical Corp.
Legal Dept.
Tracy Goad Walter, Attorney
2030 Dow Center
Midland, MI 48674
(517) 638-9511

The property has established monitoring wells on site. No information as to "how" they were developed or "what" is being monitored has been given to the City.

Name of Company:		
Name and/or Contact Person:		
Street Address of Company:		**2808 N Ohio**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"DOW/Essex and Wil-Gro Facilities"
Phone Number of Contact:		
History:	1951	No Listing
	1961	Keystone Chemical Co.
	1965	Keystone Chemical Co.
	1970	Burgess Mfg. Co.
	1975	Vacant
	1980	Vacant
	1984/5	Vacant
	1990	Vacant
	1995/6	No Listing
	2000	No Listing

RCRA Info:

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -13379 Pin: 122040120100500
Page: 1

Name ESSEX CHEMICAL CORP
Situs 2808 N OHIO
WICHITA KS 67219

Tax	4,370.78
Specials	6.30
Total	4,377.08

Phone
Mail % DOW CHEMICAL / TAX DEPT
To 2301 BRAZOSPORT BLVD
FREEPORT TX 77541-3203

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 133080
USD-259-TD-NIC

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -13379
Page: 2

Pin: 122040120100500
Name: ESSEX CHEMICAL CORP

Legal Description
LOT 1 MORTELL ADDITION

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

ESSEX CHEMICAL CORPORATION

2030 Dow Center
November 2, 1999

Ms. Doris Leslie
Water Quality Specialist
Wichita-Sedgwick County Department of
Community Health
1900 East Ninth Street
Wichita, Kansas 67214-3198

VIA FEDERAL EXPRESS

Re: North Industrial Corridor Site, Wichita, Kansas

Dear Ms. Leslie:

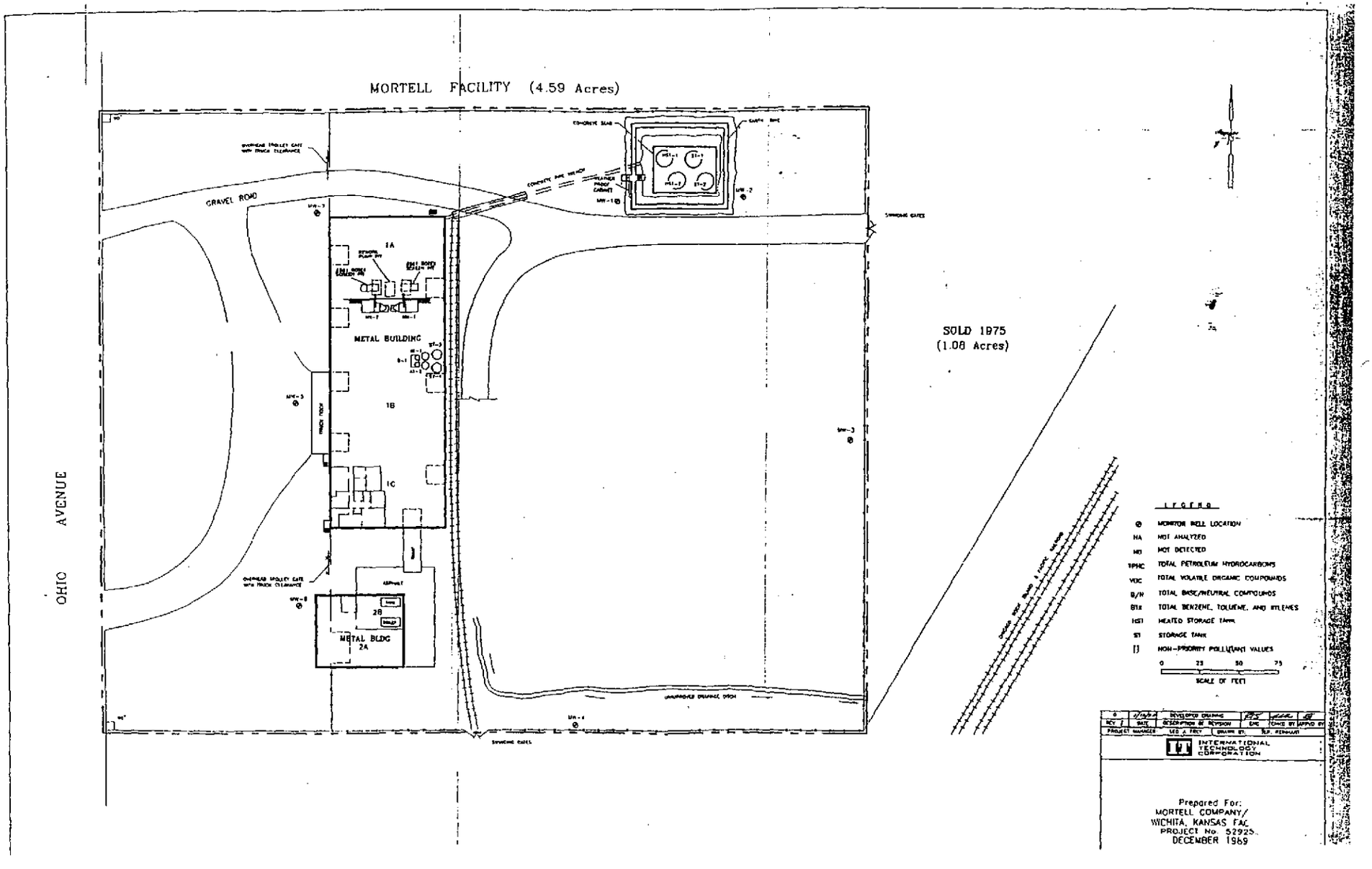
In follow-up to your September 7, 1999 letter, enclosed please find a drawing of the Mortell 4.59 acre site. You will see that we have several existing monitoring wells on our property. I forwarded the RI/FS you sent and the accompanying maps to our technical expert and he was unable to identify any proposed well locations that would fall on our property. While it was difficult to identify our site, from what we could tell your points all are north of our property. Thus, it appears that you may not even need access to our site. If we are incorrect, we continue to be interested in cooperating with you, but we cannot grant access to the site without understanding the specifics of what the on-site activities will be. If you could plot any proposed well locations on the enclosed map, that would be helpful.

Please provide me with any additional information and/or call me with any questions or comments.

Very truly yours,

Tracy Goad Walter
Attorney
Legal Department
517-638-9511
517-638-9564 (fax)
tgwalter@dow.com

TGW:cet
Enclosure


MORTELL FACILITY (4.59 Acres)
OHIO AVENUE
GRAVEL ROAD
METAL BUILDING
1A
1B
1C
METAL BLDG
2A
2B
SOLD 1975
(1.08 Acres)
LEGEND
MONITOR WELL LOCATION
NA NOT ANALYZED
ND NOT DETECTED
TPHC TOTAL PETROLEUM HYDROCARBONS
VOC TOTAL VOLATILE ORGANIC COMPOUNDS
B/N TOTAL BASE/NEUTRAL COMPOUNDS
BTX TOTAL BENZENE, TOLUENE, AND XYLENES
HST HEATED STORAGE TANK
ST STORAGE TANK
NON-PRIORITY POLLUTANT VALUES
0 25 50 75
SCALE OF FEET
INTERNATIONAL TECHNOLOGY CORPORATION
Prepared For:
MORTELL COMPANY/
WICHITA, KANSAS FAC
PROJECT No. 52925
DECEMBER 1969

Potential source at property known as: 2728 N. Ohio

Current Owner/Business: DeBruce Fertilizer, Inc.

Contact Person: Bryan Thoma

Mailing Address: DeBruce Fertilizer, Inc.
Box 34621
North Kansas City, MO 64116
(816) 421-8182

Phone Number: (316) 838-4239 Bill Bryant (On-site Manager)

Other information:

Name of Company:		Wil-Gro Fertilizer Inc.
Name and/or Contact Person:		
Street Address of Company:		**2728 N. Ohio**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"DOW/Essex and Wil-Gro Facilities"
Phone Number of Contact:		
History:	1951	No Listing
	1961	
	1965	Davison Chemical Co
	1970	WR Grace & Co
	1975	WR Grace & Co
	1980	WR Grace & Co
	1984/5	WR Grace & Co
	1990	Wil-Gro Fertilizer Inc.
	1995/6	Wil-Gro Fertilizer Inc.
	2000	Willard Grain & Feed; Will Grow Fertilizer (farm supplies)
RCRA Info:		

TXAP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -00132-00UP
Pin: 122040130000100
Page: 1

Name DEBRUCE FERTILIZER INC
Situs 2728 N OHIO
WICHITA KS 67219

Tax	2,186.55
Specials	6.30
Total	2,192.85

Phone
Mail STE 300
To 4100 MULBERRY DR
KANSAS CITY MO 64116-1696

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 118536

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -00132-00UP
Pin: 122040130000100
Page: 2
Name: DEBRUCE FERTILIZER INC

Legal Description
THAT PART NE1/4 LY NW OF CRI&P ROW EXC N 1521.4 FT THEREOF & EXC W 710 FT THEREOF SEC 4-27-1E

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

GRACE

FEDERAL EXPRESS

RECEIVED
APR 21 1989
PREP SECTION

Agricultural Chemicals Group

W.R. Grace & Co.
100 N. Main Street
P.O. Box 277
Memphis, Tennessee 38101

(901) 522-2000

April 20, 1989

U.S. Environmental Protection Agency
Pre-Remedial and State Program Section
Superfund Branch - Waste Management Division
726 Minnesota Avenue
Kansas City, Kansas 66101

ATTN: Mr. Ken Rapplean

Dear Mr. Rapplean:

On February 28 your agency sent us an Information Request seeking information from W. R. Grace & Co.-Conn., a Connecticut corporation ("Grace"), (whose name was changed from W. R. Grace & Co. on May 25, 1988) in connection with the so-called 29th & Mead Site in Wichita, Kansas (the "Site"). In 1961, Grace purchased property and improvements located at 2728 North Ohio (the "Facility") that are within the boundaries of the Site. The Facility was used for storage and wholesale distribution of fertilizer. Grace sold the Facility on May 25, 1988 to Willard Feed and Grain, Inc. ("Willard").

Since Grace did not own or operate any property within the Site for several of the years that are covered by the Information Request our knowledge of events concerning the Site in those years is limited. However, we have investigated the use of the Facility by Willard. Willard's use of the Facility since the purchase has been consistent with Grace's use prior to the sale. The Facility was destroyed by an electrical fire on April 6, 1989.

During Grace's ownership, we operated the Facility solely as a warehouse and not as a production facility. We have no knowledge of any spills of hazardous substances before, during or after our ownership. Grace used the Facility to store and distribute dry fertilizer and liquid fertilizer solutions. We did not handle chlorinated solvents, acids or caustics nor did we transport, treat or dispose of any hazardous substances at the Facility. Grace has not contributed to any groundwater contamination at the Site. Grace, therefore, should not be considered a party potentially responsible to pay for any groundwater contamination clean-up costs or remediation at the Site.

Grace submits the attached Responses to the Information Request. Please let me know if you have any questions.

Sincerely,

W. R. GRACE & CO.-CONN.

Louis E. Ingram

Louis E. Ingram
Manager, Engineering & Technical Services
Agricultural Chemicals Group

kyb

Attachment

bcc: B. T. Anderson
Billy Bryant
A. D. Laehder
J. T. Price, Esq.
Jerry Willard
J. M. Williams

BEFORE THE U.S. ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the
Contamination Located
in the General Vicinity
of Twenty-Ninth and Mead Street in
Wichita, Kansas

RESPONSE TO INFORMATION REQUEST

W. R. Grace & Co.-Conn. ("Grace") submits the following responses to the Information Request of the Environmental Protection Agency contained in its letter dated February 28, 1989, relating to the above captioned site:

1. State the title, area of responsibility, current address and telephone number of the person designated to respond to this Information Request.

RESPONSE:

Louis E. Ingram
Manager, Engineering & Technical Services
W. R. Grace & Co.
100 N. Main Building
Memphis, TN 38103
(901) 522-2138

Mr. Ingram should be contacted prior to any oral communications with Grace personnel with a copy of any correspondence to:

James T. Price, Esq.
Spencer Fane Britt & Browne
1400 Commerce Bank Building
1000 Walnut Street
Kansas City, Missouri 64106-2140
(816) 474-8100

2. Describe the manufacturing or processing activities at your facility which may involve or may have involved the use of chlorinated organic solvents.

RESPONSE:

The Grace facility in Wichita, Kansas consisted of a warehouse storage facility. Accordingly, no manufacturing or processing activities occurred. Grace used the facility to store and distribute dry fertilizers and liquid fertilizer solutions. Grace did not manufacture, process or use any chlorinated organic solvents at the warehouse facility.

3. Provide a list of the generic names and chemical characteristics of hazardous wastes and/or hazardous substances, including, but not limited to, carbon tetrachloride, vinyl chloride, tetrachloromethane, trichloroethylene, trans 1, 2-dichloroethylene, 1, 1, 1-trichloroethane, and other chlorinated solvents, acids, and caustics that are/were generated, hauled or disposed from your facility.

RESPONSE:

Grace did not generate, haul or dispose of any hazardous wastes, hazardous substances, chlorinated solvents, acids, caustics or any of the other hazardous substances listed above. Commencing about 1977, Grace stored liquid fertilizer solutions, containing ammonium nitrate.

4. With respect to each hazardous substance generated, hauled or disposed from your facility state:

a. the chemical composition, characteristic, physical state, e.g., solid or liquid, of each such hazardous substance;

b. the identify of the person who supplied you with each such hazardous substance;

c. a description of how each such hazardous substance was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you;

d. the time period during which each such hazardous substance was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you;

e. where each such hazardous substance was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you; and,

f. the quantity of each such hazardous substance used, purchased, generated, stored, treated, transported, disposed or other wise handled by you.

RESPONSE:

a. As stated in response to Request No. 3, Grace did not generate, haul or dispose of any hazardous substances. Grace stored liquid fertilizer solutions at its warehouse facility.

b. Oklahoma Nitrogen Co. ("ONC") of Woodward, Oklahoma produced the materials. ONC is an Oklahoma general partnership in which Woodward Chemicals Corporation, a

wholly-owned subsidiary of Grace, was a general partner from 1977 until 1988. Grace purchased from ONC the products identified in the response to Request No. 4c.

c. The materials were transported via rail cars and tank trucks to the Grace Wichita warehouse. Grace stored the liquid fertilizer solutions in a 5,000 ton vertical steel storage tank.

d. Grace stored the liquid fertilizer solutions from 1977 to 1988.

e. Grace sold the materials to retail agricultural suppliers in the area. The products left the property in tank trucks for customers. Grace did not dispose of the materials on or off site.

5. Describe all leaks, spills or releases of any kind into the environment of any hazardous substances, including, but not limited to, those substances listed in #3 above, that have occurred at the Site, and for each such occurrence state the following:

a. where such event occurred;

b. how such event occurred;

c. what hazardous substances were involved in the event;

d. the amount of each hazardous substance which was released during the event;

e. any and all activities undertaken in response to each such release or the threatened release of hazardous substances at the Site;

f. a description of any and all investigations of the circumstances, nature, extent, or location of each release or threatened release, including the results of any soil, water (ground and surface), or air testing undertaken; and,

g. the identity of each person involved in such event or who investigated or responded to such event or who otherwise has any information regarding or relating to such event.

RESPONSE:

Grace has no knowledge of any spills, leaks or releases of any hazardous substances at its warehouse facility.

6. If a release of any kind of hazardous substances identified in #3, above occurred into any subsurface disposal system of (sic) floor drain inside or under any buildings located on the Site, state the following;

a. The precise location of the release;

b. The date when the disposal system, floor drains, or building involved with the release was installed;

c. Whether the disposal system or floor drains were connected to pipes;

d. Where such pipes are or were located;

e. When such pipes were installed; and

f. How and when such pipes were replaced, repaired or otherwise changed.

RESPONSE:

Grace has no knowledge of any releases of hazardous substances at its warehouse facility.

7. Provide a list of your Comprehensive General Liability and Environmental Impairment Liability policies and Directors' and Officers' policies for the period from 1950 through the present. Specify the insurer, policy, effective dates, and state per-occurrence policy limits for each policy. Copies of policies may be provided in lieu of a narrative response.

RESPONSE:

Grace objects to this request because the information sought is unduly burdensome. A corporation like Grace has maintained over the years a liability insurance program involving numerous carriers providing multiple layers of coverage. Complete details concerning this coverage are not readily accessible and carriers who insured Grace before the facility was purchased in 1961 are not likely to accept coverage without litigation. The Annual Reports in Exhibit A show that Grace's assets are in excess of four billion dollars and demonstrate that the corporation is financially sound. Notwithstanding the foregoing objections, Grace states that its primary liability insurer since 1973 has been Continental Casualty Company, a part of the CNA Insurance Companies, whose home office is in Chicago, Illinois. In addition, Grace has numerous excess liability insurers.

8. Provide copies of all income tax returns, including all attachments thereto, submitted by the facility to the Internal Revenue Service and the state of Kansas during the last five years.

RESPONSE:

Grace objects to this request because it is immaterial and unduly burdensome. Grace is a multi-national corporation whose tax returns are voluminous. Grace is providing copies of its Annual Reports for the years 1984 through 1988 and its 1988 Form 10K that was filed with the Securities and Exchange Commission (see Exhibit A). If additional information is necessary, Grace will provide reasonable information upon request.

9. Provide copies of all financial statements, reports, or projections prepared by, for or on behalf of you and your facility for the past five years, whether audited or unaudited, including, but not limited to all those filed with the Securities and Exchange Commission, state agencies, and all financial institutions such as banks.

RESPONSE:

Grace objects to this request for the reasons stated in Response to Request No. 8 and incorporates that Response here. (See the documents to that Response.)

10. Identify your corporate structure, i.e., name the parent corporation, all subsidiaries, and the percent ownership of the subsidiary by the parent, and successor corporations, if any.

RESPONSE:

See the documents provided in response to Request No. 8.

11. Provide a copy of your Articles of Incorporation and By-laws.

RESPONSE:

See attached Exhibit B.

12. Identify the officers, directors and majority shareholders of your corporation. Describe the management duties of each and identify the amount of shares held respectively.

RESPONSE:

See the documents in response to Request No. 8.

13. Identify all persons who may have generated or disposed of hazardous substances at the site.

RESPONSE:

Grace has no knowledge of any persons who generated or disposed of hazardous substances at its warehouse facility.

14. If you have reason to believe there may be persons able to provide a more detailed or complete response to any question contained herein or who may be able to provide additional responsive documents, identify such persons providing their addresses, phone numbers and the additional information or documents they may have.

RESPONSE:

Grace objects to this request because it calls for speculation as to the information requested. Grace states, however, that it has no knowledge of any persons able to provide a more detailed or complete response to any question contained herein or able to provide additional responsive documents.

15. For each and every question contained here, if information or documents responsive to this Information Request are not in your possession, custody or control, identify the persons from whom such information or documents may be obtained.

RESPONSE:

All known documents are under the control of L. E. Ingram.

16. Provide any and all information you may possess regarding past operations and ownership of your facility, including, but not limited to generation, treatment, storage and disposal of hazardous substances and/or hazardous wastes.

RESPONSE:

Grace purchased the warehouse facility from Wichita Fertilizer, Inc. in 1961. Grace has no knowledge that Wichita Fertilizer, Inc. generated, treated, stored or disposed of hazardous substances and/or hazardous wastes.

17. List all companies or individuals known to you which at any time may have sent drums, containers, wastes, chemicals or other materials to your facility under current or previous ownership.

RESPONSE:

Grace has knowledge that the following facilities shipped the following products to the warehouse facility:

Oklahoma Nitrogen Co.	- Woodward, OK	- Liquid Fertilizer Solutions
W. R. Grace & Co.	- Joplin, MO	- Granulated Fertilizers
W. R. Grace & Co.	- Bartow, FL	- Dry Fertilizers

Grace has no knowledge of any other persons or facilities that shipped chemicals to the facility. To Grace's knowledge, no wastes were shipped to the facility. Grace objects to this request insofar as it may be interpreted to request information on shipments of drums or containers not containing chemicals or wastes. Such information is irrelevant and unduly burdensome.

18. List all records or other documents known to you that may provide the information requested above or that may identify the companies or individuals with knowledge or the information requested above, the location of those records, the person or entity in possession of those records, and provide copies of such records. If they are not available to you, state where they are located.

RESPONSE:

Grace has no knowledge of any records or documents that may provide information requested or that may identify companies or individuals with knowledge of information requested. Grace sold the warehouse facility on May 25, 1988 and is in the process of selling its agricultural chemicals operations. If such records or documents exist, Grace has no knowledge of the location of such documents.

19. Identify the person or persons responsible for the creation, maintenance or operation of any treatment, storage or disposal area on your property under current or previous ownership.

RESPONSE:

There has been no waste treatment, storage or disposal area operated on this facility.

20. Provide any other information you believe to be significant to the issues regarding the 29th and Mead Site.

RESPONSE:

Grace objects to this request. The request calls for speculation as to what information is sought or is "significant." Grace

states, however, that it has answered these requests completely and to the best of its ability in light of the fact that it no longer owns the warehouse facility and its Agricultural Chemicals Group, the division which operated the facility, is in a discontinued operations status.

W. R. GRACE & CO.-CONN.

By: L E Ingram

L. E. Ingram, Manager,
Engineering & Technical Services
Agricultural Chemicals Group

kyb

MATERIAL SAFETY DATA SHEET

W. R. Grace & Co.
62 Whittemore Ave.
Cambridge, MA 02140

MSDS Number: D-8619
Cancels: D-112-2
Date Prepared: 6/1/86

Telephone Number for
Information and Emergency Response
(617) 876-1400
X-3140 or 3897

SECTION I - PRODUCT IDENTIFICATION

Trade Names and Synonyms:	Daravair R/ Daravair M
Chemical Name and Family:	Vinsol Resin Solution
Formula:	Mixture (Not Applicable)
CAS#:	Mixture (Not Applicable)
DOT Hazard Class/ID#/Label:	Not Defined as Hazardous by D.O.T.
Reportable Quantity (RQ):	See Section VII
Surface Freight Classification:	Air Entraining Agent, Liquid
NPCA-HMIS Hazard Index:	• Health: 3 • Flammability: 1 • Reactivity: 0 • Personal Protection: B

SECTION II- HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Ingredient (CAS#, Chemical & Common Names)	Percent by Weight	Exposure Limits OSHA	ACGIH	OTHER
Sodium Hydroxide (Caustic Soda) CAS #1310-73-2	~3	2Mg/M^3	2Mg/M^3 (ceiling)	——

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	>212°F (Estimated)	Specific Gravity (H_2O = 1)	1.02 - 1.09
Vapor Pressure (mm Hg.)	Unknown	% Volatiles	80 - 90
Vapor Density (AIR = 1)	Unknown	Evaporation Rate (Butyl Acetate = 1)	Unknown
Solubility in Water	Complete	pH	11.0 -13.0
Appearance and Odor	Dark Brown Liquid; Sweet Odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Flammable Limits	LEL	UEL
>200°F (Estimated)	Unknown		

Extinguishing Media Water spray, dry chemical, foam or carbon dioxide.

Special Fire Fighting Procedures None Known

Unusual Fire and Explosion Hazards None Known

SECTION V - REACTIVITY DATA

Stable: Yes
Conditions to Avoid: None Known

Incompatability (Materials to Avoid): None Known

Hazardous Decomposition or Byproducts: Combustion may release CO, CO_2 or other organic compounds.

Hazardous Polymerization: Not Known to Occur
Conditions to Avoid: None Known

SECTION VI - HEALTH HAZARD DATA

(Include all known acute and chronic effects, signs, and symptoms of exposure and medical conditions generally aggravated by exposure)

Routes of Exposure:

Inhalation:

Exposure not expected by this route.

Skin and Eye:

May cause severe skin or eye irritation.

Ingestion:

May be corrosive to body tissues, including mouth, throat and stomach linings.

Carcinogenicity According to NTP, IARC and OSHA: Not Applicable

Emergency and First Aid Procedures:

In case of skin contact, immediately flush skin with large amounts of flowing water. If irritation develops, consult a physician.

In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician immediately.

If swallowed, immediately dilute ingested material by drinking large volumes of milk or water. Wash mouth with running tap water. Consult a physician immediately.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Warning Statements:

DANGER!

Alkaline Solution contains Sodium Hydroxide CAS #1310-73-2.
Causes severe irritation.
Harmful if swallowed.

Precautionary Measures:

Do not get in eyes, on skin, or on clothing.
Keep container closed.
Wash thoroughly after handling.

Steps to be Taken in Case Material is Released or Spilled:

If spilled, absorb with an inert noncombustible media and remove for disposal. Spills in excess of 33,000 lbs (or 3600 gallons) would contain a reportable quantity of Sodium Hydroxide (RQ = 1000 lbs). In case of reportable spills, contact the National Response Center 1-800-424-8802.

Waste Disposal Method:

Product waste having a pH greater than or equal to 12.5 is designated as EPA Hazardous Waste D002. Waste resulting from the clean-up of a reportable spill is also defined as hazardous. Waste not resulting from a reportable spill or waste having the pH adjusted to neutral is not considered hazardous according to EPA CFR 40 § 261.3.

Dispose of all waste in accordance with applicable government regulations.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Specify Type): Not Generally Required

Ventilation

Local Exhaust:
Mechanical:
Special:
Other:
} Not Generally Required

Protective Gloves: Gloves resistant to corrosive alkalies are required.

Eye Protection: Goggles or full face mask should be worn when appropriate,

Other Protective Clothing or Equipment: Clothing necessary to prevent bodily contact should be worn.

Work/Hygenic Practices: Observe all precautions noted above and avoid all unnecessary direct contact.

"THE DATA INCLUDED HEREIN ARE PRESENTED ACCORDING TO W. R. GRACE & CO.'S PRACTICES CURRENT AT THE TIME OF PREPARATION HEREOF, ARE MADE AVAILABLE SOLELY FOR THE CONSIDERATION, INVESTIGATION AND VERIFICATION OF THE ORIGINAL RECIPIENTS HEREOF AND DO NOT CONSTITUTE A REPRESENTATION OR WARRANTY FOR WHICH GRACE ASSUMES LEGAL RESPONSIBILITY. IT IS THE RESPONSIBILITY OF A RECIPIENT OF THIS DATA TO REMAIN CURRENTLY INFORMED ON CHEMICAL HAZARD INFORMATION, TO DESIGN AND UPDATE ITS OWN PROGRAM AND TO COMPLY WITH ALL NATIONAL, FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS APPLICABLE TO SAFETY, OCCUPATIONAL HEALTH, RIGHT-TO-KNOW AND ENVIRONMENTAL PROTECTION."

MATERIAL SAFETY DATA SHEET

W. R. Grace & Co.
62 Whittemore Ave.
Cambridge, MA 02140

MSDS Number: D-8633
Cancels: D-121-3
Date Prepared: February 4, 1987

Telephone Number for
Information and Emergency Response
(617) 876-1400
X-3140 or 3897

SECTION I - PRODUCT IDENTIFICATION

Trade Names and Synonyms:	WRDA with HYCOL
Chemical Name and Family:	Lignin Sulfonate in Aqueous Solution
Formula:	Mixture
CAS#:	Not Applicable (Mixture)
DOT Hazard Class/ID#/Label:	Nonhazardous
Reportable Quantity (RQ):	Refer to Section VII
Surface Freight Classification:	Concrete or Masonry Plasticizer & Water Reducing Compound
NPCA-HMIS Hazard Index:	• Health: 1* • Flammability: 1 • Reactivity: 0 • Personal Protection: B, G

SECTION II- HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Ingredient (CAS#, Chemical & Common Names)	Percent by Weight	Exposure Limits OSHA	ACGIH	OTHER
Calcium Lignosulfonate CAS#68131-31-7	~20%	----None Established----		
Amine Formate CAS#Proprietary	~13%	----None Established----		
Formaldehyde CAS#50-00-0	~1-2%	3ppm-TWA 5ppm-Ceiling 10ppm-30 minute peak above ceiling in 8 hours 100ppm-IDLH (1974)	1ppm-TWA (1986)	NIOSH 0.8pp Ceilin

TWA - Time Weighted Average
IDLH - Immediately Dangerous to Life and Health

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	>212°F (estimated)	Specific Gravity (H_2O = 1)	1.1 - 1.2
Vapor Pressure (mm Hg.)	Unknown	% Volatiles	50% water
Vapor Density (AIR = 1)	Unknown	Evaporation Rate (Butyl Acetate = 1)	Equal to Water
Solubility in Water	Complete	pH	6.0 to 8.0

Appearance and Odor Dark brown liquid with a slight formaldehyde odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) >220°F (PMCC) Flammable Limits Unknown LEL UEL Unknown

Extinguishing Media Product is an aqueous solution and is unlikely to burn until all water is evaporated.

Special Fire Fighting Procedures None

Unusual Fire and Explosion Hazards None known

SECTION V - REACTIVITY DATA

Stable: X
Conditions to Avoid: None known

Incompatability (Materials to Avoid): Strong oxidizing agents

Hazardous Decomposition or Byproducts: If product is dried and burned oxides of carbon and sulfur may evolve.

Hazardous Polymerization: Will not occur
Conditions to Avoid: None known

SECTION VI - HEALTH HAZARD DATA

(Include all known acute and chronic effects, signs, and symptoms of exposure and medical conditions generally aggravated by exposure)

Routes of Exposure:

Inhalation:
This product contains a small amount of formaldehyde. Formaldehyde is considered to have good early warning properties due to its pungent odor. Because the amount in the product is small and vapors are easily detected by smell at levels of 0.8ppm or higher, exposure can be minimized. Formaldehyde vapors may irritate nose, throat, mouth and mucous membranes causing coughing, breathing difficulty and in severe exposures, pulmonary edema. A small proportion of people may experience an allergic respiratory reaction (wheezing and chest tightness) upon repeated exposure. Laboratory tests indicate that overexposure to formaldehyde may produce reproductive or mutagenic effects.

SECTION VI - HEALTH HAZARD DATA (Cont'd)

Skin and Eye:
Not an eye irritant according to results of a Primary Eye Irritation Study (FHSA). Product is essentially nonirritating to skin according to results of a Primary Skin Irritation Test (FHSA). However, based on formaldehyde content, an allergic skin reaction may occur in a small proportion of sensitive persons upon prolonged or repeated contact.

Ingestion: Oral toxicity is low. Oral Rat LD_{50}>5,000 mg/kg.

Carcinogenicity According to NTP, IARC and OSHA:

NTP Annual Report on Carcinogens lists formaldehyde as a suspect animal carcinogen.

IARC Monographs lists formaldehyde as a positive animal carinogen and an indefinite human carcinogen.

OSHA is considering revising the status of formaldehyde to a potential occupational carcinogen.

This section is not applicable to the other ingredients contained in this product.

Emergency and First Aid Procedures:
In case of contact, flush eyes with plenty of water. Wash skin promptly with soap and water. If eye or skin irritation occurs, consult a physician.

If inhaled, get fresh air. Provide artificial respiration if necessary. See a physician if symptoms persist.

If swallowed, induce vomiting by giving 2 glasses of water to drink and sticking finger down throat. If symptoms of irritation occur, call a physician. Never give anything by way of mouth to an unconscious person.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Warning Statements:
CAUTION! MAY BE HARMFUL IF INHALED.
- Mixture contains Calcium Lignosulfonate CAS#68131-31-7, Amine Formate CAS#Proprietary, and Formaldehyde CAS#50-00-0.
- May cause skin or respiratory sensitization.
- Based on laboratory tests, overexposure to formaldehyde may create risk of cancer and mutagenic and reproductive effects.

Precautionary Measures:
- Avoid contact with eyes, skin and clothing.
- Wash thoroughly after handling.
- Avoid breathing vapors.
- Keep container closed.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE (Cont'd)

Steps to be Taken in Case Material is Released or Spilled:
Prevent product from entering drinking water supplies or streams. Observing above precautions, absorb or solidify spilled material with an inert, noncombustible media and remove for disposal.

Based on the maximum possible formaldehyde content, a ~5,500 gallon spill would contain 1000 lbs. of formaldehyde which equals a Reportable Quantity (RQ). Report spills equal to or in excess of the RQ to the National Response Center at 1-800-424-8802.

SECTION VIII - CONTROL MEASURES

Waste Disposal Method:
According to US EPA (40 CFR § 261.3) waste of this material is not defined as hazardous. Dispose of all waste in accordance with applicable regulations. Consult state and local regulations to determine if their hazardous waste definitions differ from the US EPA.

Respiratory Protection (Specify Type):
Use a full-face NIOSH-approved formaldehyde or acid-gas cartridge respirator whenever necessary to prevent exposures in excess of the TLV (1ppm up to 50ppm). In situations beyond the use limitations of these devices, use self-contained breathing apparatuses (SCBA). However, exposures requiring SCBA's are not expected to occur.

Ventilation
Local Exhaust: Yes

Mechanical: Not generally required

Special: N. A.

Other: N. A.

Protective Gloves: Impervious rubber gloves should be worn to prevent prolonged or repeated contact.

Eye Protection: Wear goggles to protect against vapors or if splashing is likely.

Other Protective Clothing or Equipment: Wear appropriate clothing to prevent skin contact.

Work/Hygenic Practices: Use good hygiene practices and observe above precautions.

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MATERIAL SAFETY DATA SHEET

W. R. Grace & Co.
62 Whittemore Ave.
Cambridge, MA 02140

MSDS Number: D-8605
Cancels: D-227
Date Prepared: 5/28/86

Telephone Number for
Information and Emergency Response
(617) 876-1400
X-3140 or 3897

SECTION I - PRODUCT IDENTIFICATION

Trade Names and Synonyms:	Daraccel
Chemical Name and Family:	Aqueous Solution of Calcium Chloride and Ethanolamines
Formula:	Mixture (Not Applicable)
CAS#:	Mixture (Not Applicable)
DOT Hazard Class/ID#/Label:	Nonhazardous
Reportable Quantity (RQ):	Not Applicable
Surface Freight Classification:	Concrete or Masonry Plasticizer & Water Reducer
NPCA-HMIS Hazard Index:	• Health: 2* • Flammability: 1 • Reactivity: 0 • Personal Protection: B

SECTION II- HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Ingredient (CAS#, Chemical & Common Names)	Percent by Weight	Exposure Limits OSHA	ACGIH	OTHER
Triethanolamine CAS #102-71-6 with varying amounts of:	<5%	—— None Established ——		
Diethanolamine CAS #111-42-2		None	3ppm ($15mg/m^3$)	None
Monoethanolamine CAS #141-43-5		3ppm	3ppm	None
Calcium Chloride CAS #10043-52-4	<35%	—— None Established ——		

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	Higher than 212°F	Specific Gravity (H_2O = 1)	1.32
Vapor Pressure (mm Hg.)	Unknown	% Volatile	~65
Vapor Density (AIR = 1)	Unknown	Evaporation Rate (Butyl Acetate = 1)	Unknown
Solubility in Water	Complete	pH	8.5 - 9.5

Appearance and Odor Transparent blue liquid with slight odor of bleach

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) ~320°F based on Triethanolamine Content

Flammable Limits Unknown LEL UEL

Extinguishing Media

Special Fire Fighting Procedures

Unusual Fire and Explosion Hazards

Product is 65% water and not likely to support combustion.

SECTION V - REACTIVITY DATA

Stable: Yes
Conditions to Avoid: None Known

Incompatability (Materials to Avoid): None Known

Hazardous Decomposition or By-products: None Known

Hazardous Polymerization: Will Not Occur
Conditions to Avoid: None Known

SECTION VI - HEALTH HAZARD DATA

(Include all known acute and chronic effects, signs, and symptoms of exposure and medical conditions generally aggravated by exposure)

Routes of Exposure:

Inhalation:

Overexposure by inhalation is not likely to occur. Vapors or spray mists may cause irritation to upper respiratory system.

Skin and Eye:

Contact with eyes may cause irritation. Prolonged or repeated contact with skin may cause irritation or sensitization.

Ingestion:

Specific effects are unknown. Treat as a slight alkaline solution. In laboratory tests, Calcium Chloride produced mutagenic and tumorigenic effects in animals. Tumorigenic effects have been reported in laboratory tests with Triethanolamine. Liver and kidney damage from chronic exposure to Triethanolamine has been demonstrated in animals.

Carcinogenicity According to NTP, IARC and OSHA:

Not Applicable

Emergency and First Aid Procedures:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician. Wash skin with soap and water. If irritation persists, consult a physician.

If swallowed, induce vomiting immediately by giving 2 glasses of water to drink, and sticking finger down throat (never give anything by mouth to an unconscious person). Consult a physician.

If inhaled, get fresh air. If symptoms persist, consult a physician.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Warning Statements:

Mixture contains Triethanolamine CAS# 102-71-6 with varying amounts of Monoethanolamine CAS# 141-43-5, Diethanolamine CAS# 111-42-2, and Calcium Chloride CAS# 10043-52-4.
May be irritating to eyes, skin, or respiratory system.
Prolonged or repeated contact may cause skin sensitization.
May be harmful if swallowed.

Precautionary Measures:

Avoid contact with eyes, skin, and clothing.
Wash thoroughly after handling.

Steps to be Taken in Case Material is Released or Spilled:

Observe above precautions. Absorb spilled material with an inert, noncombustible material and remove for disposal.

Waste Disposal Method:

Waste of this product is not defined as hazardous according to EPA (40 CFR §261.3). Solidification must be accomplished prior to disposal in a landfill (refer to 40 CFR §264.314). Consult applicable state and local regulations prior to disposal.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Specify Type): Not generally required, however, if strong odor, vapor or mists are detected a NIOSH - approved organic vapor respirator should be worn. Also note work/hygenic practices information below.

Ventilation

Local Exhaust: Not generally required.

Mechanical: Not generally required.

Special: Not generally required.

Other: Not generally required.

Protective Gloves: Rubber or synthetic gloves should be worn to guard against prolonged or repeated contact.

Eye Protection: Goggles should be worn if splashing is likely.

Other Protective Clothing or Equipment: Not generally required.

Work/Hygenic Practices: Good personal hygiene is appropriate for normal handling

Special Note: This product contains a small quantity of ethoxylated compound. Trace quantities of ethylene oxide may be present as a result. Ethylene Oxide vapor may build up in the head space of storage containers of tanks. The possibility of exposure to Ethylene Oxide vapor above the OSHA action level (0.5ppm) must be addressed during non-routine tasks such as cleaning of storage tanks. Consult the OSHA Ethylene Oxide Standard 29 CFR 1910.1041 for appropriate procedures.

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Excerpts from Report(s) Prepared by Others

ESSEX CHEMICAL CORPORATION

2030 Dow Center
November 2, 1999

Ms. Doris Leslie
Water Quality Specialist
Wichita-Sedgwick County Department of
Community Health
1900 East Ninth Street
Wichita, Kansas 67214-3198

VIA FEDERAL EXPRESS

Re: North Industrial Corridor Site, Wichita, Kansas

Dear Ms. Leslie:

In follow-up to your September 7, 1999 letter, enclosed please find a drawing of the Mortell 4.59 acre site. You will see that we have several existing monitoring wells on our property. I forwarded the RI/FS you sent and the accompanying maps to our technical expert and he was unable to identify any proposed well locations that would fall on our property. While it was difficult to identify our site, from what we could tell your points all are north of our property. Thus, it appears that you may not even need access to our site. If we are incorrect, we continue to be interested in cooperating with you, but we cannot grant access to the site without understanding the specifics of what the on-site activities will be. If you could plot any proposed well locations on the enclosed map, that would be helpful.

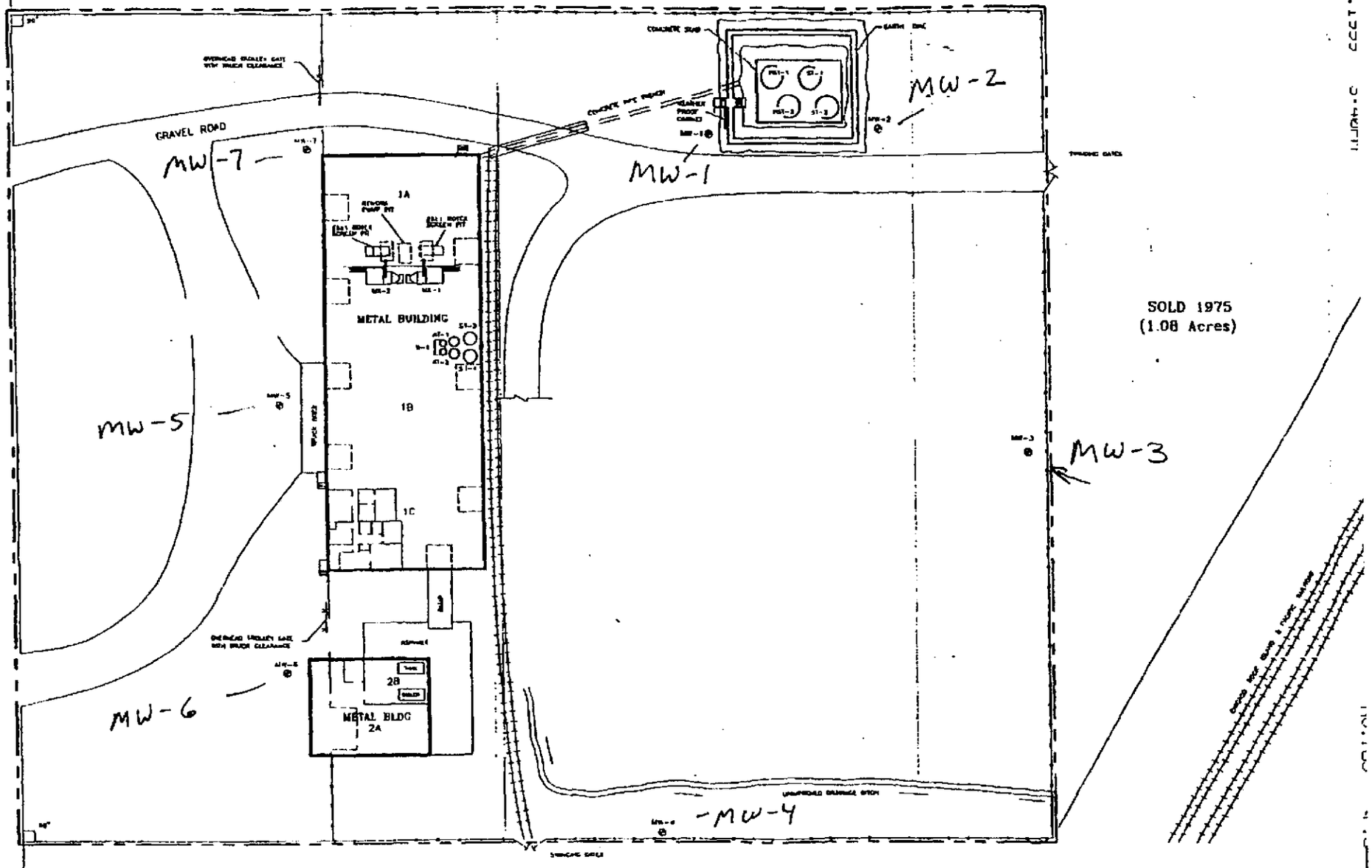
Please provide me with any additional information and/or call me with any questions or comments.

Very truly yours,

Tracy Goad Walter
Attorney
Legal Department
517-638-9511
517-638-9564 (fax)
tgwalter@dow.com

TGW:cet
Enclosure

MORTELL FACILITY (4.59 Acres)



11.6 Essex Chemical Corporation
2808 North Ohio

Copy to Telph U Conv
Left + Hand E.

ESSEX CHEMICAL CORPORATION

1401 BROAD STREET • CLIFTON, N. J. 07015

DR. CALVIN J. BENNING
DIRECTOR, ENVIRONMENTAL AFFAIRS

PHONE 201-773-6300
NEW YORK 212-962-3042
CABLE ADDRESS ESSEXCHEM, CLIFTON, N. J.

July 6, 1988

RECEIVED

JUL 11 1988

BUREAU OF
ENVIRONMENTAL
REMEDIATION

Ronald Hammerschmidt, Director
Bureau of Environmental Remediation
Kansas Department of Health and Environment
Forbes Field
Topeka, KS 66620

Dear Mr. Hammerschmidt:

This is a follow up to our telephone conversation on July 5th.

Essex Chemical Corporation has acquired the business and assets of the Mortell Company. A former plant site located at 2808 N. Ohio in Wichita, Kansas, was part of the acquisition.

We performed several environmental inspections of the site, analyzed materials and residues, and installed five monitoring wells to define the environmental state of the property.

The following data were collected:

1. The insulation in the buildings consists of flame retardant cellulose. There was no asbestos on the facility that we could find.

2. No PCB's were found on the site or in soil or residue samples that were analyzed.

3. Monitoring wells were installed at five locations by a licensed well driller under the direction of a geologist using conventional Kansas approved methods. All five wells were developed prior to sampling. The results of the ground water analyses are summarized in the attached tables.

If you need more information, please feel free to call me at (201) 773-6300 or (201) 773-1989.

Sincerely yours,

ESSEX CHEMICAL CORPORATION

Calvin J. Benning

Calvin J. Benning, Ph.D.
Director, Environmental Affairs

CJB/cvv
Attachment
cc: J. Devine, D. Farley, D. Pope, I. Zonis

SAMPLE IDENTIFICATION

85650 (2)	MW-4 (1)
85651	MW-3
85652	MW-2
85653	MW-1
85654	MW-5
85655	Field Blank

(1) MW - Monitoring Well

(2) Water Sample Number

WATER ANALYSIS SUMMARY
FOR ESSEX/WICHITA
PROJECT NO. 528931

SAMPLE IDENTIFICATION		PARAMETER Total Petroleum Hydrocarbon mg/ℓ[1]
85650	MW-4	<0.2
85651	MW-3	<0.2
85652	MW-2	0.4
85653	MW-1	<0.2
85654	MW-5	0.4
85655	FIELD BLANK	<0.2

---

[1] mg/ℓ = milligrams per liter or parts per million.

Volatile Organic Compounds
(Micrograms/Liter)

Compound	Detection Limit	Method Blank	MW-4 85650	MW-3 85651	MW-2 85652
Chloromethane	10	ND	ND	ND	ND
Bromomethane	10	ND	ND	ND	ND
Vinyl chloride	10	ND	ND	ND	ND
Chloroethane	10	ND	ND	ND	ND
Dichloromethane (methylene chloride)	5	8	6	7	5
Acetone	10	TR	TR	TR	TR
Carbon disulfide	5	ND	ND	ND	TR
1,1-Dichloroethylene	5	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND
Trans-1,2-Dichloroethene	5	ND	ND	ND	5
Chloroform	5	ND	ND	TR	TR
1,2-Dichloroethane	5	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	10	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND
Vinyl acetate	10	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND
Trichloroethene	5	ND	28	ND	ND
Chlorodibromomethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND
Benzene	5	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND
2-Chloroethyl vinyl ether	10	ND	ND	ND	ND
Tribromomethane, (Bromoform)	5	ND	ND	ND	ND
2-Hexanone	10	ND	ND	ND	ND
4-Methyl-2-pentanone	10	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND
Toluene	5	TR	ND	TR	ND
Chlorobenzene	5	ND	ND	ND	6
Ethylbenzene	5	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND
Xylenes (Total)	5	ND	ND	ND	ND
Acrolein	20	ND	ND	ND	ND
Acrylonitrile	5	ND	ND	ND	ND

ND - This compound was not detected; the limit of detection for this analysis is less than the amount stated in the table above.

TR - Trace, this compound was present, but was below the level at which concentration could be determined.

Volatile Organic Compounds
(Micrograms/Liter)

Compound	Detection Limit	MW-1 85653	MW5 85654	Field Blank 85655
Chloromethane	10	ND	ND	ND
Bromomethane	10	ND	ND	ND
Vinyl chloride	10	ND	ND	ND
Chloroethane	10	ND	ND	ND
Dichloromethane (methylene chloride)	5	5	5	5
Acetone	10	TR	TR	TR
Carbon disulfide	5	ND	ND	ND
1,1-Dichloroethylene	5	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND
Trans-1,2-Dichloroethene	5	ND	ND	ND
Chloroform	5	ND	TR	22
1,2-Dichloroethane	5	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	10	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Vinyl acetate	10	ND	ND	ND
Bromodichloromethane	5	ND	TR	12
1,2-Dichloropropane	5	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND
Trichloroethene	5	23	20	ND
Chlorodibromomethane	5	ND	ND	5
1,1,2-Trichloroethane	5	ND	ND	ND
Benzene	5	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND
2-Chloroethyl vinyl ether	10	ND	ND	ND
Tribromomethane, (Bromoform)	5	ND	ND	ND
2-Hexanone	10	ND	ND	ND
4-Methyl-2-pentanone	10	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND
Toluene	5	ND	ND	ND
Chlorobenzene	5	ND	ND	ND
Ethylbenzene	5	ND	ND	ND
Styrene	5	ND	ND	ND
Xylenes (Total)	5	ND	ND	ND
Acrolein	20	ND	ND	ND
Acrylonitrile	5	ND	ND	ND

ND - This compound was not detected; the limit of detection for this analysis is less than th amount stated in the table above.

TR - Trace, this compound was present, but was below the level at which concentration could b determined.

WATER ANALYSIS SUMMARY
OF BASE-NEUTRAL EXTRACTABLE PRIORITY POLLUTANT RESULTS
FOR ESSEX/WICHITA
PROJECT NO. 528931

PARAMETER	CAS NUMBER[1]	SAMPLE IDENTIFICATION 85652	85653	85654	85655
		Concentration µg/ℓ[2]			
Acenaphthene	83-32-9	<10	<10	<10	<10
Acenaphthylene	208-96-8	<10	<10	<10	<10
Anthracene	120-12-7	<10	<10	<10	<10
Benzidine	92-87-5	<50	<50	<50	<50
Benzo(a)anthracene	56-55-3	<10	<10	<10	<10
Benzo(a)pyrene	50-32-8	<10	<10	<10	<10
3,4-Benzofluoranthene	205-99-2	<10	<10	<10	<10
Benzo(g,h,i)perylene	191-24-2	<10	<10	<10	<10
Benzo(k)fluoranthene	207-08-9	<10	<10	<10	<10
Bis(2-chloroethoxy)methane	111-91-1	<10	<10	<10	<10
Bis(2-chloroethyl)ether	111-44-4	<10	<10	<10	<10
Bis(2-chloroisopropyl)ether	39638-32-9	<10	<10	<10	<10
Bis(2-ethylhexyl)phthalate	117-81-7	16	<10	<10	<10
4-Bromophenyl-phenylether	101-55-3	<10	<10	<10	<10
Butyl benzyl phthalate	85-68-7	<10	<10	<10	<10
2-Chloronaphthalene	91-58-7	<10	<10	<10	<10
4-Chlorophenyl phenylether	7005-72-3	<10	<10	<10	<10
Chrysene	218-01-9	<10	<10	<10	<10
Dibenzo(a,h)anthracene	53-70-3	<10	<10	<10	<10
1,2-Dichlorobenzene	95-50-1	<10	<10	<10	<10
1,3-Dichlorobenzene	541-73-1	<10	<10	<10	<10
1,4-Dichlorobenzene	106-46-7	<10	<10	<10	<10
3,3'-Dichlorobenzidine	91-94-1	<20	<20	<20	<20

WATER ANALYSIS SUMMARY
OF BASE-NEUTRAL EXTRACTABLE PRIORITY POLLUTANT RESULTS
FOR ESSEX/WICHITA
PROJECT NO. 528931

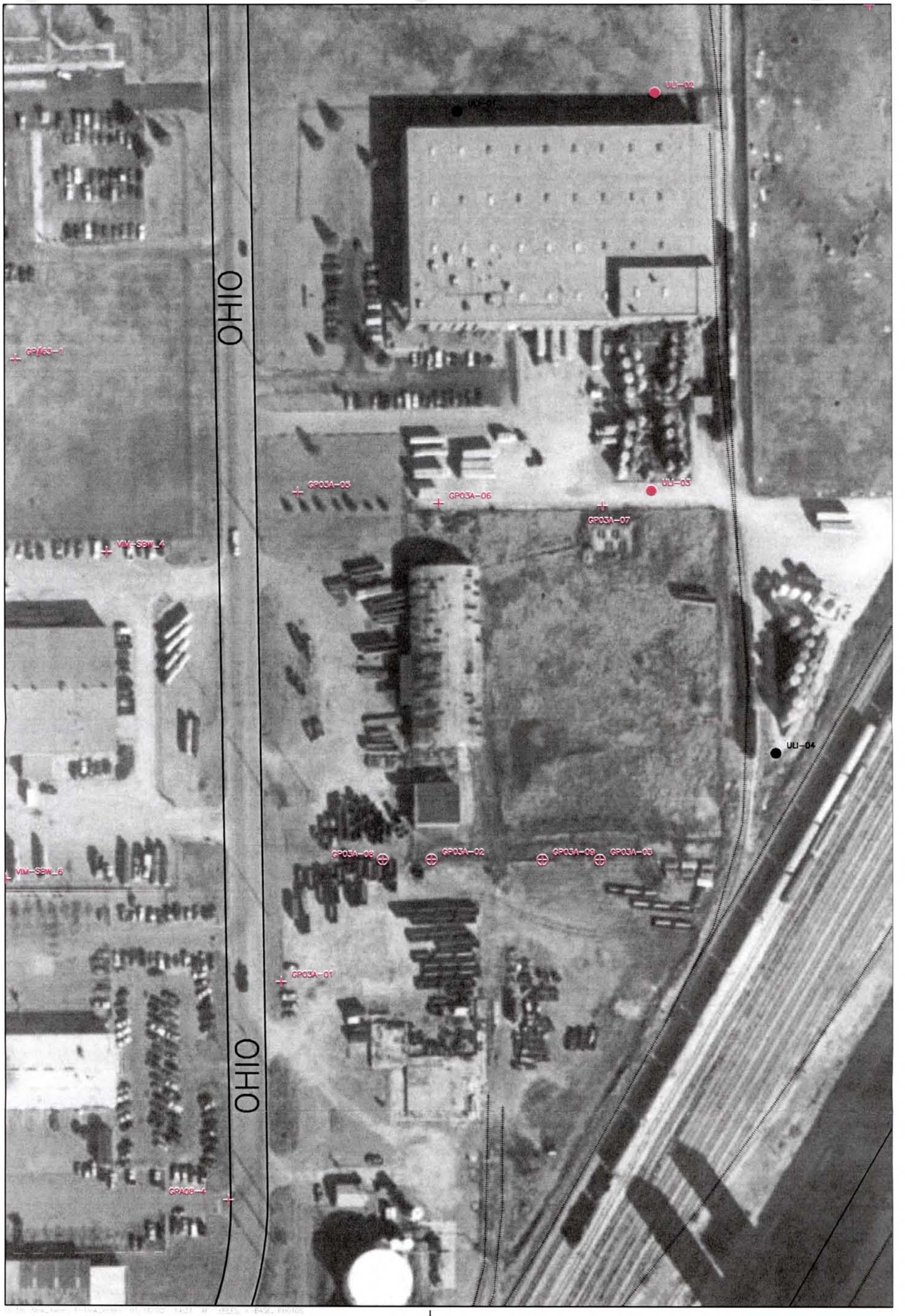
PARAMETER	CAS NUMBER[1]	SAMPLE IDENTIFICATION 85652	85653	85654	85655
		Concentration µg/ℓ[2]			
Diethyl phthalate	84-66-2	<10	<10	<10	<10
Dimethyl phthalate	131-11-3	<10	<10	<10	<10
Di-n-butyl phthalate	84-74-2	<10	<10	<10	<10
2,4-Dinitrotoluene	121-14-2	<10	<10	<10	<10
2,6-Dinitrotoluene	606-20-2	<10	<10	<10	<10
Di-n-octyl phthalate	117-84-0	<10	<10	<10	<10
1,2-Diphenylhydrazine (Azobenzene)[3]	122-66-7	<50	<50	<50	<50
Fluoranthene	206-44-0	<10	<10	<10	<10
Fluorene	86-73-7	<10	<10	<10	<10
Hexachlorobenzene	118-71-1	<10	<10	<10	<10
Hexachlorobutadiene	87-68-3	<10	<10	<10	<10
Hexachlorocyclopentadiene	77-47-4	<10	<10	<10	<10
Hexachloroethane	67-72-1	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	193-39-5	<10	<10	<10	<10
Isophorone	78-59-1	<10	<10	<10	<10
Naphthalene	91-20-3	<10	<10	<10	<10
Nitrobenzene	98-95-3	<10	<10	<10	<10
N-Nitrosodimethylamine	62-75-9	<50	<50	<50	<50
N-Nitrosodi-n-propylamine	621-64-7	<10	<10	<10	<10
N-Nitrosodiphenylamine (Diphenylamine)[3]	86-30-6	<10	<10	<10	<10
Phenanthrene	85-01-8	<10	<10	<10	<10
Pyrene	129-00-0	<10	<10	<10	<10
1,2,4-Trichlorobenzene	120-82-1	<10	<10	<10	<10

(1) The numbers presented in this column are the Chemical Abstracts Service (CAS) numbers used for cataloging the indicated compounds in the Chemical Abstracts Index.

(2) µg/ℓ = micrograms per liter or parts per billion.

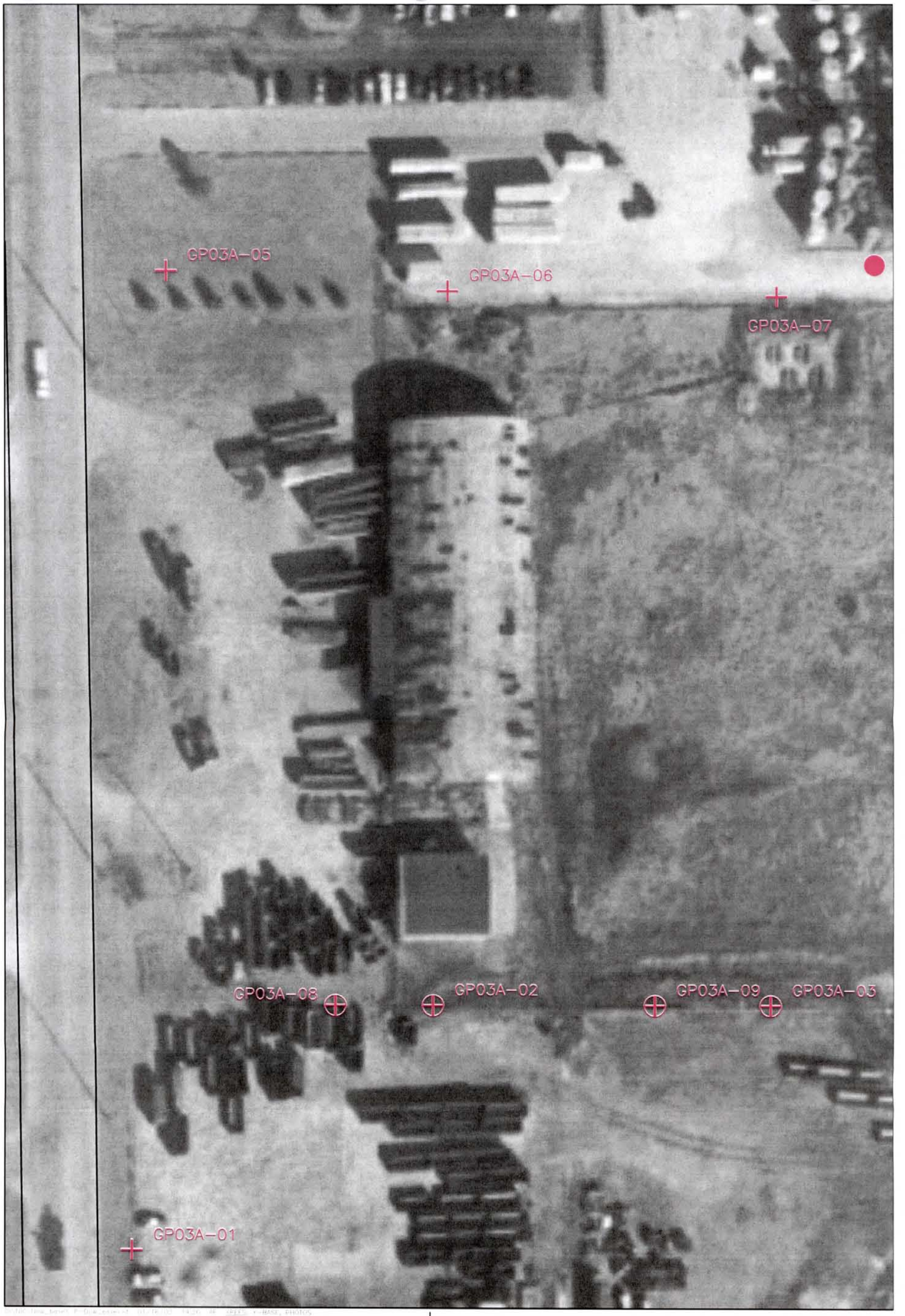
(3) Detected as compound in parentheses.

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Dow/Essex



CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Dow/Essex

Table(s)
Analytical Data Table(s)

Dow/Essex and Wil-Gro Facilities
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP03A-01	S/17	11/05/99		µg/L	<1	**56**	**4.7**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03A-01	D/29	11/05/99		µg/L	**1.5**	**140 JH**	**20**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03A-05	S/17	03/08/00		µg/L	<1	**40**	**6.5**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03A-05	D/32	03/08/00		µg/L	<1	**48**	**17**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03A-06	S/17	03/08/00		µg/L	**1.7**	**64**	**12**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03A-06	D/29	03/08/00		µg/L	**4.8**	**130**	**24**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03A-07	S/17	03/08/00		µg/L	<1	**17**	**2.1**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP03A-07	D/36	03/08/00		µg/L	**7.8**	**240**	**41**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA08-4	S/20	12/17/97		µg/L	**1.5**	**230**	**34**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA08-4	S/20	10/19/99		µg/L	**1.7**	**130**	**24**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA08-4	D/31	12/17/97		µg/L	**2.4**	**450**	**66**	<1	<1	<1	<1	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethe
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-15
Huttig Building Products Facility

PRP Evaluation Summary

Huttig Building Products Facility
1340 North Mosley (12th and Mosley)

Potential Source, Area 02I

Contaminants of Concern - TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Huttig Building Products Facility

TCE Contamination

Data indicate that this area is a potential source of chlorinated VOC contamination. Groundwater sampling data have shown an increase in concentrations of TCE along the groundwater flow path through this area.

Groundwater samples collected from the shallow (17 to 20 feet bgs) aquifer upgradient of the Huttig Building Products facility (HUT) contained TCE concentrations of less than 15 µg/L at locations GPA28-01 and GP02I-01, -02, and -03 during NIC Phase 1/1A (CDM 2000) and Phase 2 sampling conducted in 1997 and 1999, respectively. At downgradient sample locations GPA31-6, GP02I-05, -06, -07, and -08, TCE was detected in shallow groundwater at concentrations of 360, 30, 100, 40, and 38 µg/L, respectively, in 1999. Phase 2 resampling of GPA31-6 at the 20 ft bgs sampling depth showed a decrease in TCE from 360 µg/L to 92 µg/L. The decrease may be due to a slight change in groundwater flow or other factors. Data still indicate the probable presence of a TCE source area at this facility.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southeast but facility-specific groundwater flow is not well defined.

References

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 1340 N. Mosley

Current Owner/Business: Huttig Building Products

Contact Person:

Mailing Address: Rock Island Millwork
P.O. Box 1041
Chesterfield, MO 63006-1041

Phone Number: (316) 264-8375

Other information:

Ms. Sandra Lee, Environmental Dept.
Liberty Mutual
100 Liberty Way
PO Box 1525
Dover HN 03821-1525

Terracon
Darryl D. Morgan, P.G.
2111 W. Harry
Wichita, KS 67213

Parties noted above have been in correspondence with the City, and additional site testing was proposed. However, the information was never provided to the City of Wichita.

Name of Company:		Huttig Sash & Door Company
Name and/or Contact Person:		
Street Address of Company:		**1340 N Mosley**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"Huttig Facility"
Phone Number of Contact:		
History:	1951	No Listing
	1961	Rock Island Wholesale Co.
	1965	Rock Island Millwork Co.
	1970	Rock Island Mill work Co.
	1975	Rock Island Millwork Co.
	1980	Rock Island Millwork Co.
	1984/5	Rock Island Millwork Co (planning mills)
	1990	Rock Island Millwork Co. (whol window & door distr)
	1995/6	Hutting Dist. (whol window & door distr)
	2000	Huttig Sash & Door Company (lumber, plywood, millwork)
RCRA Info:		

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -00925 Pin: 125160210100200D
Page: 1

Name RIAC CORP
Situs 1340 N MOSLEY ST
WICHITA KS 67214

Tax	15,614.51
Specials	6.30
Total	15,620.81

Phone
Mail % ROCK ISLAND MILLWORK
To PO BOX 1041
CHESTERFIELD MO 63006-1041

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 119473

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -00925
Page: 2

Pin: 125160210100200D
Name: RIAC CORP

Legal Description
EVEN & ODD LOTS 19 TO 27 INC EXC W 13 FT FOR ST & 1/2 VAC ALLEY ADJ ON E.
HARGIS & RUBERT ADDITION

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

No RCRA Information found at the time of review.

file Huttig

Terracon
2111 W Harry St
Wichita, KS 67213-3299
(316) 262-0171 Fax: (316) 262-6997

August 27, 2001

Ms. Linda Firsching
City of Wichita
455 North Main
Wichita, Kansas 67202

Re: Right-of-Way Access
1340 North Mosley
Wichita, Kansas
Project No. 01017120

Dear Ms. Frisching:

Terracon has been retained by Douglas, Inc., on behalf of Huttig Building Products to perform Geoprobe® borings in the general vicinity of the above-referenced site. Terracon respectfully requests City of Wichita's approval to access and perform borings in The City of Wichita rights-of-way, adjacent to the subject site.

Enclosed is a site diagram showing the approximate number and approximate locations of the probes to be performed in the City right-of-way. We anticipate work at this site to commence on or about August 29, 2001. If you have any questions about this work, please give us a call.

Sincerely,
TERRACON

Prepared By:

Darryl D. Morgan

Darryl D. Morgan, P.G.
Project Manager

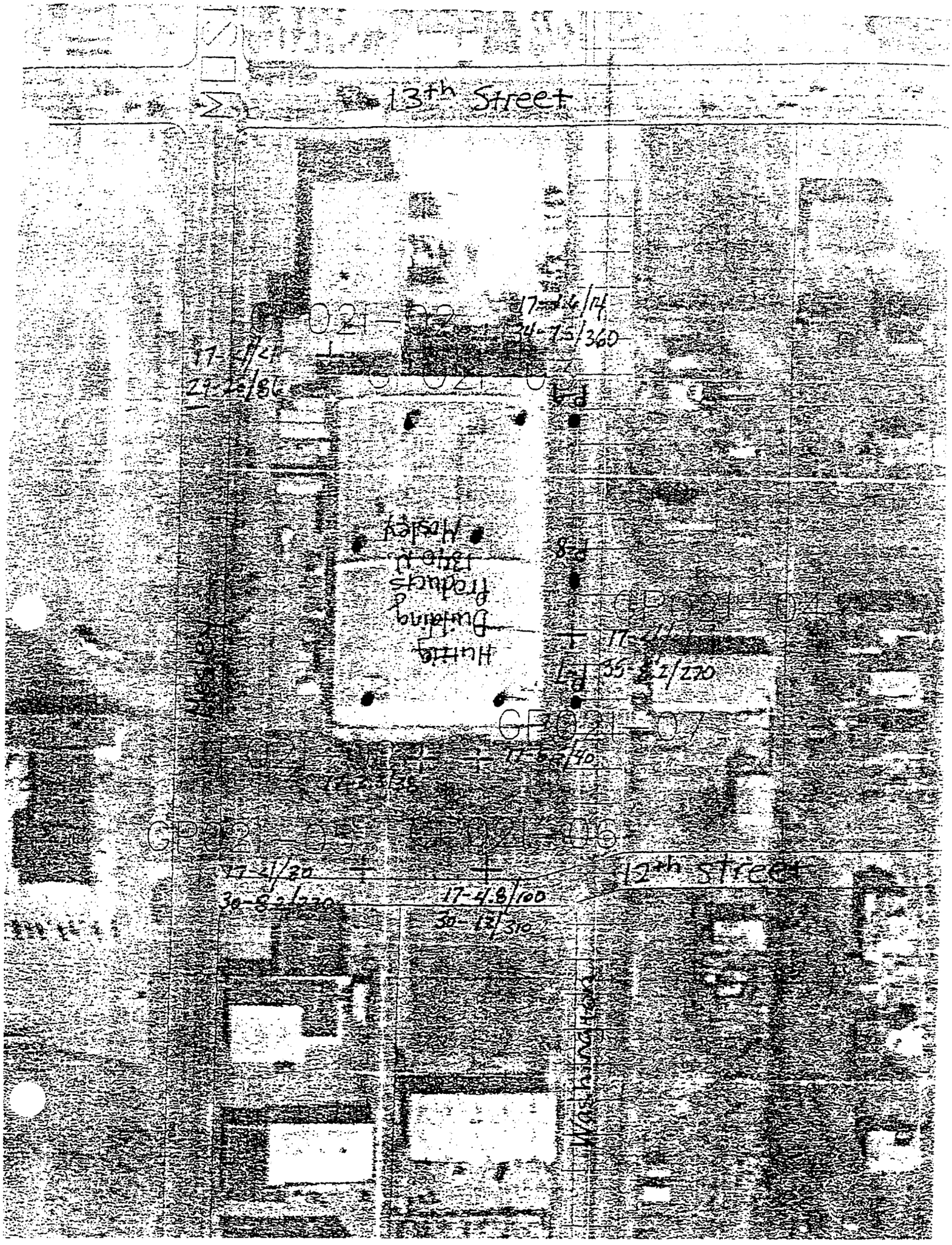
Reviewed By:

Ken Wallace

Kenneth C. Wallace, P.G.
Senior Project Manager

n:\env\projects\2001\01017120\letter\city access_ltr.doc

Enclosure


13th Street
Washington
12th Street
Huizing
Building
Products
Inc.
Hasley
P8
P7
P4
17-4.8/100
30-12/310

CITY OF WICHITA

Wichita-Sedgwick County Department of Community Health

August 17, 2000
Liberty Mutual
Attn: Ms Sandra Lee
Environmental Department
100 Liberty Way
PO Box 1525
Dover NH 03821-1525

RE: Request for Information, North Industrial Corridor
Site Location: Huttig Sash & Door Company,
1340 North Mosley Avenue, Wichita, Kansas

This letter is in response to your request for information dated August 4 and our phone conversation on August 10, 2000. Your letter included a table, which listed requested documents concerning the Huttig property.

1: **Any information regarding (Huttig Sash & Door Company) involvement at the site**: Please refer to the enclosed copies of correspondence dated Dec. 3,1999.

2: **Investigation reports:** The following document was available, City of Wichita, North Industrial Site, Phase 1/1A Technical Memorandum, Volume 1 – Text, Final dated February 2000, Approved by KDHE on January 14, 2000. This document essentially is a summary of the previous ground water investigations in the North Industrial Corridor Site. This document consists of a total of 7 volumes. I have briefly reviewed this document and was not able to find any specific references to the Huttig property on North Mosley Avenue. Enclosed are copies of pages from the Introduction and Section 1 for your convenience. Also enclosed are copies of summary pages from Appendix U and V, which contains information concerning test results on or near the Huttig property. If you desire additional pages of the document, please contact Doris Leslie or myself at 316-268-8351. If you need a complete duplication of the entire document, arrangements can be made by a professional copying service and shipped directly to your address.

Enclosed are select pages of the "Revised Draft Work Plan Addendum North Industrial Corridor" dated August 2000. The City of Wichita has drilled (Geoprobed) additional points on and adjacent to the Huttig property. Also copied are portions of the draft document maps and resulting analysis of ground water samples. The remainder of the draft document is not available for public viewing until the document is approved by the Kansas Department of Health and Environment.

Environmental Health Division

1900 East Ninth Street • Wichita, Kansas 67214-3198

T 316.268.8351 **F** 316.268.8390

www.wichitagov.org

3: **Technical documents** – Please see above.

4: **Determination of Remedial Actions** – N/A

5: **Project Summaries** – N/A

6: **Site History Information** – Please refer to document listed in #2.

7: **Regulatory history** – Please refer to document listed in #2.

8: **Sampling history, including information regarding the initial discovery of contamination onsite** — Please refer to document listed in #2 **and periodic monitoring reports.** – N/A

9: **Tank information** – N/A

10: **Information regarding other State or Federal Agency involvement** – N/A

If you need additional information or have any questions, you may contact Mr. Jack Brown or my self at 316-268-8351.

Sincerely

Brian G. Fisher
Water Quality Planner, PG

cc: Jack Brown
John Davis
Doris Leslie, file

August 9, 2000

CITY OF WICHITA

Wichita-Sedgwick County Department of Community Health

Liberty Mutual Environmental Department
Attn: Sandra Lee
PO Box 1525
Dover New Hampshire 03821-1525

Subject: Huttig Sash and Door Company 1340 North Mosley Avenue
LMIG No: P096-204863-01
North Industrial Corridor/Wichita, KS

Dear Ms. Lee:

I am in receipt of your letter dated August 4, 2000 regarding the above subject matter. The letter was date-stamped in our office as being received on August 9, 2000. Some of the information you are requesting is generally available under the provisions of the Kansas Open Records Act through our office. You may also wish to make a similar request for information on this facility from the Kansas Department of Health Environment in Topeka, KS or the Environmental Protection Agency Region VII Office in Kansas City, KS.

Since your request is rather lengthy, it will take some time to assemble the information and there will be costs associated with printing. It may be more expedient for someone to visit our office and review the records. In order to clarify and assist in this information request, I will assign Brian Fisher of our staff to contact you within three (3) days from the date of this letter. I have also left you a voice mail message today regarding the status of your request.

Sincerely,

Jack Brown
Environmental Health Director

Cc: Joe Lang, City Law Department
Brian Fisher, Environmental Health

Environmental Health Division

1900 East Ninth Street • Wichita, Kansas 67214-3198

T 316.268.8351 **F** 316.268.8390

www.wichitagov.org

LIBERTY MUTUAL

RECEIVED
AUG 9 2000

ENVIRONMENTAL DEPARTMENT

100 Liberty Way
PO Box 1525
Dover NH 03821-1525
Telephone: (603) 749-2600

August 04, 2000

Wichita-Sedgwick County Department
of Community Health
1900 East Ninth Street
Wichita, Kansas 67214-3198

RE:	**KS(North Industrial Corridor)**
Site Location:	**North Industrial Corridor Project, Wichita, Kansas**
LM Insured:	**Huttig Sash & Door Company**
	1340 North Moseley Avenue, Wichita, Kansas
LMIG No:	**P096-204863-01**

Pursuant to the articles of the Freedom of Information Act, Liberty Mutual Insurance Company (Liberty Mutual) requests disclosure of information relating to the above referenced site.

The following is a general list. The documents which are of specific interest to this review have been marked.

1	X	Any information regarding (Huttig Sash & Door Company) involvement at the site (e.g., manifests, contractural agreements, 104e notices)
2	X	Investigative reports (e.g., Preliminary Assessment, Site Investigations, RCRA Facility Assessments, Phase I and Phase II Environmental Assessments/Audits)
3	X	Technical documents (e.g., RI/FS, hydrogeologic studies, RCRA Facility Investigation)
4	X	Determination of remedial actions (e.g., ROD, ACO)
5	X	Project summaries (press releases, public notices, internal memorandums)
6	X	Site history information (e.g., ownership, usage)
7	X	Regulatory history (e.g., enforcement actions, discharge permits)
8	X	Sampling history, including information regarding the initial discovery of contamination onsite and periodic monitoring reports.
9	X	Tank information (e.g., removal, closure, notification of violation or release, spill reports)
10	X	Information regarding other State or Federal Agency involvement (e.g., State, County or local Department of Health, US Department of the Interior, US Fish and Wildlife, State Attorney General, US Justice Department etc.)

Please contact the undersigned at (603) 749-2600 extension 32236 concerning the availability of information or respond in writing, per your agency's policy. We also request this correspondence referral to other divisions, branches, or departments which may provide additional information.

This request should not be construed as an indication that coverage has been determined for any company that has contacted Liberty Mutual regarding a claim(s) at the subject site. This request is being made solely for the purpose of enabling Liberty Mutual to properly evaluate the claim(s).

Thank you for your assistance in this matter.

Sincerely,

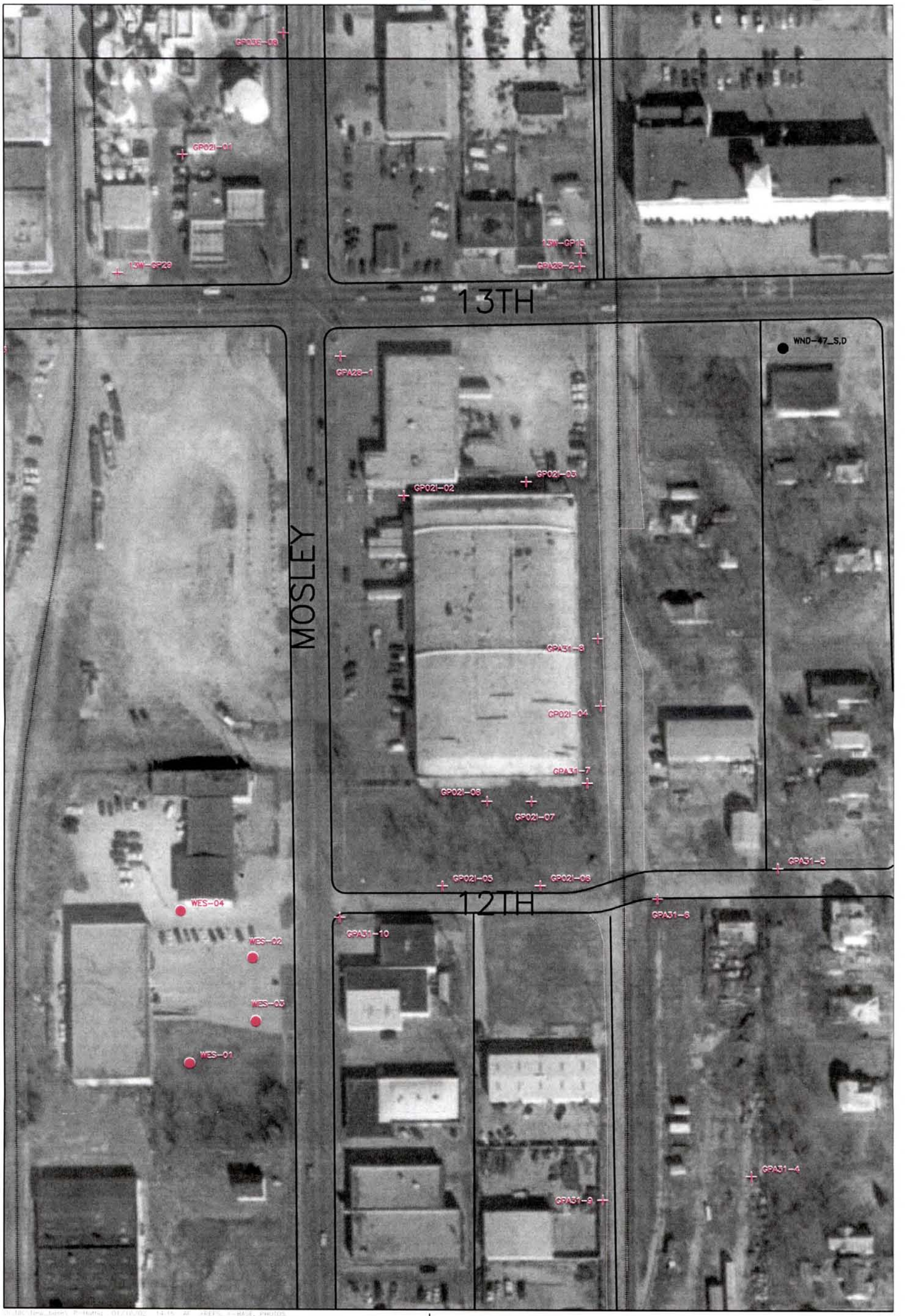
Sandra Lee

Sandra Lee
Environmental Claims Technician

cc: Brian Merchant

Note 8/10/00 – called Sanda Lee went thru list
8/17/00 – Agreed untill end of next week

Figure(s)
Aerial Photographs and Sample Location Map(s)



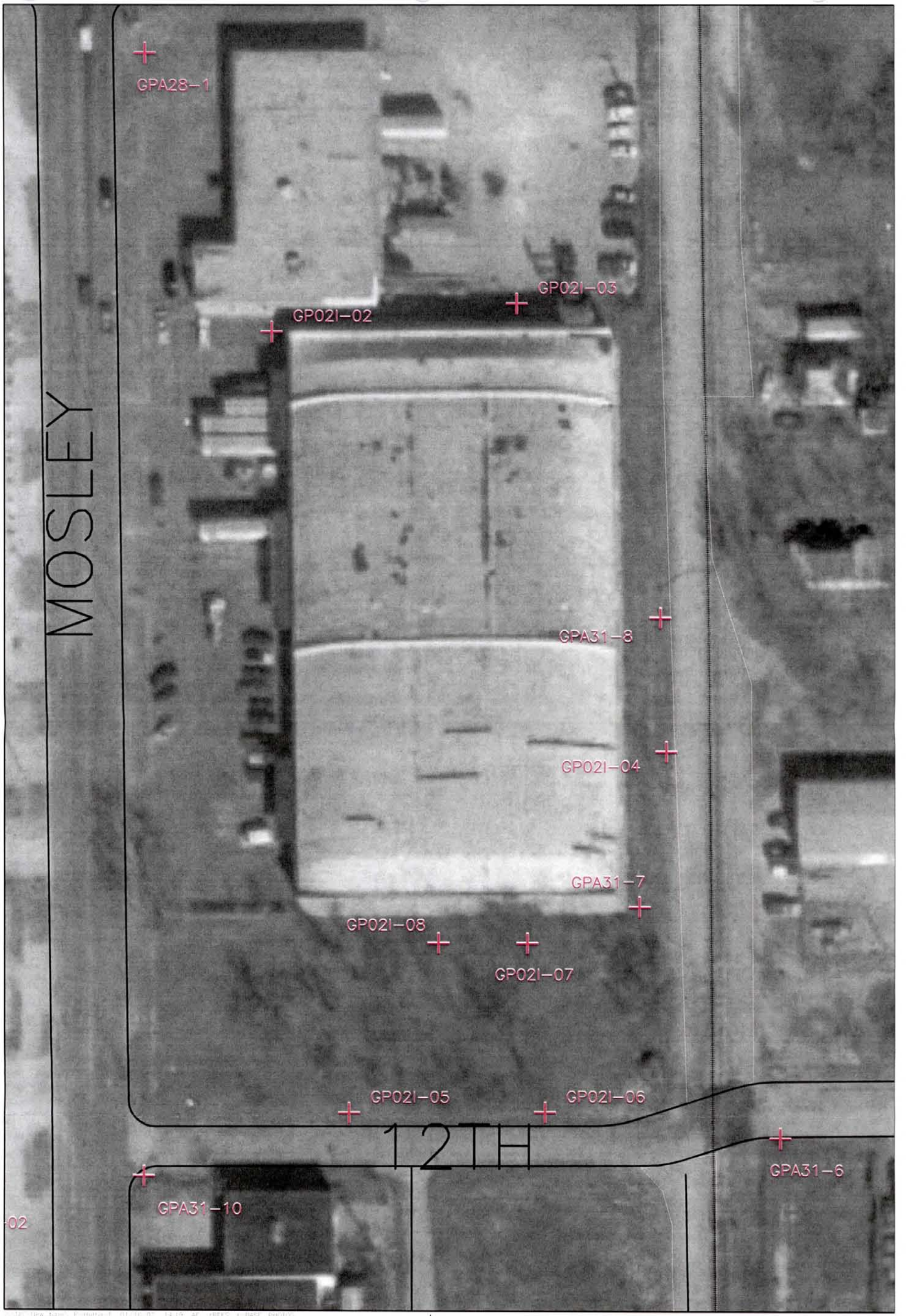
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Huttig



CDM

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Huttig

Table(s)
Analytical Data Table(s)

Huttig Building Products Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP02I-02	S/17	01/14/00		µg/L	<1	<1	5.5	3.1	<1	<1	<1	<1	<1	<1	<5.4
GP02I-02	D/29	01/14/00		µg/L	20	86	51	32	<1	6.3	<1	<1	<1	<1	<5.4
GP02I-03	S/17	11/29/99		µg/L	1.6	14	6.3	<1	1.2	<1	<1	<1	<1	<1	<5.4
GP02I-03	D/34	11/29/99		µg/L	7.5	360	91	12	<1	4.2	2.7	<1	<1	<1	<5.4
GP02I-03	D/34	11/29/99	DUP	µg/L	5.4	310	85	12	<1	3.9	2.6	<1	<1	<1	<5.4
GP02I-04	S/17	11/22/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5
GP02I-04	M/26	11/22/99		µg/L	<1	3.5	32	2	<1	<1	<1	<1	<1	<1	5
GP02I-04	D/35	01/25/00		µg/L	8.2	270	56	11	<1	3.4	2.7	<1	<1	<1	<5.4
GP02I-05	S/17	01/10/00		µg/L	<1	30	60	18	<1	3.6	<1	<1	<1	<1	<5.4
GP02I-05	D/30	01/10/00		µg/L	8.2	230	82	15	<1	8.3	2.3	<1	<1	<1	<5.4
GP02I-06	S/17	01/10/00		µg/L	4.8	100	43	2.8	<1	2.9	<1	<1	<1	<1	<5.4
GP02I-06	D/30	01/10/00		µg/L	13	310	91	23	<1	6.1	2.9	<1	<1	<1	<5.4
GP02I-07	S/17	01/25/00		µg/L	5.5	40	20	<1	<1	1.4	<1	<1	<1	<1	<5.4
GP02I-08	S/17	01/25/00		µg/L	3.3	38	72	28	<1	5.4	<1	<1	<1	<1	<5.4
GPA28-1	S/20	12/08/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.9	10.3
GPA28-1	D/25	12/08/97		µg/L	<1	11	17	5.1	<1	3.1	<1	<1	<1	1	<5.4
GPA28-2	S/20	12/08/97		µg/L	5.4	160	38	<1	<1	<1	<1	<1	1.5	<1	<5.4
GPA28-2	S/20	12/08/97	DUP	µg/L	5	130	35	<1	<1	<1	<1	<1	1.3	<1	<5.4
GPA28-2	S/20	10/15/99		µg/L	6.8	60	14	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA28-2	D/27	12/08/97		µg/L	<1	250	69	1.9	<1	2.1	1.4	<1	<1	<1	<5.4
GPA31-10	S/20	05/29/98		µg/L	2.2	86	61	4.2	<1	3.2	1.7	<1	<1	<1	<5.4
GPA31-10	D/27	05/29/98		µg/L	6.8	230	100	12	2.3	9.1	3	<1	<1	<1	<5.4
GPA31-6	S/20	05/29/98		µg/L	9	360	72	5.1	<1	2.5	2.6	<1	<1	<1	<5.4
GPA31-6	S/20	01/10/00		µg/L	5.6	92	23	<1	1.3	1.1	<1	<1	<1	<1	<5.4
GPA31-6	S/17	01/10/00		µg/L	<1	1.4	6.9	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA31-6	D/26	05/29/98		µg/L	11 JS	380	69	4.9 JS	<1 JS	2.5 JS	2.8 JS	<1 JS	<1 JS	<1 JS	<5.4
GPA31-7	S/20	05/29/98		µg/L	2.8	23	6.6	<1	1.5	<1	<1	<1	<1	<1	<5.4
GPA31-7	D/30	05/29/98		µg/L	6.7	260	57	2.7	<2	<2	<2	<2	<2	<2	10.8
GPA31-8	M/23	05/29/98		µg/L	1.2	48	24	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA31-8	D/35	05/29/98		µg/L	22	480	80	8.8	<1	2.7	4	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroether
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-16
Kansas Plating Facility

PRP Evaluation Summary

Kansas Plating Facility
1110 North Mosley (Northeast of 10th and Mosley)

Potential Source Area PRP and Work Plan Addendum Map ID - 05E
Contaminants of Concern - 1,1,1-TCA and its degradation products
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Degradation Pathways
- Application for Certification and Release
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)
- Capture Zone Analysis

CDM Evaluation of Kansas Plating Facility, 1110 North Mosley

Introduction

This analysis of groundwater sampling and hydrologic data is updated from that submitted to the Kansas Department of Health and Environment (KDHE) by the City of Wichita in June 2000. This update is the result of comments made by a representative of Kansas Plating, (KPI) indicating that data collected by KPI had not been presented in the original analysis. Following examination of the data package submitted to KDHE, CDM revised the data package in an attempt to include all data collected by KPI and its representatives. Additionally, the evaluation has been significantly expanded to address comments made directly to CDM personnel (Darren Brown) by the KPI representative (Chris Steincamp).

It must be noted that data derived from field gas chromatographic analyses conducted by KPI are of a quality best suited for field screening. At sample locations where laboratory analytical data exist, field data are considered subordinate. Within the North Industrial Corridor Site (NIC), analytical data from the groundwater within the upper portion of the aquifer is best suited toward the evaluation of a property as a potential source of groundwater contamination. As a result, only shallow groundwater analytical data is relied upon and examined here.

The examination of all available shallow groundwater sample analytical data, groundwater flow data, aquifer testing data, industrial supply well production data, and facility process and waste stream data provided by KPI indicates that KPI appears to have contributed and is still contributing 1,1,1-Trichloroethane (TCA) and its degradation products, 1,1-Dichloroethane (1,1-DCA), and 1,1-Dichloroethene (1,1-DCE) to the groundwater at the NIC Site.

Contaminants of Concern

The contaminants of concern at KPI are TCA and its degradation products 1,1-DCA, and 1,1-DCE. Maximum contaminant levels (MCLs) set by the United States Environmental Protection Agency (US EPA) and Kansas Action Levels (KALs) used by the KDHE are as follows:

Contaminant	MCL (µg/L)	KAL (µg/L)
1,1,1-Trichloroethane	200	200
1,1-Dichloroethane	not established	5
1,1-Dichloroethene	7	7

In the NIC alluvial aquifer, TCA is degraded to 1,1-DCA via the process of biotic dechlorination. TCA is degraded to 1,1-DCA via the process of biotic dihydrohalogenation. The TCA degradation pathways are presented in Figure 1. It should be noted that while the majority of samples collected at KPI have yielded concentrations of TCA below the MCL, many samples collected at KPI and immediately downgradient of the facility have contained concentrations of 1,1-DCE three to five times this contaminant's MCL.

Figure 2 shows the distribution of these compounds plotted on an aerial photograph of the KPI facility.

Sample Identification Nomenclature

In order to integrate data collected at the KPI facility into the NIC database, the identity of groundwater sampling locations referred to in the TerraTech KPI investigations have been modified to provide the facility identifier, and to correlate the sample location as noted in the facility's investigations. In the case of KPI, this nomenclature is implemented by use of the original sample number with the prefix "KPI" to indicate the sample's origin, then adding the indicator "GP" to indicate that the sample was collected by Geoprobe methods. For example, the KPI investigation's sample location "T-1-S" or "T-1-D", collected by Geoprobe methods from the shallow and deep aquifer, respectively, at location T-1 and referred to on KPI's maps as "1", is referred to as "KPI-GP01S,D". These nomenclature changes have been implemented for all sample locations installed during the KPI Phase I and Phase II Investigations (TerraTech 1996). Geoprobe sample locations installed during the KPI's supplemental Geoprobe investigation (TerraTech, 1998) differentiated from the earlier investigation by the suffix "A" and mapped as "T-1A" through "T7A" are renamed "KPI-T-1A" through "KPI-T-7A". KPI industrial production water wells which are referred to by numbers "1" through "9" inclusive, and referred to on KPI maps as "1" through "9" (TerraTech 1996) are referred to in this analysis as "KPI-WW1" through "KPI-WW9", inclusive.

Monitoring wells associated with the House Oil Company (HOC) groundwater investigation maintain the same monitoring well number but have been renamed with the prefix "HOC" resulting in the change from "MW-1" to "HOC-1" and so on. HOC wells are referred to by KPI as "KDHE wells" because they were installed by the KDHE

Storage Tank Division. Samples collected during the NIC investigation conducted by the City of Wichita are identified by the prefix "GPA", "GP#", or "GP08C". Samples collected by KDHE during the 13th and Washington Investigation (KDHE 1993) are identified by the prefix "13W" followed by the sample location number. Monitoring well pair WND-40S and WND-40D installed as part of the 29th and Mead Investigation by the Wichita North Industrial District are referred to by their original names. Maps produced by CDM display the identifiers described above.

Review of Hazardous Waste Manifests from the KPI Facility

A review of hazardous waste manifests indicates that chlorinated solvents including TCA was used at the facility for vapor degreasing from as early 1982 until at least April 1993 (TerraTech 1996, Appendix B).

Presence of TCA at KPI

KPI's representatives have made three primary arguments to explain the presence of TCA and its degradation products that appear to originate at the facility:

- TCA is being drawn from an offsite downgradient source onto the KPI facility by groundwater pumping at KPI, and
- Groundwater contaminated with TCA is migrating onto the site from an upgradient source to the northwest of KPI
- A facility south of KPI has disposed of TCA to the sanitary sewer, which has conveyed the TCA contamination northward and then released the TCA into groundwater within the KPI facility.

CDM's analysis of the pumping conducted at KPI indicates that KPI's groundwater extraction was not sufficient to draw in groundwater from the Aero Space Controls facility located downgradient of KPI.

Evaluation of the data indicates the presence of a TCA groundwater plume west of the KPI facility, but groundwater sample data and groundwater flow direction data indicate that this TCA plume is separate from the TCA plume that appears to originate at KPI.

A review of the sanitary sewer line maps in the vicinity of KPI indicates that the sanitary sewer line in the alley south of KPI has a terminus south of 10th Street and conveys its charge to the south, away from KPI. Therefore, KPI's third argument has no merit.

These issues are discussed in greater detail below.

KPI Production Wells - Capture Zone Analysis

The argument has been made by KPI that TCA contamination has been drawn onto the KPI property by KPI's industrial supply wells from an offsite downgradient TCA source. The purported downgradient source of TCA is assumed by KPI to originate in the vicinity of well HOC-10 and to likely be a result of solvents originating at a manufacturing facility south of KPI (TerraTech, 1996, TerraTech, 1998).

Site-wide water table maps presented in the NIC Phase 1/1a Technical Memorandum indicate a groundwater flow from either north to south or from north-northeast to south-southeast. The slight discrepancy between these two different flow directions is due to the large-scale nature of the NIC data collection effort. Localized groundwater flow direction in the vicinity of KPI was identified by KPI (TerraTech 1998, Figure-3) as approximately 30 degrees east of due south (S30E) with a gradient of approximately 0.0018 feet per foot (ft/ft). This flow direction agrees with groundwater contaminant plume data presented in this analysis.

Using the uniform flow equation (Todd, 1980) and TerraTech's aquifer parameters, an analysis was conducted to determine the downgradient extent of the capture zone created by KPI's industrial supply wells. This analysis indicates that groundwater and associated contamination could be drawn from no more than approximately 37 feet downgradient by a well pumping at a sustained rate of 30 gpm. This assumes an aquifer saturated thickness of 20 feet (GTI 1996, CDM 2000); a single well pumping rate of 30 gpm; hydraulic conductivity of 697 ft/d (TerraTech, 1996); and groundwater gradient of 0.0018 ft/ft (TerraTech, 1998, Figure-3). Monitoring well HOC-10 is approximately 130 feet, over three times the calculated extent of the downgradient capture zone, from the nearest KPI production well, KPI-WW8.

According to the aquifer test analysis presented by KPI, "the hydraulic conductivity values obtained from the 1 hour pumping test are probably not valid" due to the test's short duration and the placement of observation wells parallel to the direction of groundwater flow (TerraTech 1996). KPI's representative refers to data collected by the Coleman Company at their Downtown facility in Wichita as more reliable and states that a "continuous pumping well at the KPI site will have a radius of influence of at least fifty feet or greater." Figure 3 compares downgradient capture zones using KPI and Coleman hydraulic conductivity data. Figure 3 shows that at a rate of 30 gpm and a hydraulic conductivity of 360 feet per day (Coleman's value), the downgradient capture zone would be extended to 70 feet.

The linear relationship between pumping rate and downgradient extent of the well's capture zone indicates that, using KPI data, for every gallon per minute pumped, the capture zone is extended 1.2 feet downgradient. According to this ratio a sustained pumping rate greater than 105 gpm would be necessary for KPI's nearest well (KPI-WW8) to capture groundwater contamination observed at well HOC-10. Using data attributed to Coleman, the pumping rate required at KPI-WW8 to capture groundwater from the vicinity of HOC-10 would be approximately 55 gpm.

The capture zone analysis presented above is greatly conservative in KPI's favor. The analysis assumes that the total average pumping rate at KPI-WW8 is that given for the entire facility, approximately 30 gpm. In actuality, KPI has a total of four active production wells that pump at an aggregate annual average rate of 30 gpm. While KPI-WW8 is approximately 130 feet from HOC-10, the remaining three active production wells, KPI-WW1, KPI-WW2, and KPI-WW7 are located approximately 260, 320, and 380 feet upgradient of monitoring well HOC-10. Assuming all of KPI's

production wells are all pumping at an equal rate, their combined influence on groundwater flow would be equivalent to a single well approximately 270 feet upgradient of well HOC-10. Assuming that KPI-WW8 produces only one fourth of the groundwater used at KPI (7.5 gpm), Figure 3 shows that the extent of the production well's downgradient capture zone of would be approximately nine feet. Detailed pumping rate data for individual production wells at KPI were not provided by KPI.

It should also be considered that groundwater produced from two of KPI's active industrial supply wells is reported by TerraTech (1996) to be reinjected into wells KPI-WW4 and KPI-WW3. The reinjection of produced groundwater should negate two of KPI's production wells' (KPI-WW2 and KPI-WW7) contribution to KPI's overall ability to capture an offsite downgradient source of contamination.

In review of the aquifer test data by KPI, CDM observed that a saturated thickness of 15 feet was used by KPI (TerraTech 1996). The basis for this aquifer saturated thickness assignment is unknown. Other data collected in the vicinity of KPI indicate a saturated thickness of approximately 20 feet in the vicinity of KPI (GTI, 1996, CDM, 2000). This difference is significant in that the calculation of aquifer hydraulic conductivity value from KPI's data is dependent on aquifer thickness. Supporting data and calculations are presented in Section 5.

Figure 4 presents TerraTech's interpretation of groundwater TCA concentration data as a TCA contour map of the KPI facility (TerraTech, 1998, Figure-4). CDM has added the location of active production and reinjection wells at the facility presented in Figure 5 (TerraTech, 1996, Figure-6). Injection wells are also presented according to TerraTech (TerraTech 1996, Figure-7). TerraTech's interpretation of TCA data does not show TCA being drawn from the vicinity of HOC-10 toward production well KPI-WW8. TerraTech's interpretation of KPI TCA data, as shown in Figure 4, shows a dissolved groundwater TCA plume moving from northwest to southeast across the KPI facility, increasing in concentration immediately south of KPI's Pre-Treat Facility, and increasing again in the vicinity of HOC-10. This figure does not show the TCA plume being captured by pumping at the KPI production wells. If KPI's production wells are capable of drawing contaminated groundwater from a purported offsite downgradient source, they should also be capable of completely capturing the TCA plume that crosses the site and is closer to the production wells than the purported downgradient source of TCA contamination observed at KPI.

Extraction of groundwater by KPI production wells does not appear to be capable of drawing contaminated groundwater from a downgradient source onto the facility's property.

Contaminant Concentration Data

Representatives of KPI have made the argument that TCA is migrating onto the KPI facility from an upgradient source northwest of KPI. TCA exists in shallow groundwater across Mosley to the west of KPI but CDM notes that the concentration of TCA and its degradation products in shallow groundwater at KPI is approximately

twice that observed in shallow groundwater west of Mosley. The data presented in Figure 2 indicate the presence of a separate source of TCA at KPI. Figure 2 presents concentrations of TCA and its degradation products observed in samples of shallow groundwater collected in the vicinity of KPI since 1993. Figures 4, 6, and 7 present TCA concentration maps prepared by KPI's representatives (TerraTech 1996, Appendix G, TerraTech 1998, Figure-4) showing concentrations of TCA increasing at KPI.

Additionally, examination of the ratio of TCA to TCE in groundwater samples indicates that there may be two distinct TCA plumes in the vicinity of KPI. One plume, indicated by higher concentrations of TCA relative to TCE is defined by groundwater samples collected from locations KPI-T-7A, GP08C-04, and GP#18-1. This TCA plume originates to the northwest of the KPI facility and appears to extend through the intersection of 10th Street and Mosley Avenue. The TCA plume that originates at the KPI facility is indicated by higher concentrations of TCA relative to TCE observed at sample locations KPI-GP12S, GP#18-6, 13W-GP17, KPI-GP05S, WND-40_S, and HOC-10. The upgradient terminus of KPI's TCA plume is bounded by sample locations 13W-GP18, KPI-GP03S, and KPI-WW1. The two TCA plumes are separated by an area of groundwater where concentrations of TCE are relatively higher than TCA. This intermediate zone between the two TCA plumes is defined by groundwater samples collected from locations KPI-GP04S, HOC-08, and GP#18-2. The western boundary of the KPI TCA contamination plume is defined by sample locations KPI-GP08S, KPI-PZ-01, KPI-WW8, and KPI-GP07S. The geometry of the different TCA plumes indicates a groundwater flow direction of approximately S30E. This groundwater flow direction agrees well with the groundwater flow direction, provided in Figure 8, by KPI (TerraTech 1998, Figure-3). Figures 9 and 10 are maps showing concentrations and ratios, respectively, of TCA relative to TCE.

These lines of evidence indicate that KPI is apparently a source of TCA contamination at the NIC Site.

Transport of Contaminants from Downgradient Offsite Source Via Sanitary Sewer

In direct communication from Chris Steincamp (Depew & Gillen, L.L.C) to Darren Brown (CDM), the argument has been made that contamination at KPI has resulted from disposal of solvents to the sanitary sewer by a manufacturing facility located due south of KPI. Figure 11 presents a map of the sanitary sewer lines and sewer flow directions in the vicinity of 10th and Mosley. From this figure, it can be seen that the sewer Mr. Steincamp alleges the manufacturing facility disposed of solvents into, the sewer begins in alleyway adjacent to Aero Space Controls (ASC), approximately 50 feet south of 10th Street and runs due south. The sanitary sewer line behind KPI begins approximately 50 feet north of 10th Street and runs due north to 11th Street. The lack of a connection between the two different sewer lines indicates that contamination from ASC is not impacting the groundwater at KPI. Additionally, if the sanitary sewer running north behind KPI has leaked contaminants and impacted groundwater at the facility, those solvents would have had to originate at the KPI facility.

This line of evidence indicates that contaminants present at the KPI facility are not carried northward by the sanitary sewer lines from a facility south of 10th Street.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southeast but facility-specific groundwater flow is not well defined.

References

GTI 1996, *Preliminary Results from Investigation of the 29th and Mead Area,* Prepared for Wichita North Industrial District, June, 1996. Groundwater Technologies Inc.

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

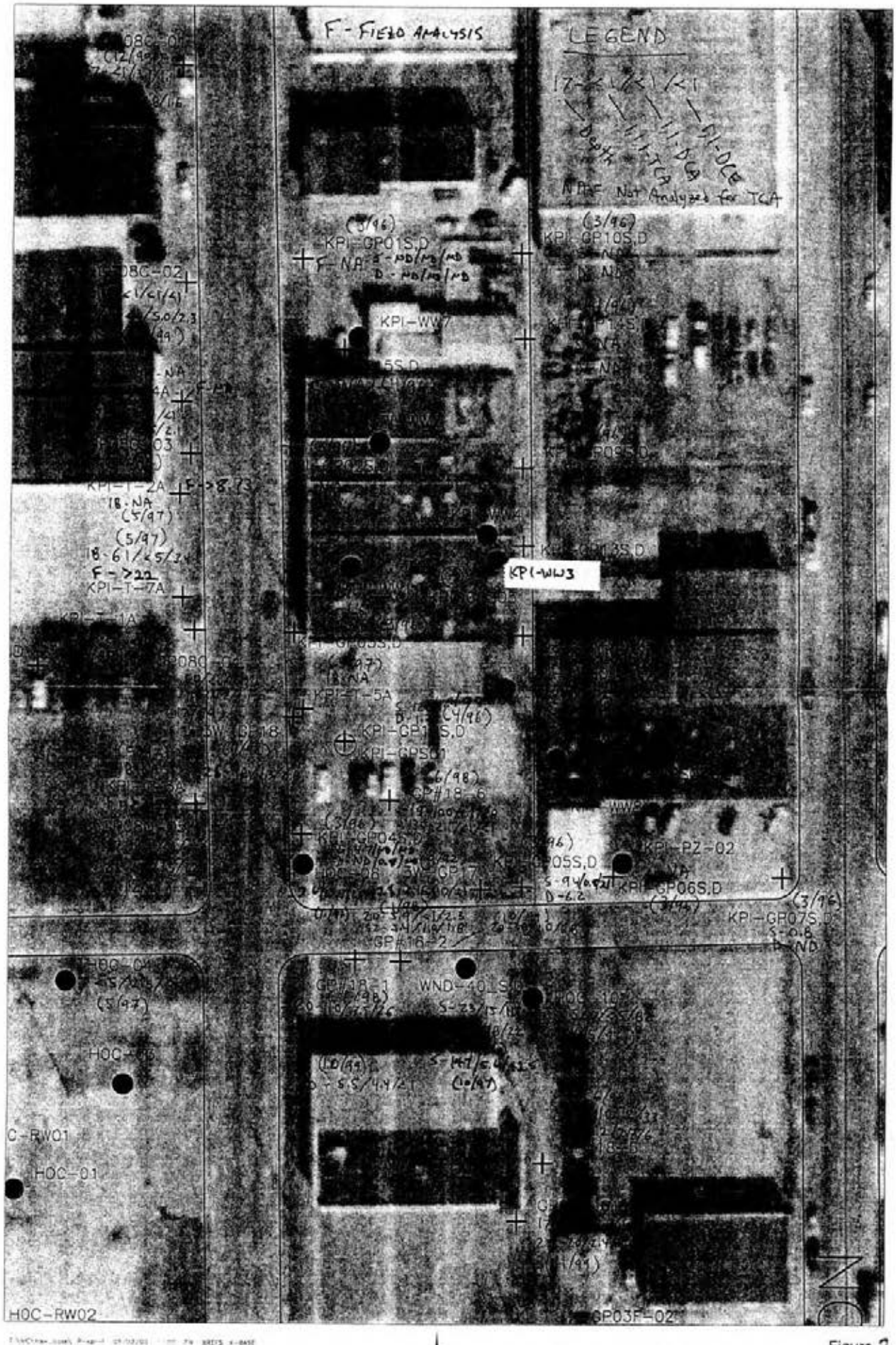
KDHE 1993, *Expanded Site Inspection - 13th and Washington Site - Wichita, Kansas - Cerclis ID KSD984988456,* September, 1993. Prepared by Kansas Department of Health and Environment, Bureau of Environmental Remediation, Pre-Remedial Unit/Remedial Section.

TerraTech 1996, *Final Report - Limited Phase I and Phase II Environmental Site Investigation, Kansas Plating Inc. 1110 North Mosley, Wichita, Kansas,* September, 1996. Prepared for Depew & Gillen L.L.C., Wichita, Kansas.

TerraTech 1998, *Supplemental Report - Phase II Geoprobe Sampling Investigation - Kansas Plating, Inc. . 1110 North Mosley, Wichita, Kansas,* January, 1998. Prepared for Depew & Gillen L.L.C., Wichita, Kansas.

TerraTech 1999, *Ammendum to Kansas Plating, Inc. Phase-II-Sanitary Sewer Evaluation and Report,* April, 1999, Prepared for Depew & Gillen L.L.C., Wichita, Kansas.

Todd, D. K., 1980, Groundwater Hydrology, John Wiley and Sons, NY NY, Page 122.



CDM Camp Dresser & McKee

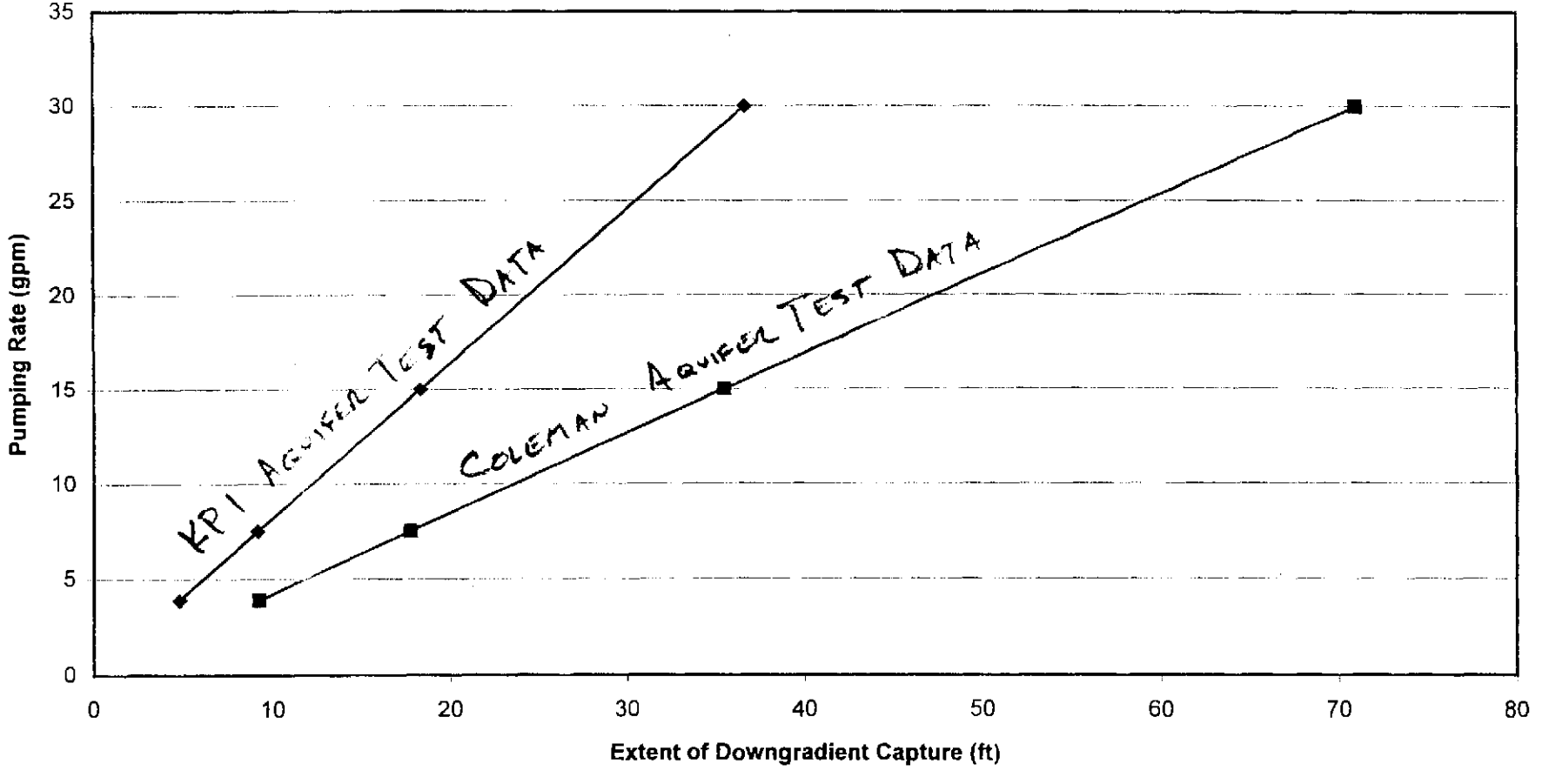
1" = 50'

25 0 50

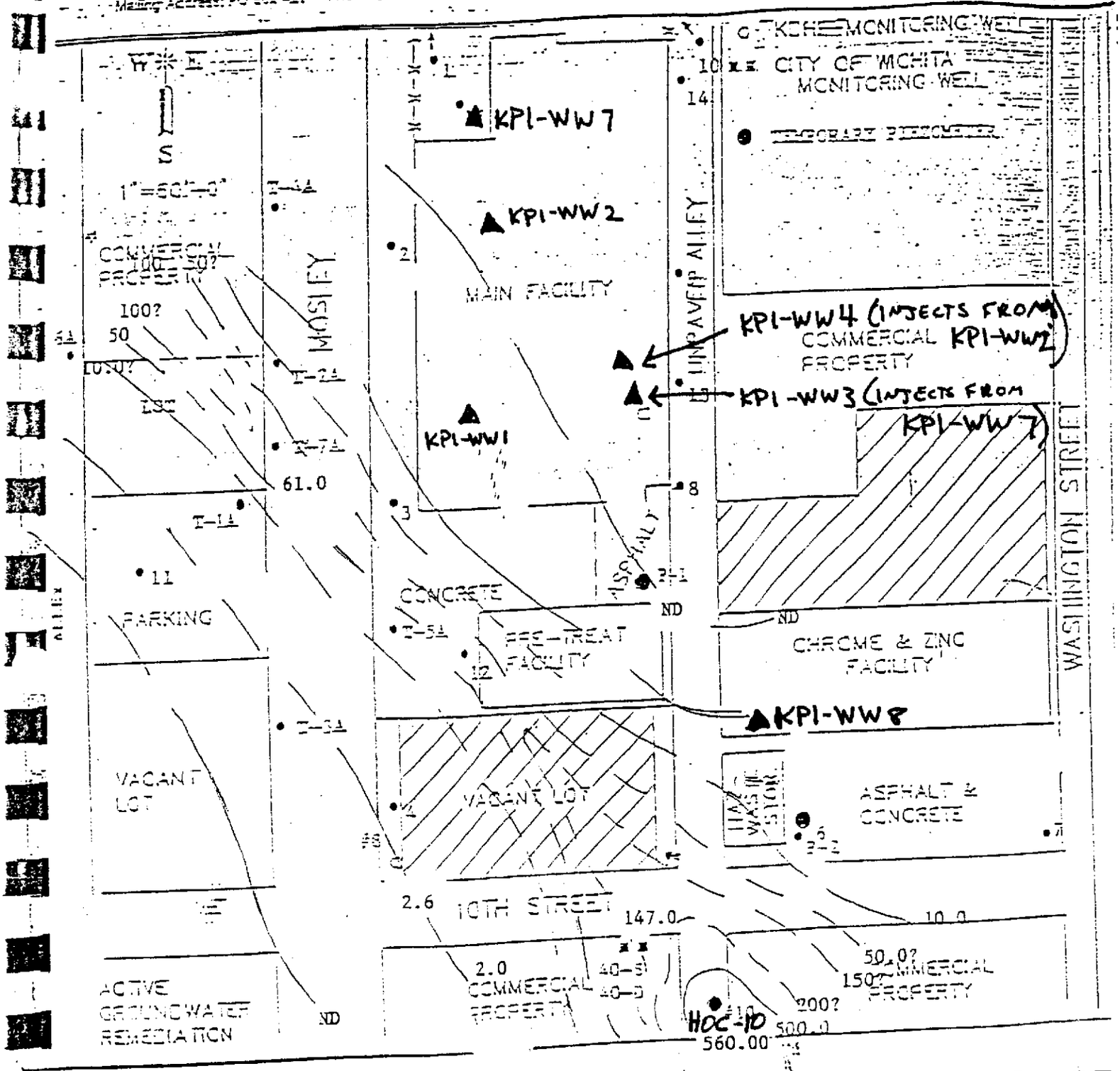
N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Mosley & 10th

Figure 3
Pumping Rate vs. Extent of Downgradient Capture
Kansas Plating, Inc.
(Using KPI and Coleman Aquifer Test Data)



1716 E. South Bazar – Wichita, KS 67208
Phone 316-941-4444 – Fax 316-941-5211 – Email TTES KS@aol.com
Mailing Address: PO Box 427 – Wichita, KS 67201-0427



Site: KANSAS PLATING, INC.
Location:
1,1,1-TCA ISOCONCENTRATION MAP
(UG/L) (WITH APPROXIMATE LOCATIONS OF ACTIVE KPI PRODUCTION WELLS)
Scale:
Key

(TERRATECH 1998, FIGURE-4.)

FIGURE 4

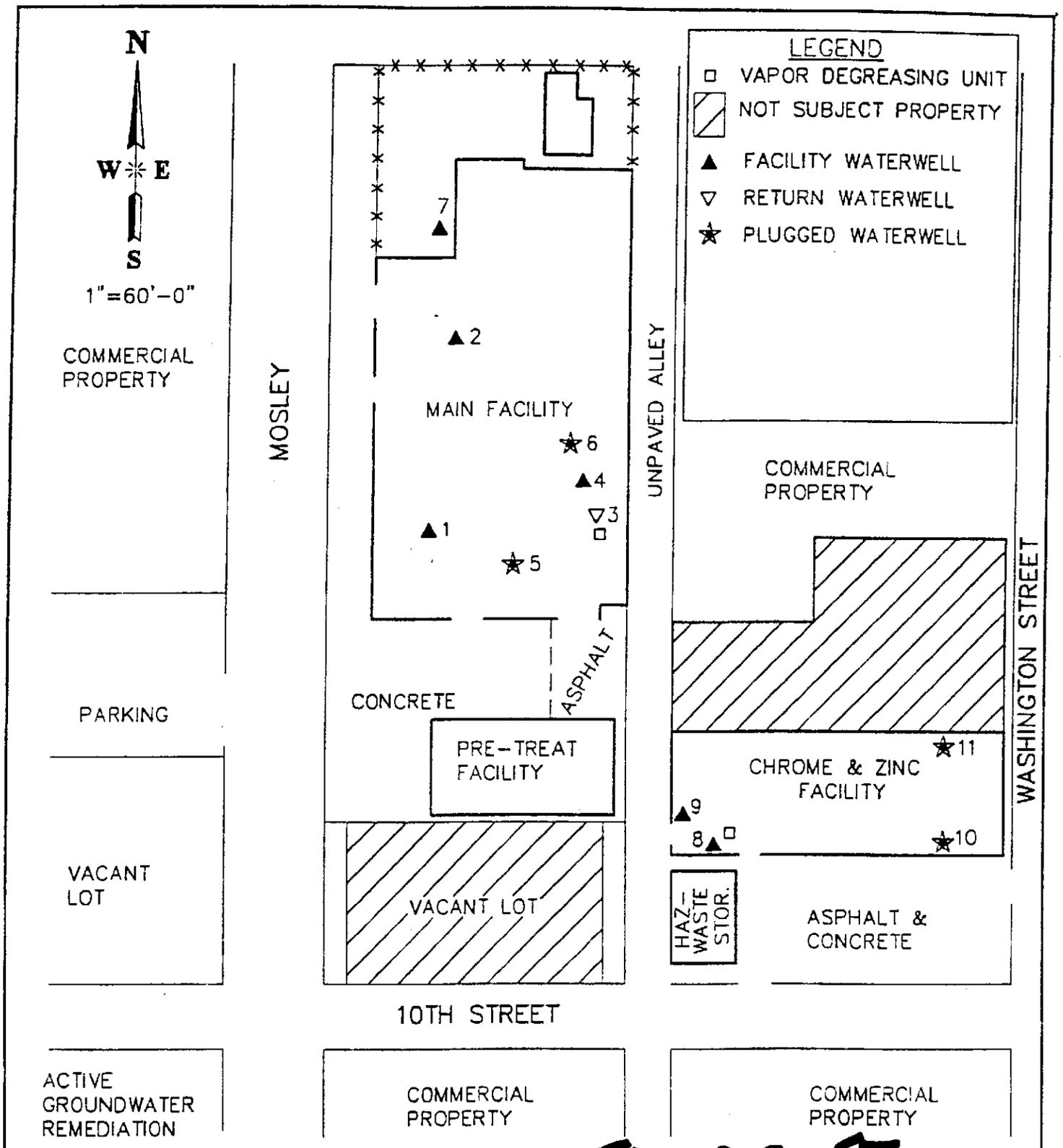


FIGURE 5

TERRATECH
ENVIRONMENTAL SERVICE, INC.
212 South Hydraulic, Suite #400, Wichita, KS. 67211
Office (316) 262-0735 Fax (316) 262-6860

FACILITY WATERWELL MAP
KS PLATING
1110 N. MOSLEY
WICHITA, KANSAS

(TERRATECH 1996 FIGURE-6.)

J:\ADCADD\CIVIL\P\KSPLATE\KSPLATE2 Wed Aug 21 11:39:05 1996

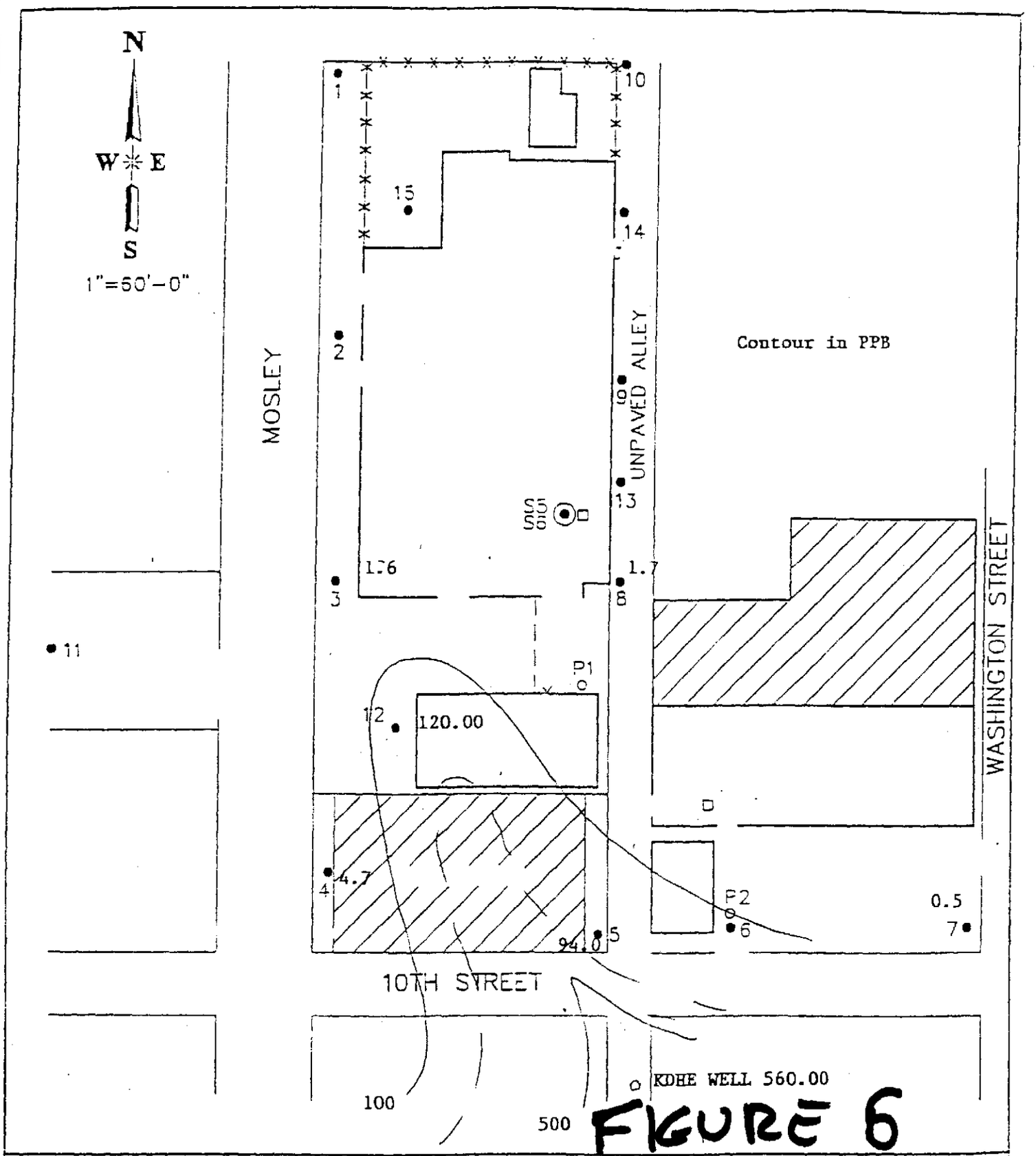


FIGURE 6

TERRATECH
ENVIRONMENTAL SERVICE, INC.
212 South Hydraulic, Suite #400, Wichita, KS. 67211
Office (316) 262-0735 Fax (316) 262-6860

ISOCONCENTRATION MAP
1,1,1-TCA
PHASE-II INVESTIGATION 1996
SHALLOW GROUNDWATER LABORATORY
(FROM TERRATECH, 1996, APPENDIX G)

C:\ARCADD\CIVIL\P\KSPLATE\KSPLATE2 Wed Aug 21 11:55:57 1996

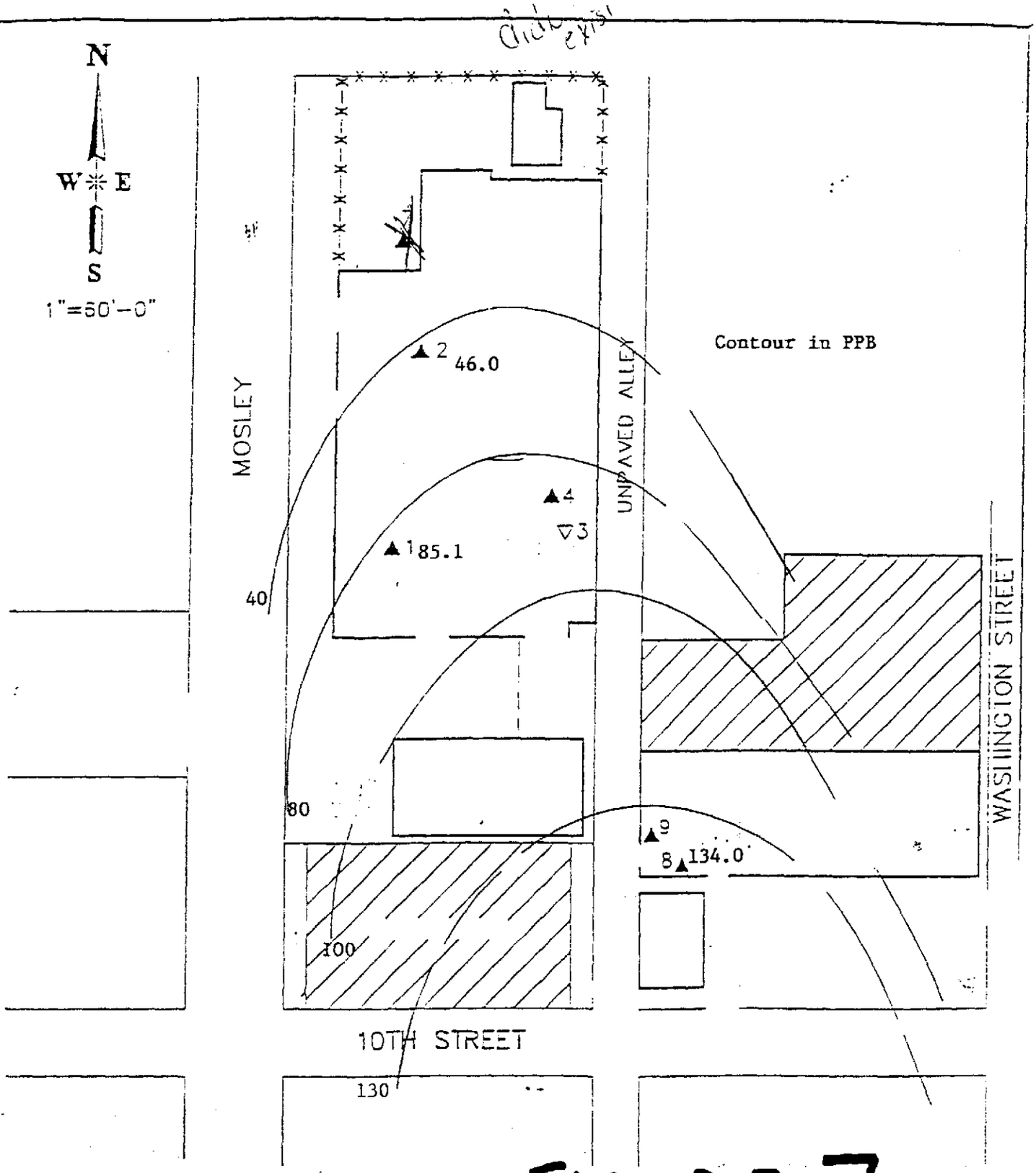


FIGURE 7

TERRATECH
ENVIRONMENTAL SERVICE, INC.
212 South Hydraulic, Suite #400, Wichita, KS. 67211
Office (316) 262-0735 Fax (316) 262-6860

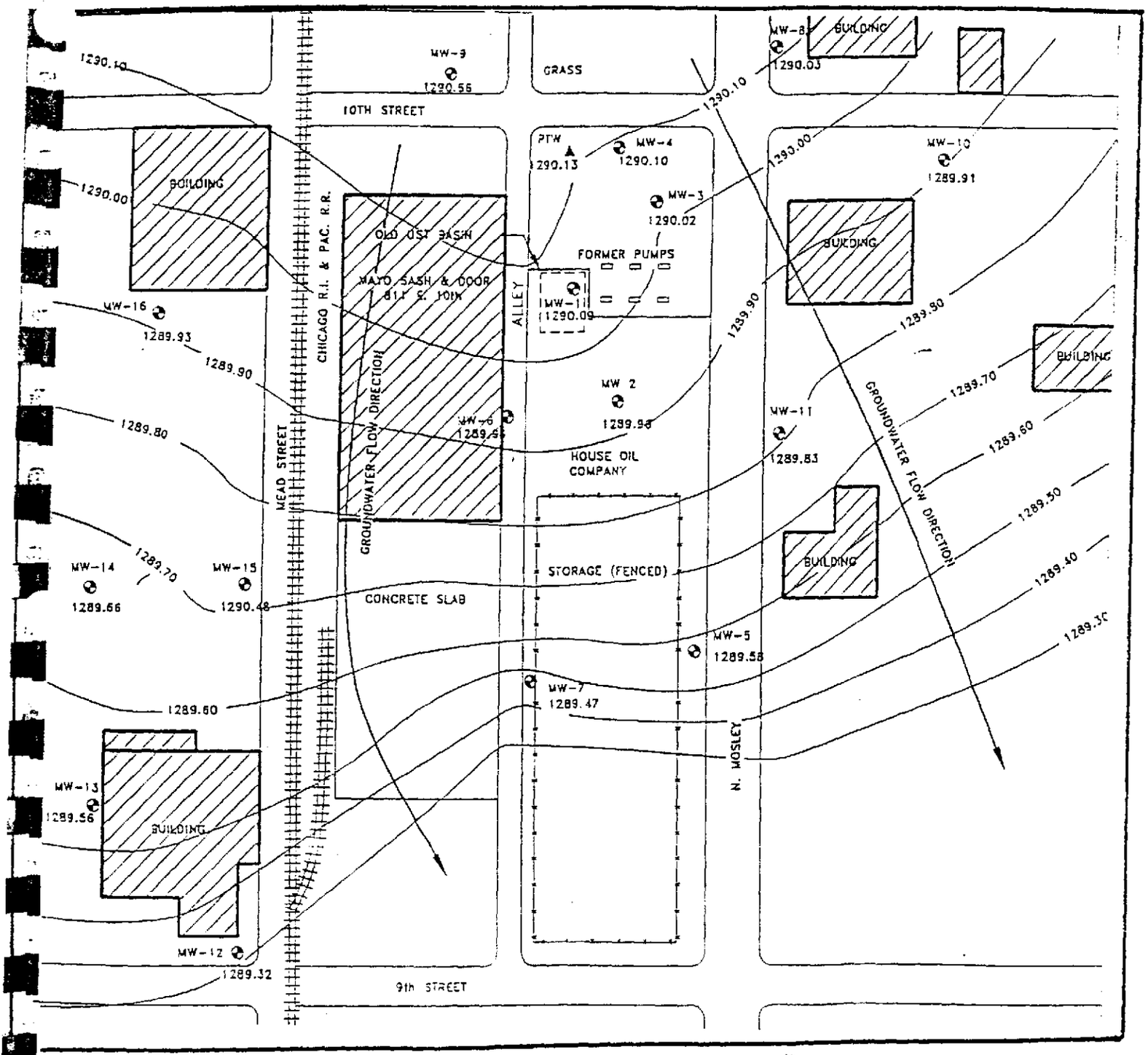
ISOCONCENTRATION MAP
1,1,1-TCA

ESTIMATED CONTOUR- WATERWELL SAMPLING
12/ 1993
(From TERRATECH, 1996, APPENDIX G)

C:\ADCADD\CIVIL\P\KSPLATE\KSPLATE2 Wed Aug 21 11:55:57 1996

TerraTech Environmental Service, Inc.

1760 South Baenr ~ Wichita, KS 67209
Phone 316-941-4444 ~ Fax 316-941-9311 ~ Email TTES KS@aol.com
Mailing Address: PO Box 427 ~ Wichita, KS 67201-0427



Site: GROUNDWATER GRADIENT MAP
Location: HOUSE OIL / KANSAS PLATING, INC.

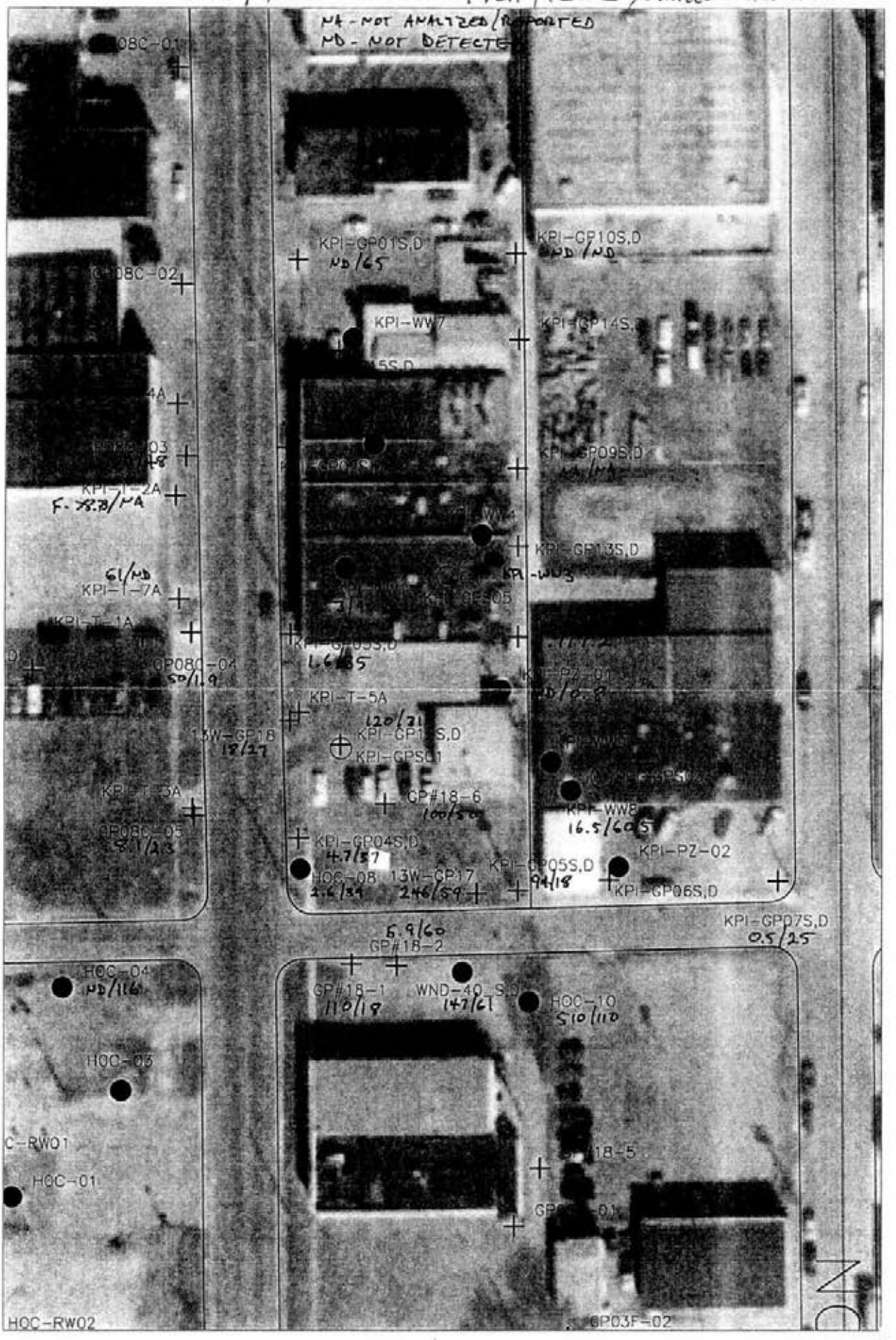
Scale: REPRODUCED
Key

FIGURE 8

(TERRATECH, 1998, FIGURE-3.)

TCA / TCE CONCENTRATIONS, SHALLOW AQUIFER

NA - NOT ANALYZED/REPORTED
ND - NOT DETECTED



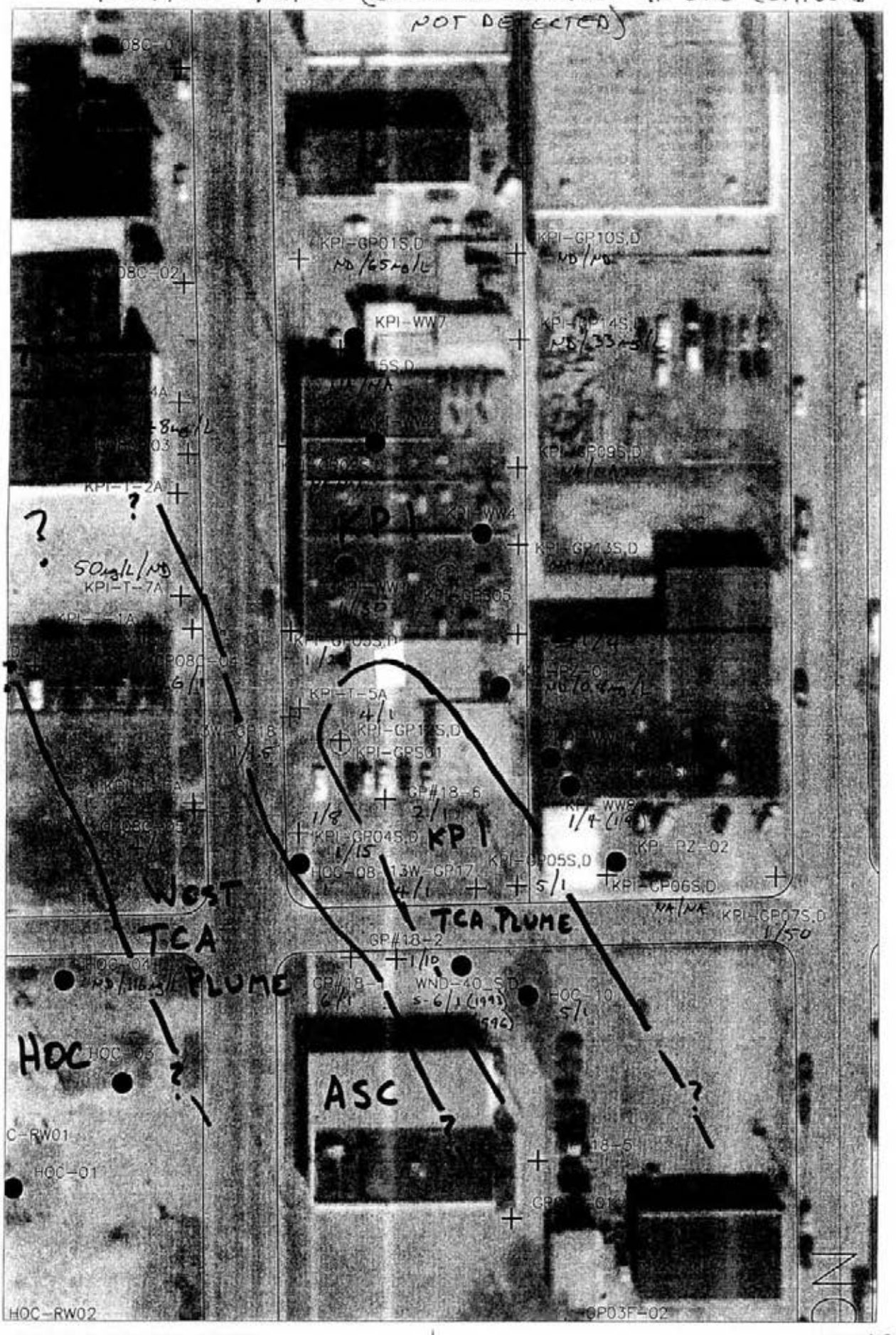
CDM Camp Dresser & McKee

1" = 50'
25 0 50

N

Figure 9
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Mosley & 10th

TCA/TCE RATIO (NOTE: CONCENTRATIONS GIVEN IF ONE COMPOUND NOT DETECTED)



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CDM Camp Dresser & McKee

1" = 50'
25 0 50

N

Figure 10
North Industrial Corridor (NIC) Site

DELINEATION OF TWO TCA PLUMES AT KPI BASED ON TCA\TCE RATIOS

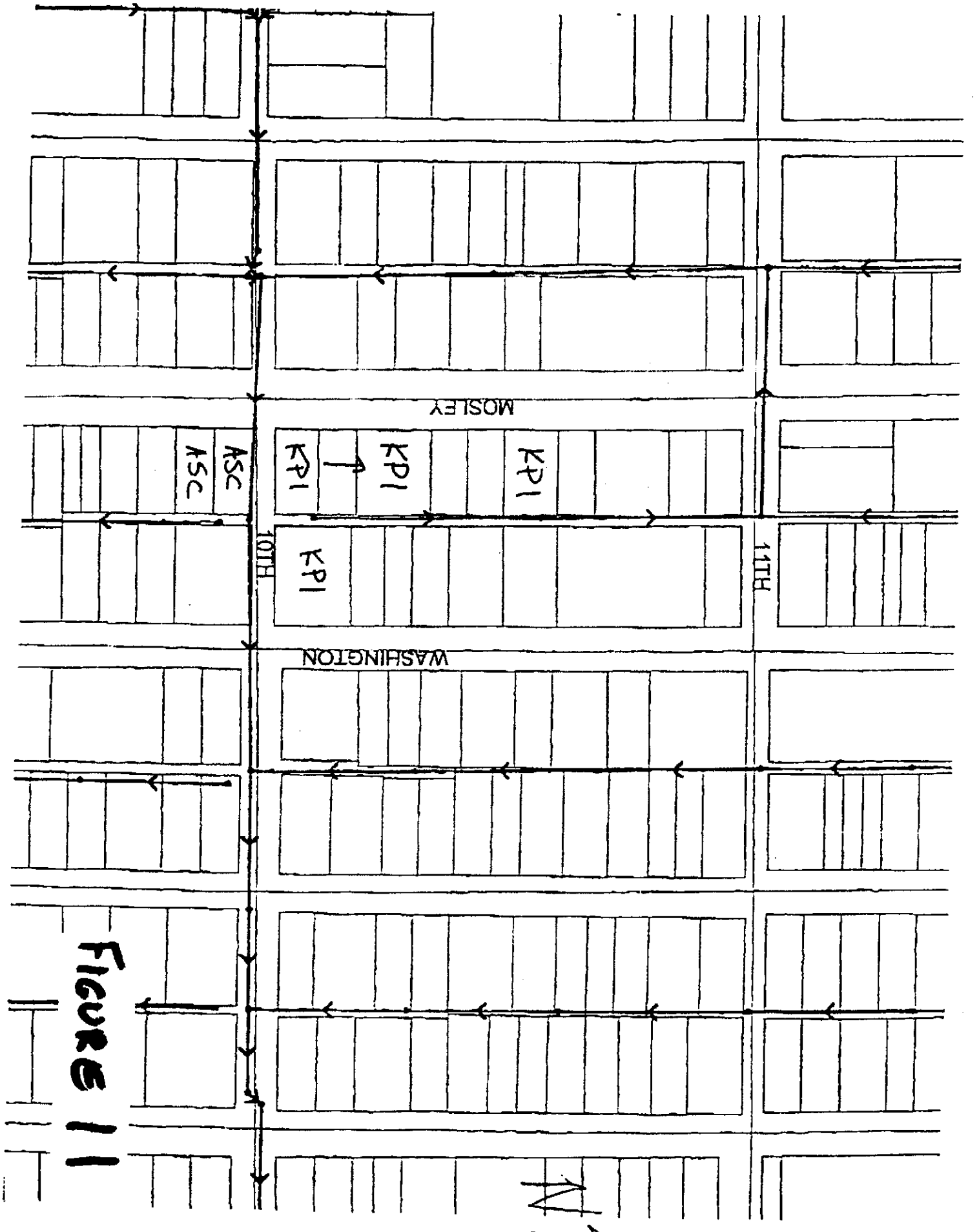


FIGURE 11

Polk Directory Review and RCRA Information Summary

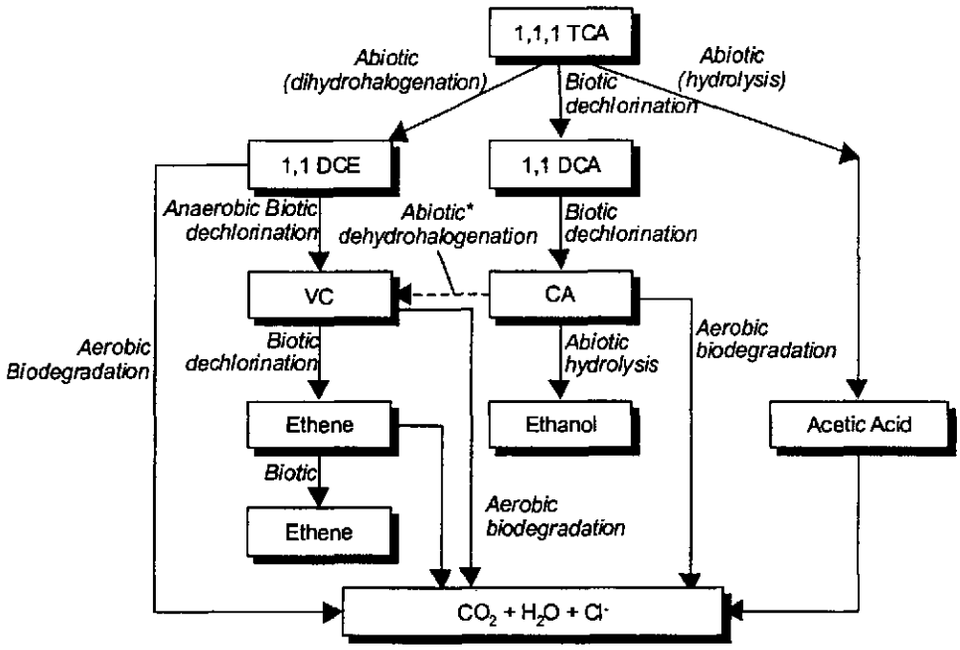
KANSAS PLATING:

630 N Washington	1956 to 1959	Kansas Plating Inc
	1960	we do not have this book
	1961	vacant
1110 N Mosley	prior to 1959	no listing
	1960	we do not have this book
	1961 to date	Kansas Plating Inc

RCRA Info: KDHE air files show Trichloroethylene, Trichloroethene, Methyl ethyl keytone

Degradation Pathways

1,1,1-TCA Degradation Pathways



Application for Certification and Release

JR 8/4/96

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, KANSAS PLATING, INC.

(insert legal name(s) of party seeking certificate)

1110 N. Mosley
67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:

1110 N. Mosley Wichita, KS

1107 N. Washington Wichita, KS

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: _____

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third-party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

KANSAS PLATING, INC.

Name: BY Norris H. Madden
(signature) President

Name: Norris H. Madden
(print or type)

1110 N. Mosley

Wichita, KS 67214
Address (print or type)

Date: 8/5/96

Subscribed and sworn to before me this 5th day of August, 1996.

Helen M. Gleason
Notary Public

My appointment expires: 1/10/99

HELEN M. GLEASON
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 1/10/99

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for Commercial/Industrial property only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant Kansas Plating, Inc. Date 8/5/96

Business Phone (316) 263-7853 Home Phone

Legal Description Sankey & McCall's Addition Wichita, Sedgwick County, KS
Lots 6, 8, 9, 10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 (Mosley Ave.)
Lots 1, 3, 5, 7 (Washington St.) Property Tax Key # See Attached List

Street Address of Property 1110 North Mosley

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER	(See Attached List)	DATES	TYPE OF BUSINESS/SITE USE
Kansas Plating, Inc.	From: ____ To: Present		Electro-plating and organic finishing of
	From: ____ To: ____		parts.
	From: ____ To: ____		
	From: ____ To: ____		

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES	(See Attached List)	DATES	TYPE OF BUSINESS/SITE USE
Kansas Plating, Inc.	From: ____ To: Present		Electro-plating and organic finishing of
	From: ____ To: ____		parts.
	From: ____ To: ____		
	From: ____ To: ____		

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☐Yes ☒No ☐Unknown

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☒Yes ☐No ☐Unknown

(d) Has any type of environmental study been performed on this property? ☒Yes ☐No ☐Unknown
If yes, please identify and include a copy of the report.

(2) Disposal of Wastes.
(a) Are liquid or sludge wastes generated and/or stored on property? ☒Yes ☐No ☐Unknown

(b) What do the liquid wastes consist of?
Waste Codes: D001, D002, D005, D006, D007, D008, D010, D040, D043
F001, F003, F005, F007, F008, F009.

(c) Has any type of characterization of these liquid wastes been conducted? ☒Yes ☐No ☐Unknown
If yes, include copy of results.
See attached results

CAMCOR/Chief Supply Corp.
Rt. 2 Box 71
Haskell, OK 74436
(918)482-5271

BRL = Below Regulatory Limits
N/A = Not Applicable to Sample
N/P = Test Not Performed
N.D. = Non-detectable
ppm = Parts per million

****

Generator Name/Location: Kansas Plating
Office/Contact: Chief Supply of Kansas/Michael Higgins
WMPS # LS 93-1013 Date Recieved 7-14-93 Date Reported 7-19-93
Sample Identification: Trichloroethylene

****

Visual Inspection: Thin black liquid with white sediment
Alpha, Beta, Gamma emissions: N/D Odor: Sharp

S.G.	1.39	@ 25C	Water	3.7	%	ASTM 1744
Flash	>200 F	EPA 1020	BTU/LBS.	5,137		ASTM D240-87
pH	6.3	EPA 9040	Total Halogen	68.2		EPA 325.3

****

Hydrocarbon Scan EPA 8015/Halocarbon Scan EPA 8010

Parameter	Result	Code#	Parameter	Result	Reg. Limit
Acetone	N.D.%	D018	Benzene	N.D. ppm	0.5 ppm
Butyl Acetate	N.D.%	D035	Meth/Eth/Ketone	N.D. ppm	200 ppm
Cyclohexanone	N.D.%	D039	Tet/chl/ethylene	N.D. ppm	0.7 ppm
Isobutanol	N.D.%	D040	Tri/chl/ethylene	958,300ppm	0.5 ppm
Isopropanol	N.D.%				
Methanol	N.D.%				
N-Butanol	N.D.%				
Tet/hy/furan	N.D.%				
Toluene	N.D.%				
Xylenes	N.D.%				
1,1,1 Tri Chl	N.D.%				
Methylene Chl	N.D.%				
Methyl Isobutyl Ketone	N.D.%				

Comments: The remainder of the sample contains 0.5% other waste solvents and inorganics.

Solids Content: 1 - 2%
Factor for calc. TCLP: 1.38

****

METALS CONTENT

Code#	Metal	Total		Calc. TCLP (total/factor)		Reg. Limit (TCLP)		
D004	Arsenic	<1.0	ppm	BRL	ppm	5.0	ppm	EPA 6010
D005	Barium	191	ppm	138.4	ppm	100.0	ppm	EPA 6010
D006	Cadmium	0.6	ppm	BRL	ppm	1.0	ppm	EPA 6010
D007	Chromium	0.57	ppm	BRL	ppm	5.0	ppm	EPA 6010
D008	Lead	3.0	ppm	BRL	ppm	5.0	ppm	EPA 6010
D009	Mercury	<0.01	ppm	BRL	ppm	0.2	ppm	EPA 7471
D010	Selenium	<1.0	ppm	BRL	ppm	1.0	ppm	EPA 6010
D011	Silver	<0.06	ppm	BRL	ppm	5.0	ppm	EPA 6010
*	Nickel	<1.0	ppm	BRL	ppm	*20.0	ppm	EPA 6010

* source is California Code of Regulations Title 22, Ch. 11, Art. 3

****

Signature
Robert Meeks, Laboratory Manager

(Cont.)

	Chemical	Quantity Used	How & Where Stored	Disposal Method
	Zinc Compounds	2,000 lbs.	Fiber Box - 1107 N. Washington	Neutralization & Precipitation
19.	Rust preventative Oils	100 gal.	Plastic Buckets - 1110 N. Mosley	Reclamation
20.	Fluorescent Penetrant	110 gal.	Steel Drum - 1110 N. Mosley	Hydrolyze
21.	Methyl Ethyl Ketone	11,500 lbs.	Steel Drum - 1107 N. Washington	Fuel Blend
22.	Toluene	110 gal.	Steel Drum - 1107 N. Washington	Fuel Blend
23.	Various & Misc. Paints Containing Heavy Metals & VOC's	940 gal.	Steel Cans - 1110 N. Mosley	Fuel Blend
24.	Trichloroethylene	8,000 lbs.	Steel Drum - 1107 N. Washington	Fuel Blend

Excerpts from Report(s) Prepared by Others

TERRATECH
ENVIRONMENTAL SERVICE, INC.

212 South Hydraulic, Suite #400, Wichita, Kansas 67211
Office: (316) 262-0735 Fax: (316) 262-6860

FINAL REPORT

LIMITED -PHASE I AND PHASE-II ENVIRONMENTAL SITE INVESTIGATION

Kansas Plating, Inc.
1110 North Mosley
Wichita, Kansas

September 1996

Prepared for:

Mr. Chris Steincamp
Depew & Gillen, L.L.C.
Wichita, Kansas

Prepared by:

TerraTech Environmental Service, Inc.

PLEASE RECYCLE!

TERRATECH
ENVIRONMENTAL SERVICE, INC.
212 South Hydraulic, Suite #400, Wichita, Kansas 67211
Office: (316) 262-0735 Fax: (316) 262-6860

I. LIMITED PHASE-I INVESTIGATION

I-1. Historical Property Development

As part of this investigation, historic fire insurance maps (depicting building layouts and contents) were reviewed. Available maps included the years 1914, 1935, 1950 and 1960 (Figure-1 through 4, page 2). Review of the maps indicates the subject property remained residential through approximately 1950. The 1968 map indicates the facility shown as "plating". Additionally, the 1968 map notes numerous commercial type facilities (machine shops, grain elevators, etc.) located near the subject property.

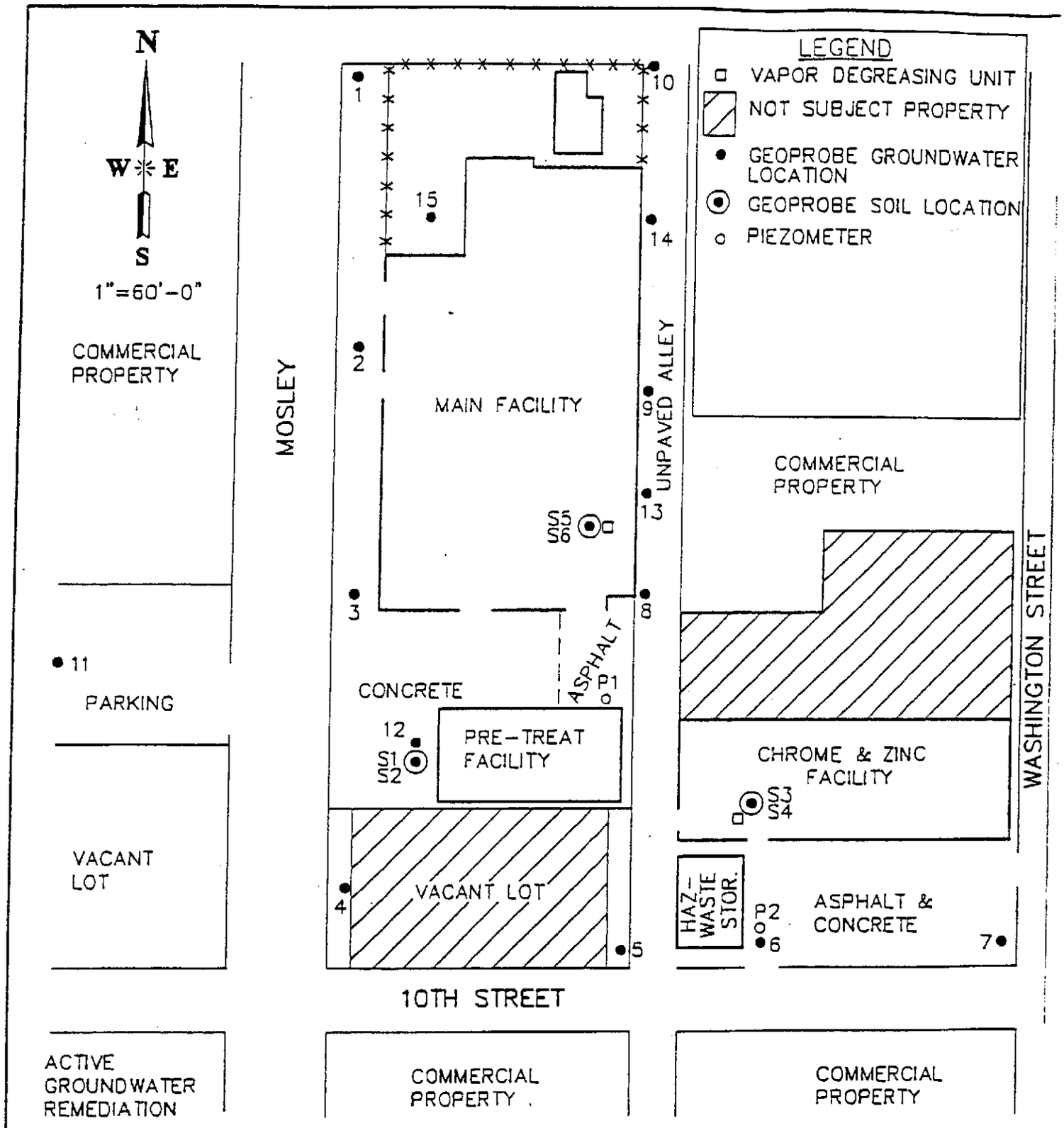
I-2. Freedom of Information (FOI) Request

Under the Freedom of Information Act, documentation was obtained from Environmental database, Inc., pertaining to hazardous material utilization or waste generation of registered facilities located within a one (1) mile radius of the subject property. The documentation was derived from federal and state environmental agencies. Additionally, a request was submitted to the City of Wichita-Sedgwick County Department of Health and Environment (W-SCDHE) for any local documentation. (All FOI documentation is located in Appendix A).

I-2-A. Surrounding Properties

Review of federal and state regulatory documentation indicates two (2) CERCLIS (proposed National Priorities List) sites are located within a 1/2 mile radius of the subject property. Both facilities, located near the intersection of 13th Street and Washington (likely up-gradient of the subject property), appear on the CERCLIS listing due to the presence of volatile organic compounds (VOC's) within the underlying groundwater.

Review of the state documentation indicates the presence of three (3) Kansas SUPERFUND locations within a one (1) mile radius of the subject property. Only the 13th and Washington listing has bearing on the subject property. Additionally, eleven leaking underground storage tank locations (LUST) have been identified within the one mile radius of the subject property. One is located immediately southwest of the subject property. The former House Oil Company (located at the northeast corner of 10th and Mosley) is currently engaged in the recovery of petroleum contaminated groundwater for on-site air stripping. The remedial operation at this location has been occurring since approximately 1992.



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ENVIRONMENTAL SERVICE, INC.
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PROBE-SOIL & WATER LOCATIONS PIEZOMETER LOCATIONS KS PLATING, 1110 N. MOSLEY WICHITA, KANSAS

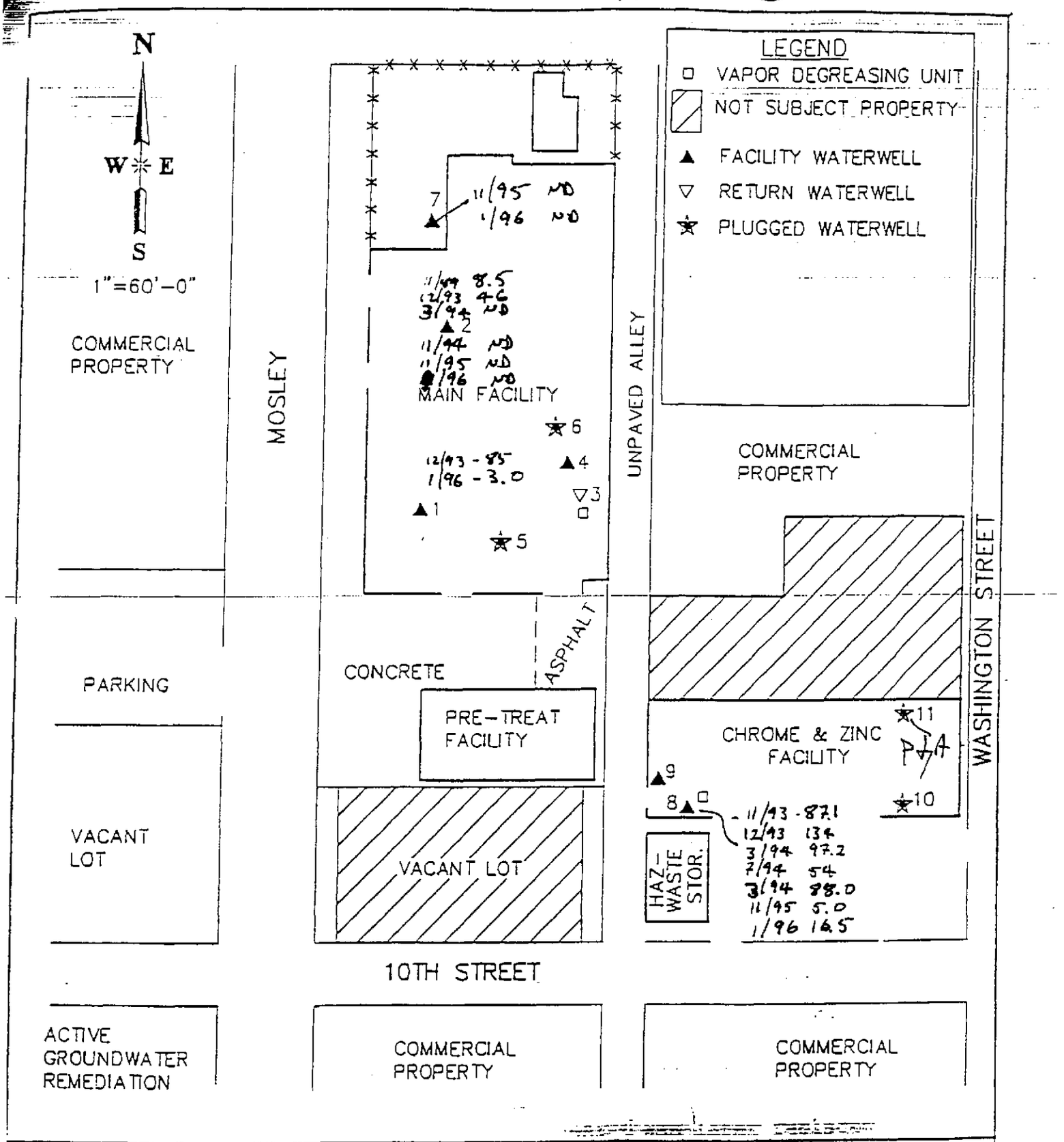
FIGURE-9.

C:\ADCADD\CIVIL\P\KSPLATE\KSPLATE2 Wed Aug 21 11:36:59 1996

	Field Results (ppb)				Laboratory Results (ppb)			
TH-ID	(cis) 1,2-DCE	TCE	PCE	Lab ID #	(cis) 1,2-DCE	1,1,1 TCA	TCE	PCE
T-1-S	5.0	≥53	1.8	960322001	23		65	1.1
T-1-D	8.2	>65	8.3	960322002	58		260	6.0
T-2-S	3.5	≥61.2	4.8					
T-2-D	6.5	≥73	11.3					
T-3-S	1.8	≥40	1.1	960322005	20	1.6	35	0.9
T-3-D	4.0	≥55.8	12.6	960322006	41	ND	74	5.7
T-4-S	2.6	≥40.8	1.2	960322007	22	4.7	37	1.1
T-4-D	4.0	≥56.2	12.4	960322008	37	ND	63	5.3
T-5-S	2.5	≥119	1.5	960325009	6.3	94	18	ND
T-5-D	2.6	≥54.6	2.9	960325010	24	6.2	62	1.3
T-6-S	1.6	≥55	1.0					
T-6-D	3.5	≥48.4	<1.0					
T-7-S	3.0	≥44.1	ND	960325013	32	0.5	25	ND
T-7-D	1.7	11.8	ND	960325014	23	ND	10	ND
T-8-S	<1.0	5.6	ND	960325015	3.1	1.7	7.2	ND
T-8-D	1.7	39.8	<1.0	960325016	10	ND	29	0.5
T-9-S	ND	3	ND					
T-9-D	<1.0	40	<1.0					
T-10-S	ND	1.5	<1.0	960325019	ND	ND	ND	ND
T-10-D				960325020	6.2	ND	29	0.8
T-11-S	ND	7	1.5					
T-11-D	<1.0	25	4.0					
T-12-S	ND	≥173	ND	960416A03	16.0	120.0	31	0.8
T-12-D	ND	≥35.0	1.8	960416A04	35.0	1.2	59	1.6
T-13-S	ND	2.6	ND					
T-13-D	<1.0	≥19.1	<1.0					
T-14-S	ND	4.5	ND					
T-14-D	ND	32	<1.0	960416A05	9.9	ND	33	0.6
T-15-S	<1.0	6.5	<1.0					
T-15-D	2.4	≥138	3.7					

FIGURE-10. page 17

TCA OVER TIME AT WWs



TERRATECH
ENVIRONMENTAL SERVICE, INC.
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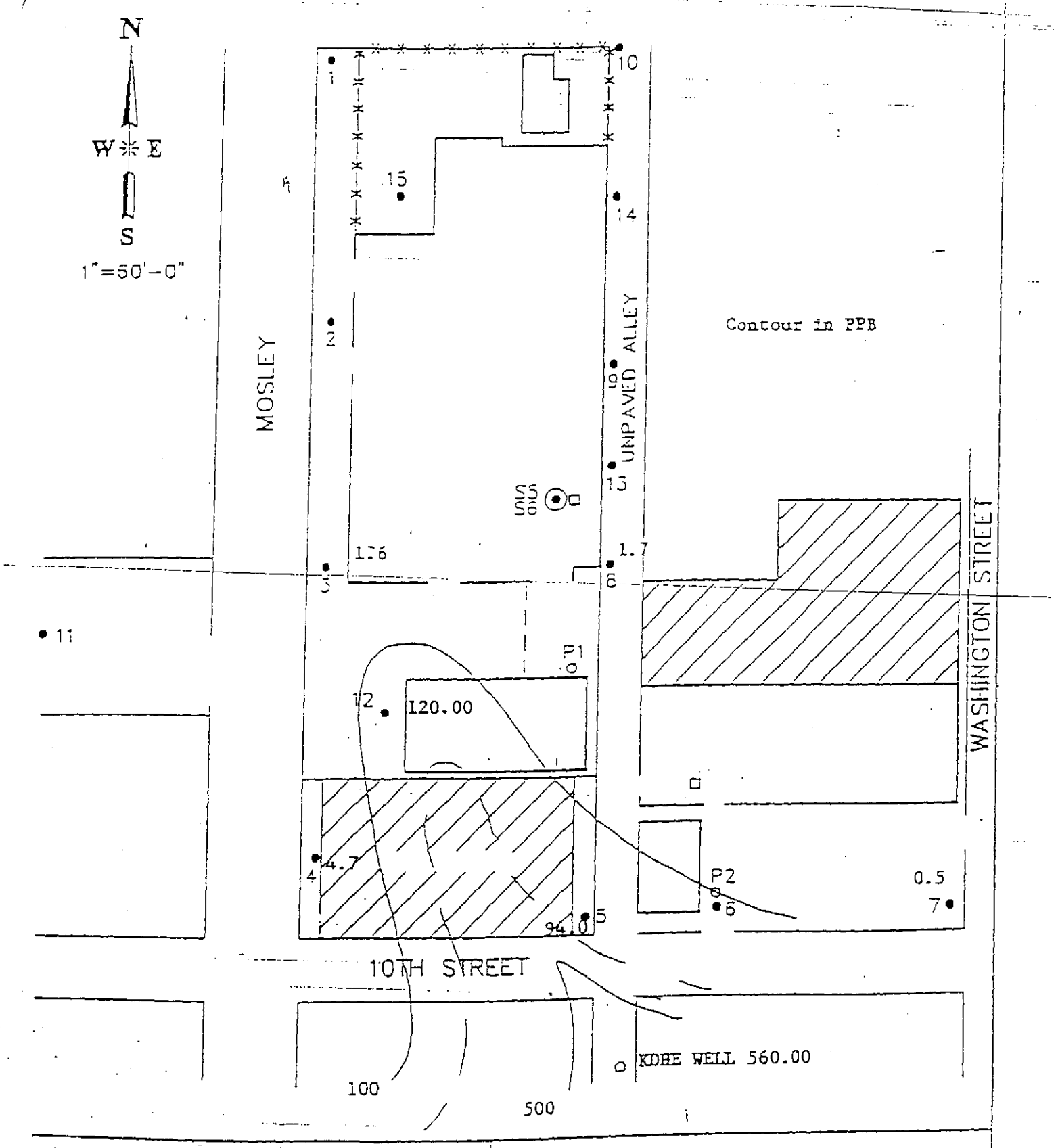
Office (316) 262-0726 Fax (316) 262-6860

FACILITY WATERWELL MAP
KS PLATING
1110 N. MOSLEY
WICHITA, KANSAS



TERRA TECH
ENVIRONMENTAL SERVICE, INC.
212 South Hydraulic, Suite 1400 Wichita KS. 67211

ISOCONCENTRATION MAP
1,1,1-TCA

PHASE-II INVESTIGATION 1996

SHALLOW GROUNDWATER- LABORATORY

KANSAS PLATING INC.
LABORATORY WELL COMPARISONS

Date	Lab	Well Location	Well No.	TCA	TCE
11-15-89	KDHE	Mosley -anod dept.	2	8.5	1.1
11-18-93	M&D	Washington St. - Zinc dept.	8	87.1	53.3
12-7-93	M&D	Mosley -anod dept. Mosley - near lab Washington St. - Zinc dept.	2 1 8	46.0 85.1 134.0	72.5 62.3 44.7
3-31-94	M&D	Mosley - anod dept Washington St. - Zinc dept.	2 8	ND 97.2	95.7 59.7
7-15-94	Priority	Mosley - anod dept. Washington St. - Zinc dept.	2 8	ND 54.0	74.0 46.0
11-17-94	National	Mosley - anod dept. Washington St. - Zinc dept.	2 8	ND 88.0	111.0 65.0
11-17-95	Priority	Mosley - anod dept. Washington St. - Zinc dept.	2 8	ND 5.0	84.0 66.0
11-30-95	Priority	Mosley - masking dept.	7	ND	132.0
1-18-96	Priority	Mosley - masking dept. Mosley - anod dept. Mosley - near lab Washington St. - Zinc dept.	7 2 1 8	ND ND 3.0 16.5	114.0 92.0 90.0 60.5

FIGUE-8.

Note: These are Kansas Plating, Inc. Wells only.

FIGURE-7.
KANSAS PLATING INC.
SUMMARY OF WATER WELL INSTALLATIONS
(Source: Mr. Norris Madden)

Well Number	Original Status Location & Use	Current Status
1	1110 N. Mosley near lab.	Supplies water to vapor de-greaser and to rinse tanks in cad department (Replaced #5 on map)
2	1110 N. Mosley near North wall in anodize department.	Supplies water to rinse tanks and chillers in anodize department. Was drilled in 1976 by Don Redington of Shuksan Enterprise.
3	1110 N. Mosley near east wall in plating room, North of oven.	Currently used for return of cooling water in masking department. Water supplied by well #7. Originally supplied water to cooling coils for South paint room and rinse tanks. Drilled in 1968 by Jack Murphy.
4	1110 N. Mosley near air compressors in plating room.	Currently used for return of water from chillers in anodize department. Was originally drilled for that purpose.
5	1110 N. Mosley near West wall in cad plating department	Was drilled in 1960 to supply rinse tanks in cad department. Was later replaced by well #1 and <u>has since been plugged.</u>
6	1110 N. Mosley near shot-pun machine. This was originally used to supply water to the anodize chiller and to the rinse tanks in that department.	Was later replaced by well #2 and <u>has since been plugged.</u>

7	1110 No. Mosley outside masking department (west of building). This supplies water to air cooling unit in masking department.	Still used for same purpose. Was drilled in 1993 by Weninger water well service.
8	1107 N. Washington near South wall west of vapor degreaser. Originally supplied water to vapor degreaser and rinse tanks in still zinc line.	Supplies water for vapor degreaser and for rinse tanks on zinc and decor chrome lines.
9	1107 N. Washington near West wall North of alley door. Originally supplied water to barrel line which no longer exists. Later supplied water to rinse tanks on decor chrome line until it became non-productive.	No longer pumped not yet plugged but is capped.
10	1107 N. Washington near South wall close to air compressor at East end or room. Originally replaced well #11 in supplying rinse water to decor chrome line.	No longer used, has been plugged.
11	1107 N. Washington near East end of plating room. Originally supplied rinse water to decor-chrome line. Replace well #10.	No longer used, has been plugged.

Summary:

1. Producing Wells = 4
2. Return Wells = 2
3. Non-productive well, collared and capped but not plugged = 1
4. Plugged and abandoned Wells = 4

Total 11

The City of Wichita currently monitors the discharge from the pre-treatment facility through man-hole instrumentation located down stream of the facility. (Available copies of the "Industrial Effluent User Limit Reports" are located in Appendix C).

According to Mr. David Housby, Quality Control Chemist for the facility since 1983, historical hazardous material usage and waste generation documentation is available in the form of invoices back to at least 1977.- During this time period, waste accumulations contained Zinc, Chrome, Cyanide, and acid laden sludge materials. These materials were removed from the facility for disposal by Kansas Industrial Environmental Service. Facility documentation does note the use of 1,1,1-Trichloroethane (TCA) with vapor decreasing procedures from 1982 through 1992. During this period, approximately 600 lbs. to 2400 lbs. (1 to 4 drums) of spent solvent were typically accumulated annually. *

The facility requires a large volume of water for normal operation (Figure-5, page 8). A total of eleven (11) waterwells (located throughout the facility) have been completed at the facility over the last 36 years to supplement the water requirement (Figure-6, page 9). Of the eleven, four (4) currently are producing water and two (2) are utilized in the return of closed loop cooling water. One (1) is currently non-producing, while four (4) have been plugged. A chronological order of all the facility waterwells provided by Kansas Plating, Inc., is located in Figure-7, page 10. Review of available WWC-5 completion documentation indicates the newer wells (1976 to present) are constructed of PVC type materials utilizing cement as grout and are completed to approximately thirty feet below grade (near the underlying shale bedrock). The older well installations are likely composed of steel and may be completed in a similar manner as a modern "sand-point". Water is pumped through the use of top drive electric pumps (capable of 20 gallons per minute each) and plastic pipe column intake.

Based upon environmental concerns noted within the area, the facility began obtaining groundwater samples for analytical screening in 1989. Figure-8, page 12, shows a summary of 1,1,1-TCA and TCE concentrations detected within the four producing waterwells from 1989 through 1/1996.

FIGURE-5.

KANSAS PLATING INC.
TOTAL INFLUENT GROUNDWATER USAGE

Years	Gallons	Average per Month
1985	6696670	558055
1986	6677580	556465
1987	5884940	490411
1988	4869593	405799
1989	5470820	455901
1990	13202255	1100187*
1991	13234400	1102866
1992	14778850	1231570
1993	16162240	1346853
1994	15001770	1250147
1995	10446500	870541**

* Increase due to multi-shift operation.
** Decrease due to installation of restrictors installed on rinse tanks.

TerraTech Environmental Service, Inc.

1760 South Baehr ~ Wichita, KS 67209
Mailing Address: PO Box 427 ~ Wichita, KS 67201-0427
Phone 316-941-4444 ~ Fax 316-941-9311 ~ Email TTES KS@aol.com

SUPPLEMENTAL REPORT
PHASE-II GEOPROBE SAMPLING INVESTIGATION
KANSAS PLATING, INC.

1110 North Mosley
Wichita, Kansas

January, 1998

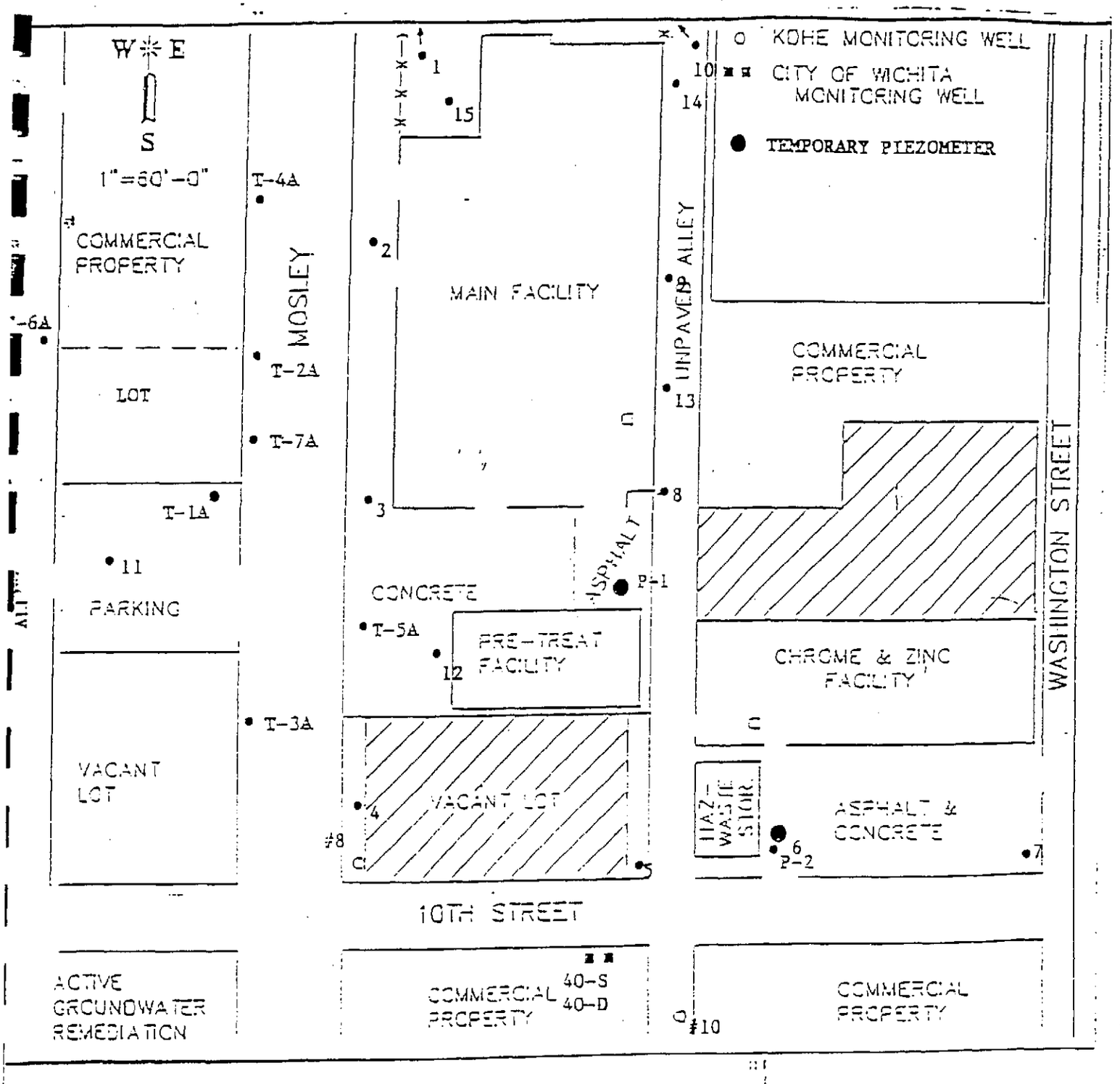
Prepared for:

Depew &Gillen, L.L.C.
Mr. Charles Steincamp
Wichita, Kansas

Prepared by:

TerraTech Environmental Service, Inc.
1760 S. Baehr
Wichita, Kansas

TerraTech Environmental Service, Inc.
1760 South Baehr – Wichita, KS 67209
Phone 316-941-4444 – Fax 316-941-6311 – Email TTES KS@aol.com
Mailing Address: PO Box 427 – Wichita, KS 67201-0427

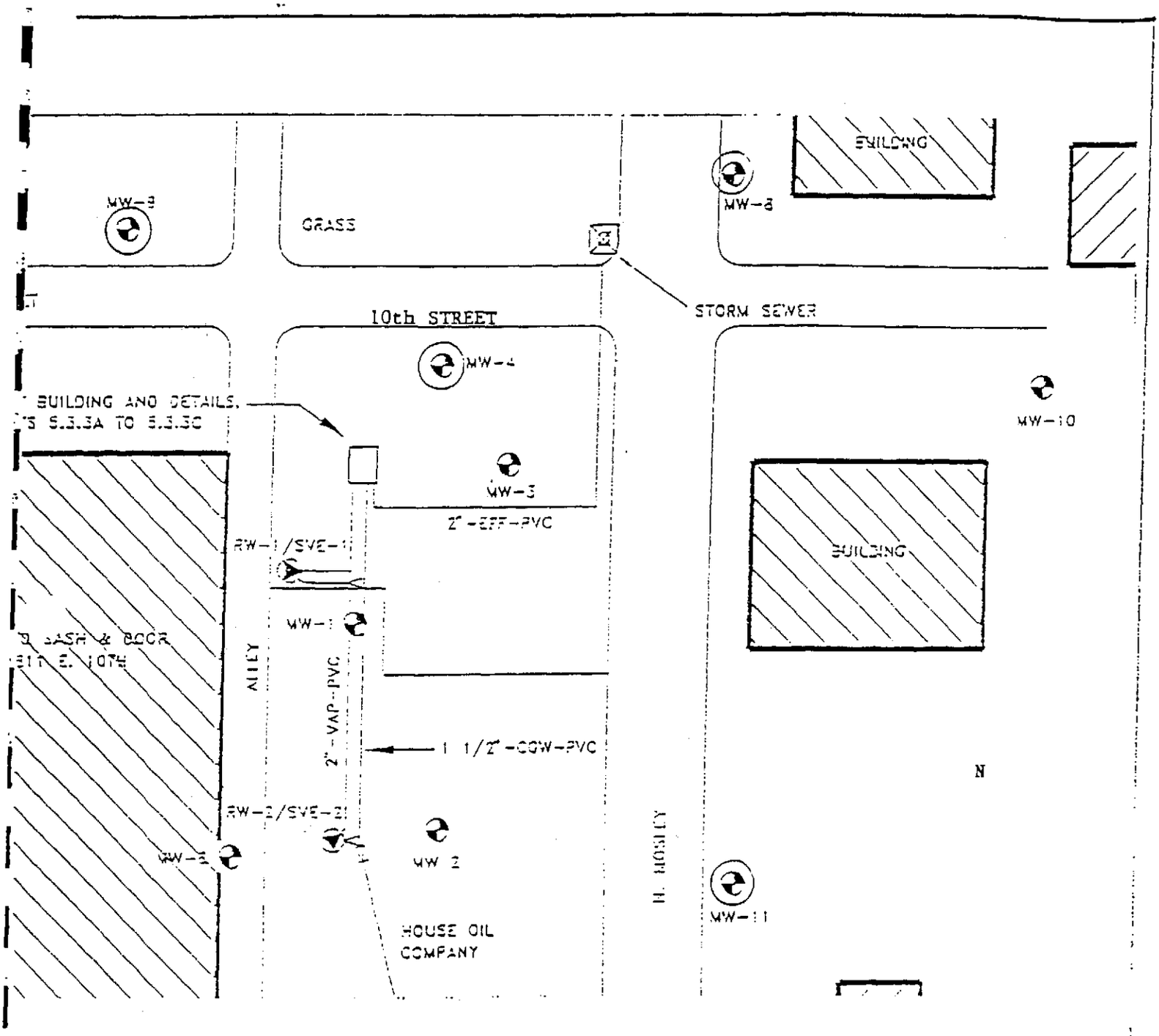


Site: KANSAS PLATING, INC.
Location: COMBINED GEOPROBE SAMPLING POINTS- 9/1996, 9/1997

Scale: 1"=app. 60.0'
Key • #-1996 SAMPLING LOCATION
• T-# -1997 SAMPLING LOCATION

FIGURE-1.

TerraTech Environmental Service, Inc.
1760 South Baehr - Wichita, KS 67209
Phone 316-941-4444 - Fax 316-941-6211 - Email TTES KS@aol.com
Mailing Address: PO Box 427 - Wichita, KS 67201-0427



Site: HOUSE OIL # 02087525
Location: WICHITA, KS

Scale: REPRODUCED

Key SAMPLED MONITORING WELL

FIGURE-2.

TABLE-1: Field and Laboratory 1,1,1-TCA Concentrations

Table-1:Field and Laboratory 1,1,1-TCA Concentrations

Location	Field 1,1,1-TCA	Laboratory 1,1,1-TCA
KPI Piezometer P-1	NA	ND
KPI Piezometer P-2	>0.68	NA
T-1A 16'-18' bgs	>9.8	NA
T-2A 16'-18' bgs	>8.73	NA
T-3A 16'-18' bgs	>2.9	NA
T-4A 16'-18' bgs	ND	NA
T-5A 16'-18' bgs	>0.77	NA
T-6A 16'-18' bgs	>1.3	NA
T-7A 16'-18' bgs	>22.0	**61**
Monitoring Wells (LUST Site ID # 02087525)		
MW-4	>0.3	ND
MW-8	>1.1	**2.6**
MW-9	>0.04	ND
MW-11	>0.26	ND
City of Wichita MW-40-S	>12.8	**147**
City of Wichita MW-40-D	>0.5	NA

II-2. Total Metal Analytical Findings

Two (2) shallow groundwater samples were obtained to under-go analytical testing for Total Metals.(EPA Methods 6010, 7060, 7470, 7740). The samples were taken from wells at MW-40S and P-2, downgradient of Kansas Plating Inc. Review of the analytical findings indicates concentrations within naturally occurring levels. The laboratory analytical data is located in Appendix C.

III. DISCUSSION

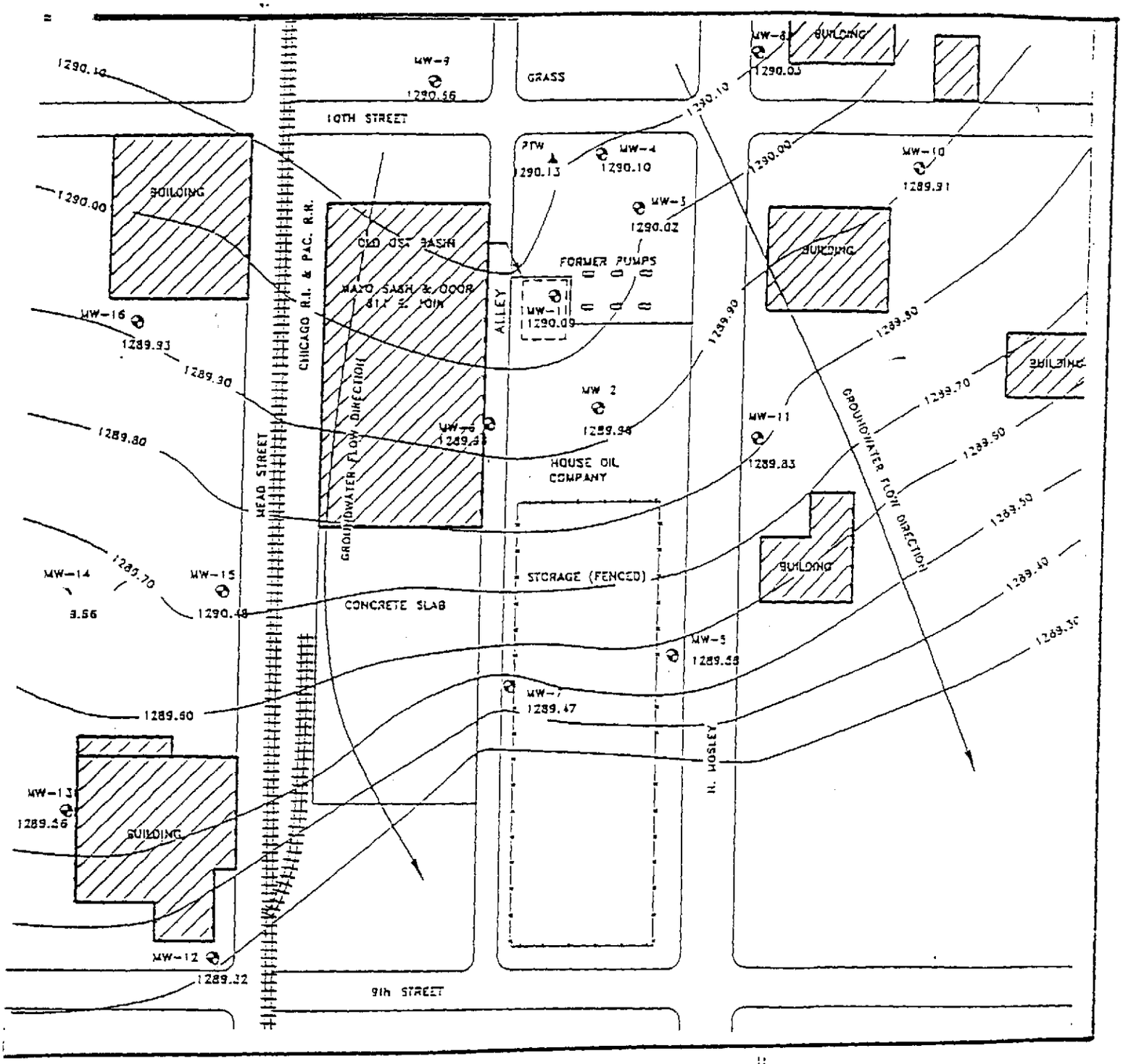
Based upon the additional phase-II data, the western half of the KPI subject property is being impacted by a plume of 1,1,1-TCA originating from an unknown source located west-northwest of the facility. A 1,1,1-TCA laboratory concentration of 61.0 ppb was detected at location T-7A west (up-gradient) of the KPI property across Mosley Street. It must be noted that location T-7A was selected after field analyses indicated 1,1,1-TCA at location T-6A (located in the alley between Mosley and Mead Ave., near the southwest corner of the building marked "Parts & Equipment Co.").

Groundwater flow in the vicinity of Kansas Plating, Inc. is moving in a southeasterly direction (Figure-3., page 8). 1,1,1-TCA (among other 8010 constituents) has been historically detected (1989 through 1995) in laboratory grab samples obtained from tap fixtures associated with facility waterwells #1, #2 and #8. The presence of the 1,1,1-TCA in these wells is due to the combination of a southeasterly flow gradient and the large radius of capture induced by the wells utilized at the KPI facility on a continuous basis. As noted in the initial TerraTech report, a short duration pump test conducted at facility waterwell #8 indicated a capture radius of approximately 75.0'. Sustained pumping would likely increase the radius past 100.0' Figure-5. (page 10). is a graph showing 1,1,1-TCA detection in facility wells #2 and #8 in comparison with the annual volume of groundwater pumped from 11/1989 through 11/ 1995. As shown on the graph, 1-1-1-TCA concentration proportionally increased during the years of higher groundwater utilization and decreased during years of lower groundwater utilization.

The 1,1,1-TCA concentration of 560.00 ppb (initial Geoprobe investigation) detected in KDHE monitoring well designation #10 (House Oil LUST Site) is due to the convergence of the plume migrating from the northwest with a second plume located south of Tenth Street (Figure-4., page 9). It must be noted that monitoring well #10 lies approximately 5 feet west of a sanitary sewer manhole. It is highly possible that the second plume is related to a breech in the sanitary sewer near a commercial facility located southwest of the manhole. This facility is reported to be engaged in manufacturing. An enclosure for hazardous waste storage was noted near the northeast corner of this facility near monitoring well #10. The 1,1,1-TCA present in facility waterwell #8 is related to hydraulic capture of the west/northwest plume and the plume located south of the KPI facility.

TerraTech Environmental Service, Inc.

1760 South Saint ~ Wichita, KS 67209
Phone 316-941-4444 ~ Fax 316-941-6311 ~ Email TTES KS@aol.com
Mailing Address: PO Box 427 ~ Wichita, KS 67201-0427



Site: GROUNDWATER GRADIENT MAP
Location: HOUSE OIL / KANSAS PLATING, INC.

Scale: REPRODUCED
Key

FIGURE-3.

APPENDIX B: 8010 ANALYTICAL RESULTS

AMERICAN ANALYTICAL & TECHNICAL SERVICES

10926 E. 55th PLACE TULSA, OK 74146 918 664-0387

Client Name:	TERRATECH ENVIROMENTAL SERVICES 1330 E. 1ST, SUITE 104 WICHITA , KS 67214		
Client ID:	P-1 TERRATEC	Project ID:	
AATS ID:	13247.01	Report:	13247.01
Received:	05/30/97	Analyzed:	05/30/97
Report Date:	06/02/97	Matrix:	Water

Sample Amount: 5.0 RESULTS REPORTED IN ug/L

COMPOUND	RESULTS	REPORTING LIMIT	COMPOUND	RESULTS	REPORTING LIMIT
CHLOROMETHANE	ND	1.0	VINYL CHLORIDE	ND	1.0
BROMOMETHANE	ND	1.0	CHLOROETHANE	ND	1.0
TRICHLOROFLUOROMETHANE	ND	1.0	1,1-DICHLOROETHENE	ND	1.0
METHYLENE CHLORIDE	ND	1.0	trans-1,2-DICHLOROETHENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	CHLOROFORM	ND	1.0
1,1,1-TRICHLOROETHANE	ND	1.0	CARBON TETRACHLORIDE	ND	1.0
,2-DICHLOROETHANE	ND	1.0	TRICHLOROETHENE	0.3 J	1.0
,2-DICHLOROPROPANE	ND	1.0	BROMODICHLOROMETHANE	ND	1.0
2-CHLOROETHYL VINYL ETHER	ND	1.0	cis-1,3-DICHLOROPROPENE	ND	1.0
trans-1,3-DICHLOROPROPENE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
TETRACHLOROETHENE	ND	1.0	DIBROMOCHLOROMETHANE	ND	1.0
CHLOROBENZENE	ND	1.0	BROMOFORM	ND	1.0
1,1,2,2-TETRACHLOROETHANE	ND	1.0	1,3-DICHLOROBENZENE	ND	1.0
1,4-DICHLOROBENZENE	ND	1.0	1,2-DICHLOROBENZENE	ND	1.0

QA Sequence No: 1A053097

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate Recoveries

p-CHLOROTOLUENE (71-123%)	cis-1,2-DICHLOROETHENE (63-129%)
100 %	84 %

** - Outside of QC Limits on both Original and Rerun
B - Compound Also Found in Blank
J - Estimated Value Below Reporting Limit
ND - Not Determined

Approved by: [signature]

Method: EPA 601/SW8010

AMERICAN ANALYTICAL & TECHNICAL SERVICES
926 E. 55th PLACE
LSA, OK 74146

Date: 05/30/97
Episode: 13247
Client: TERRATEC
Project: Oue 6-6, Edd 6-12

SAMPLE LOG-IN RECORD

SAMPLE #	DATE IN	DESCRIPTION	SDG	MA	MC	TEST	PRI	DUE	CONTAINER DESCRIPTION	RESULTS	ANALYST	DATE/TIME
			DH									
13247.01	05/30/97	P-1 TERRATEC	72	7	2	GC110	6	06/06/97	4H HALOGENATED VOA			

Total samples = 1

AMERICAN ANALYTICAL & TECHNICAL SERVICES

10926 E. 55th PLACE TULSA, OK 74146 918 664-0387

LABORATORY QUALITY CONTROL SEQUENCE

METHOD EPA 601/SW8010
SEQUENCE DATE 05/30/97
INSTRUMENT ID : 1A

QA Sequence: 1A053097
Page: 1

LABORATORY BLANK

MATRIX : W
SAMPLE ID : BLANK
SAMPLE AMOUNT : 5.0 g
ANALYSIS DATE : 05/30/97
ANALYSIS TIME : 11:08

AATS NO : BLANK
FILENAME : 00670601.D
DILUTION FACTOR: 1.00

COMPOUND	QUANTITATION LIMIT (ug/L)	AMOUNT FOUND (ug/L)
CHLOROMETHANE	1.0	ND
VINYL CHLORIDE	1.0	ND
BROMOMETHANE	1.0	ND
CHLOROETHANE	1.0	ND
TRICHLOROFLUOROMETHANE	1.0	ND
1,1-DICHLOROETHENE	1.0	ND
METHYLENE CHLORIDE	1.0	ND
trans-1,2-DICHLOROETHENE	1.0	ND
1-DICHLOROETHANE	1.0	ND
HLOROFORM	1.0	ND
1,1,1-TRICHLOROETHANE	1.0	ND
CARBON TETRACHLORIDE	1.0	ND
1,2-DICHLOROETHANE	1.0	ND
TRICHLOROETHENE	1.0	ND
1,2-DICHLOROPROPANE	1.0	ND
BROMODICHLOROMETHANE	1.0	ND
2-CHLOROETHYL VINYL ETHER	1.0	ND
cis-1,3-DICHLOROPROPENE	1.0	ND
trans-1,3-DICHLOROPROPENE	1.0	ND
1,1,2-TRICHLOROETHANE	1.0	ND
TETRACHLOROETHENE	1.0	ND
DIBROMOCHLOROMETHANE	1.0	ND
CHLOROBENZENE	1.0	ND
BROMOFORM	1.0	ND
1,1,2,2-TETRACHLOROETHANE	1.0	ND
1,3-DICHLOROBENZENE	1.0	ND
1,4-DICHLOROBENZENE	1.0	ND
1,2-DICHLOROBENZENE	1.0	ND

SURROGATE RECOVERY (cis-1,2-DICHLOROETHENE): 88 %
SURROGATE RECOVERY (p-CHLOROTOLUENE): 98 %

		MS	MSD
	Cis 1,2 Dich	100 %	101 %
BFB	p-chloro	102 %	104 %

AMERICAN ANALYTICAL & TECHNICAL SERVICES

10926 E. 55th PLACE TULSA, OK 74146 918 664-0387

LABORATORY QUALITY CONTROL SEQUENCE

METHOD EPA 601/SW8010
SEQUENCE DATE 05/30/97
INSTRUMENT ID : 1A

QA Sequence: 1A053097
Page: 2

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

SPIKE COMPOUND	SPIKE CONC(ug/L)	BLANK SAMPLE CONC. (ug/L)	CONTROLMS MATRIX SPIKE CONC. (ug/L)	MS PERCENT RECOVERY	CONTROLMD SPIKE DUPLICATE CONC. (ug/L)	MSD PERCENT RECOVERY	RECOVERY PERCENT DIFFERENCE
CHLOROMETHANE	20.0	0.0	14.6	73.0	15.2	76.0	4.03
VINYL CHLORIDE	20.0	0.0	14.3	71.5	16.2	81.0	12.46
BROMOMETHANE	20.0	0.1	13.6	67.5	15.4	76.5	12.50
CHLOROETHANE	20.0	0.0	16.1	80.5	16.6	83.0	3.06
TRICHLOROFLUOROMETHANE	20.0	0.2	15.2	75.0	15.9	78.5	4.56
1,1-DICHLOROETHENE	20.0	0.0	14.6	73.0	15.2	76.0	4.03
METHYLENE CHLORIDE	20.0	0.4	15.9	77.5	17.5	85.5	9.22
trans-1,2-DICHLOROETHENE	20.0	0.0	17.4	87.0	17.8	89.0	2.27
1,1-DICHLOROETHANE	20.0	0.0	18.9	94.5	19.2	96.0	1.57
CHLOROFORM	20.0	0.4	20.4	100.0	20.7	101.5	1.49
1,1,1-TRICHLOROETHANE	20.0	0.0	19.0	95.0	18.5	92.5	2.67
CARBON TETRACHLORIDE	20.0	0.0	17.8	89.0	18.3	91.5	2.77
1,2-DICHLOROETHANE	20.0	0.0	19.1	95.5	19.0	95.0	0.52
TRICHLOROETHENE	20.0	0.0	19.4	97.0	19.4	97.0	0.00
1,2-DICHLOROPROPANE	20.0	0.0	20.3	101.5	19.7	98.5	3.00
BROMODICHLOROMETHANE	20.0	0.0	20.5	102.5	20.3	101.5	0.98
2-CHLOROETHYL VINYL ETHER	20.0	0.0	22.2	111.0	23.8	119.0	6.96
1,3-DICHLOROPROPENE	20.0	0.0	18.2	91.0	17.7	88.5	2.78
trans-1,3-DICHLOROPROPENE	20.0	0.0	17.8	89.0	18.4	92.0	3.31
1,1,2-TRICHLOROETHANE	20.0	0.0	20.0	100.0	19.7	98.5	1.51
TETRACHLOROETHENE	20.0	0.0	18.1	90.5	18.5	92.5	2.18
DIBROMOCHLOROMETHANE	20.0	0.0	18.6	93.0	19.9	99.5	6.75
CHLOROBENZENE	20.0	0.0	20.6	103.0	19.8	99.0	3.96
BROMOFORM	20.0	0.0	17.1	85.5	17.2	86.0	0.58
1,1,2,2-TETRACHLOROETHANE	20.0	0.0	19.0	95.0	19.6	98.0	3.11
1,3-DICHLOROBENZENE	20.0	0.0	20.0	100.0	19.4	97.0	3.04
1,4-DICHLOROBENZENE	20.0	0.0	20.6	103.0	19.5	97.5	5.49
1,2-DICHLOROBENZENE	20.0	0.0	20.5	102.5	19.1	95.5	7.07

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany • Broken Arrow, Oklahoma 74012 • Office (918) 251-2858 • Fax (918) 251-2599

TERRATECH
1760 BAEHR
WICHITA, KS 67209
Attn: BRUCE REED

REPORT: 31957.03

DATE: 12/05/97

SWLO # : 31957.03
SAMPLE #: T-7
SAMPLE MATRIX : WATER
PROJECT : BHI
LOCATION:
METHOD REFERENCE: SW 8010

DEPTH FROM : 0.00
DEPTH TO : 0.00
DATE SAMPLED : 11/20/97
DATE RECEIVED : 11/24/97
DATE PREPARED :
DATE ANALYZED : 12/01/97
DILUTION FACTOR: 5.00

PURGEABLE HALOCARBONS
RESULTS REPORT IN ug/l

PARAMETER	RESULTS**		PARAMETER	RESULTS**	
CHLOROMETHANE	5	U	VINYL CHLORIDE	5	U
BROMOMETHANE	5	U	CHLOROETHANE	5	U
TRICHLOROFLUOROMETHANE	5	U	1,1-DICHLOROETHENE	3.4	J
METHYLENE CHLORIDE	5	U	TRANS-1,2-DICHLOROETHENE	5	U
1,1-DICHLOROETHANE	5	U	CIS-1,2-DICHLOROETHENE	5	U
CHLOROFORM	5	U	1,1,1-TRICHLOROETHANE	61	
CARBON TETRACHLORIDE	5	U	1,2-DICHLOROETHANE	5	U
TRICHLOROETHENE	5	U	1,2-DICHLOROPROPANE	5	U
BROMODICHLOROMETHANE	5	U	2-CHLOROETHYL VINYL ETHER	5	U
CIS-1,3-DICHLOROPROPENE	5	U	TRANS-1,3-DICHLOROPROPENE	5	U
1,1,2-TRICHLOROETHANE	5	U	TETRACHLOROETHENE	5	U
DIBROMOCHLOROMETHANE	5	U	1,2-DIBROMOETHANE	5	U
CHLOROBENZENE	5	U	BROMOFORM	5	U
1,1,2,2-TETRACHLOROETHANE	5	U	1,3-DICHLOROBENZENE	5	U
1,4-DICHLOROBENZENE	5	U	1,2-DICHLOROBENZENE	5	U

QA/QC SURROGATE RECOVERIES

2-BROMO-1-CHLOROPROPANE	(72-119)	97%	P-CHLOROTOLUENE	(71-123)	91%

** RESULTS REPORTED TO A MAXIMUM OF 3 SIGNIFICANT FIGURES

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:RATECH
1760 BAEHR
WICHITA, KS 67209
Attn: BRUCE REED

REPORT: 31957.02

DATE: 12/05/97

SWLO # : 31957.02
SAMPLE #: MW-4
SAMPLE MATRIX : WATER
PROJECT : BHI
LOCATION:
METHOD REFERENCE: SW 8010

DEPTH FROM : 0.00
DEPTH TO : 0.00
DATE SAMPLED : 11/20/97
DATE RECEIVED : 11/24/97
DATE PREPARED :
DATE ANALYZED : 12/01/97
DILUTION FACTOR: 5.00

PURGEABLE HALOCARBONS
RESULTS REPORT IN ug/l

PARAMETER	RESULTS**		PARAMETER	RESULTS**	
CHLOROMETHANE	5	U	VINYL CHLORIDE	3	J
BROMOMETHANE	5	U	CHLOROETHANE	5	U
TRICHLOROFLUOROMETHANE	5	U	1,1-DICHLOROETHENE	5	U
METHYLENE CHLORIDE	5	U	TRANS-1,2-DICHLOROETHENE	5	U
1,1-DICHLOROETHANE	2.5	J	CIS-1,2-DICHLOROETHENE	56.3	
CHLOROFORM	5	U	1,1,1-TRICHLOROETHANE	5	U
CARBON TETRACHLORIDE	5	U	1,2-DICHLOROETHANE	5	U
TRICHLOROETHENE	116		1,2-DICHLOROPROPANE	5	U
DIBROMOCHLOROMETHANE	5	U	2-CHLOROETHYL VINYL ETHER	5	U
CIS-1,3-DICHLOROPROPENE	5	U	TRANS-1,3-DICHLOROPROPENE	5	U
1,1,2-TRICHLOROETHANE	5	U	TETRACHLOROETHENE	2.8	J
DIBROMOCHLOROMETHANE	5	U	1,2-DIBROMOETHANE	5	U
CHLOROBENZENE	5	U	BROMOFORM	5	U
1,1,2,2-TETRACHLOROETHANE	5	U	1,3-DICHLOROBENZENE	5	U
1,4-DICHLOROBENZENE	5	U	1,2-DICHLOROBENZENE	5	U

QA/QC SURROGATE RECOVERIES

2-BROMO-1-CHLOROPROPANE (72-119) 91% P-CHLOROTOLUENE (71-123) 88%

**RESULTS REPORTED TO A MAXIMUM OF 3 SIGNIFICANT FIGURES

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

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.RRATECH
1760 BAEHR
WICHITA, KS 67209
Attn: BRUCE REED

REPORT: 31994.01

DATE: 12/06/97

SWLO # : 31994.01
SAMPLE #: MW9
SAMPLE MATRIX : WATER
PROJECT : BHI
LOCATION:
METHOD REFERENCE: SW 8010

DEPTH FROM : 0.00
DEPTH TO : 0.00
DATE SAMPLED : 11/20/97
DATE RECEIVED : 12/01/97
DATE PREPARED :
DATE ANALYZED : 12/03/97
DILUTION FACTOR: 5.00

PURGEABLE HALOCARBONS
RESULTS REPORT IN ug/l

PARAMETER	RESULTS**		PARAMETER	RESULTS**	
CHLOROMETHANE	5	U	VINYL CHLORIDE	6.4	
BROMOMETHANE	5	U	CHLOROETHANE	5	U
TRICHLOROFLUOROMETHANE	5	U	1,1-DICHLOROETHENE	5	U
METHYLENE CHLORIDE	5	U	TRANS-1,2-DICHLOROETHENE	5	U
1,1-DICHLOROETHANE	5	U	CIS-1,2-DICHLOROETHENE	66.8	
CHLOROFORM	5	U	1,1,1-TRICHLOROETHANE	5	U
CARBON TETRACHLORIDE	5	U	1,2-DICHLOROETHANE	5	U
TRICHLOROETHENE	146		1,2-DICHLOROPROPANE	5	U
DIBROMODICHLOROMETHANE	5	U	2-CHLOROETHYL VINYL ETHER	5	U
CIS-1,3-DICHLOROPROPENE	5	U	TRANS-1,3-DICHLOROPROPENE	5	U
1,1,2-TRICHLOROETHANE	5	U	TETRACHLOROETHENE	5	U
DIBROMOCHLOROMETHANE	5	U	1,2-DIBROMOETHANE	5	U
CHLOROBENZENE	5	U	BROMOFORM	5	U
1,1,2,2-TETRACHLOROETHANE	5	U	1,3-DICHLOROBENZENE	5	U
1,4-DICHLOROBENZENE	5	U	1,2-DICHLOROBENZENE	5	U

QA/QC SURROGATE RECOVERIES

2-BROMO-1-CHLOROPROPANE	(72-119)	96%	P-CHLOROTOLUENE	(71-123)	95%

**RESULTS REPORTED TO A MAXIMUM OF 3 SIGNIFICANT FIGURES

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany • Broken Arrow, Oklahoma 74012 • Office (918) 251-2858 • Fax (918) 251-2599

RATECH
1760 BAEHR
WICHITA, KS 67209
Attn: BRUCE REED

REPORT: 31994.02

DATE: 12/06/97

SWLO # : 31994.02
SAMPLE #: MW11
SAMPLE MATRIX : WATER
PROJECT : BHI
LOCATION:
METHOD REFERENCE: SW 8010

DEPTH FROM : 0.00
DEPTH TO : 0.00
DATE SAMPLED : 11/20/97
DATE RECEIVED : 12/01/97
DATE PREPARED :
DATE ANALYZED : 12/03/97
DILUTION FACTOR: 5.00

PURGEABLE HALOCARBONS
RESULTS REPORT IN ug/l

PARAMETER	RESULTS**		PARAMETER	RESULTS**	
CHLOROMETHANE	5	U	VINYL CHLORIDE	5	
BROMOMETHANE	5	U	CHLOROETHANE	5	U
TRICHLOROFLUOROMETHANE	5	U	1,1-DICHLOROETHENE	5	U
METHYLENE CHLORIDE	5	U	TRANS-1,2-DICHLOROETHENE	5	U
1,1-DICHLOROETHANE	5	U	CIS-1,2-DICHLOROETHENE	38.6	
CHLOROFORM	5	U	1,1,1-TRICHLOROETHANE	5	U
CARBON TETRACHLORIDE	5	U	1,2-DICHLOROETHANE	5	U
TRICHLOROETHENE	59.6		1,2-DICHLOROPROPANE	5	U
BROMODICHLOROMETHANE	5	U	2-CHLOROETHYL VINYL ETHER	5	U
CIS-1,3-DICHLOROPROPENE	5	U	TRANS-1,3-DICHLOROPROPENE	5	U
1,1,2-TRICHLOROETHANE	5	U	TETRACHLOROETHENE	5	U
DIBROMOCHLOROMETHANE	5	U	1,2-DIBROMOETHANE	5	U
CHLOROBENZENE	5	U	BROMOFORM	5	U
1,1,2,2-TETRACHLOROETHANE	5	U	1,3-DICHLOROBENZENE	5	U
1,4-DICHLOROBENZENE	5	U	1,2-DICHLOROBENZENE	5	U

QA/QC SURROGATE RECOVERIES

2-BROMO-1-CHLOROPROPANE	(72-119)	99%	9-CHLOROTOLUENE	(71-123)	96%

**RESULTS REPORTED TO A MAXIMUM OF 3 SIGNIFICANT FIGURES

ANALYTICAL RESULTS
Results For Multiple Methods

NEI/GTEL Client ID: TTE01MIS74
Login Number: W7090105
Project ID (number): TTE01MIS74
Project ID (name): KPI/WICHITA/KS

Method: See Below
Matrix: Aqueous

	NEI/GTEL Sample Number	W7090105-04	W7090105-05	--	--
	Client ID	P-2	MW40S	--	--
	Date Sampled	09/05/97	09/05/97	--	--
EPA 6010A	Date Prepared	09/22/97	09/22/97	--	--
EPA 6010A	Date Analyzed	09/22/97	09/22/97	--	--
EPA 6010A	Dilution Factor	1.00	1.00	--	--
EPA 7060A	Date Prepared	09/17/97	09/17/97	--	--
EPA 7060A	Date Analyzed	09/17/97	09/17/97	--	--
EPA 7060A	Dilution Factor	1.00	1.00	--	--
EPA 7421	Date Prepared	09/15/97	09/15/97	--	--
EPA 7421	Date Analyzed	09/15/97	09/15/97	--	--
EPA 7421	Dilution Factor	1.00	1.00	--	--
EPA 7470A	Date Prepared	09/16/97	09/16/97	--	--
EPA 7470A	Date Analyzed	09/17/97	09/17/97	--	--
EPA 7470A	Dilution Factor	1.00	1.00	--	--
EPA 7740	Date Prepared	09/17/97	09/17/97	--	--
EPA 7740	Date Analyzed	09/17/97	09/17/97	--	--
EPA 7740	Dilution Factor	1.00	1.00	--	--

Analyte		Reporting Limit	Units		Concentration:		
Inorganics (MT, WC)							
Arsenic	EPA 7060A	10	ug/L	< 10.	< 10.	--	--
Barium	EPA 6010A	200	ug/L	< 200	250	--	--
Cadmium	EPA 6010A	20.	ug/L	< 20.	< 20.	--	--
Chromium	EPA 6010A	30.	ug/L	< 30.	< 30.	--	--
Lead	EPA 7421	4.0	ug/L	< 4.0	< 4.0	--	--
Mercury	EPA 7470A	0.5	ug/L	0.9	< 0.5	--	--
Selenium	EPA 7740	10	ug/L	12.	13.	--	--
Silver	EPA 6010A	20.	ug/L	< 20.	< 20.	--	--

Notes:

Dilution Factor:
Dilution factor indicates the adjustments made for sample dilution.

EPA 6010A:
Digestion for Total Metals by EPA Method 3010A.

EPA 7421:
Digestion for Total Metals by EPA Method 3020A.

EPA 7060A, EPA 7740:
Digestion by EPA Method 7060.

EPA 7470A:
Digestion is method specific.

EPA 6010A, EPA 7060A, EPA 7421, EPA 7470A, EPA 7740:

Figure(s)
Aerial Photographs and Sample Location Map(s)

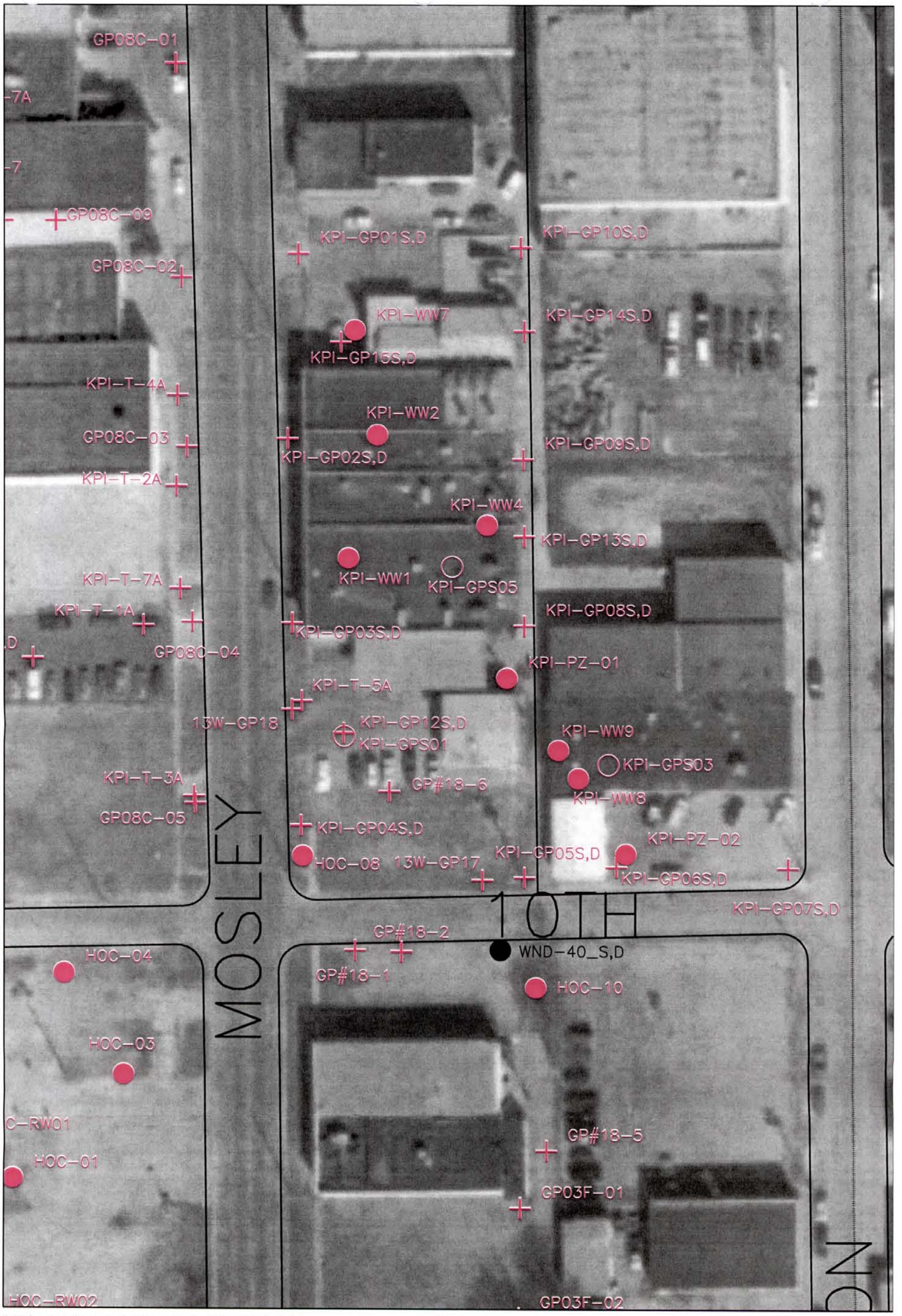
CDM Camp Dresser & McKee

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Kansas Plating Facility



CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Kansas Plating Facility

Table(s)
Analytical Data Table(s)

Kansas Plating Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#18-1	S/20	01/08/98		µg/L	<1	**18**	**5.7**	<1	**110**	**7.5**	**26**	<1	**8.1**	<1	**243.7**
GP#18-1	S/20	10/15/99		µg/L	<1	**12**	**9.7**	**1**	**5.5**	**4.4**	<1	<1	<1	<1	**168.1**
GP#18-1	D/33	01/08/98		µg/L	**1.9**	**62**	**17**	<1	**5.9**	**1**	**2.1**	<1	<1	<1	**52.1**
GP#18-2	S/20	01/08/98		µg/L	**2.2**	**60**	**16**	<1	**5.9**	<1	**2.3**	<1	<1	<1	**52.1**
GP#18-2	S/20	10/15/99		µg/L	<1	**26**	**9.2**	<1	**38**	**1**	**8.8**	<1	**1**	<1	<5.4
GP#18-2	D/32	01/08/98		µg/L	**2.8**	**64**	**16**	<1	**5.4**	**1**	**1.8**	<1	<1	<1	**49.1**
GP#18-5	S/18	06/04/98		µg/L	<1	**180**	**12**	<1	**110**	**12**	**33**	<1	**1.2**	<1	<5.4
GP#18-5	S/18	10/15/99		µg/L	<1	**120**	**10**	<1	**99**	**6.6**	**26**	<1	**2**	<1	<5.4
GP#18-5	D/30	06/04/98		µg/L	<1	**39**	**10**	<1	**12**	**2.7**	**6**	<1	<1	<1	<5.4
GP#18-6	S/18	06/04/98		µg/L	<1	**50**	**8.9**	<1	**100**	**1.3**	**38**	<1	**9.9**	<1	<5.4
GP#18-6	S/18	10/15/99		µg/L	<1	**35**	**6.3**	<1	**180**	**3.4**	**52**	<1	**5.8**	<1	<5.4
GP#18-6	D/30	06/04/98		µg/L	<1	**58**	**9.4**	<1	**2.1**	<1	<1	<1	<1	<1	<5.4
GP08C-01	S/17	12/17/99		µg/L	**2.6**	**150**	**63**	**3**	<1	**3.1**	**1.1**	<1	<1	<1	<5.4
GP08C-01	D/29	12/17/99		µg/L	**2.9**	**130 JH**	**61 JH**	**3.7**	<1	**3.8**	**1.6**	<1	<1	<1	<5.4
GP08C-01	D/29	12/17/99	DUP	µg/L	**2.1**	**130 JH**	**61 JH**	**3.7**	<1	**3.6**	**1.5**	<1	<1	<1	<5.4
GP08C-02	S/17	12/17/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08C-02	D/29	12/17/99		µg/L	**5.7**	**230 JH**	**81 JH**	**6.3**	<1	**5**	**2.3**	<1	<1	<1	<5.4
GP08C-03	S/17	12/17/99		µg/L	**1.3**	**48**	**22**	<1	<1	**1.1**	<1	<1	<1	<1	<5.4
GP08C-03	D/29	12/17/99		µg/L	**6.7**	**210 JH**	**77 JH**	**9.6**	<1	**4.5**	**2.1**	<1	<1	<1	<5.4
GP08C-04	S/17	12/17/99		µg/L	<1	**1.9**	<1	<1	**50**	<1	**2.9**	<1	<1	<1	<5.4
GP08C-04	D/29	12/17/99		µg/L	**6.9**	**190 JH**	**66 JH**	**7.1**	**1.9**	**4.2**	**2.1**	<1	<1	<1	<5.4
GP08C-05	S/17	12/17/99		µg/L	<1	**2.3**	**1.1**	<1	**8.1**	<1	<1	<1	<1	<1	<5.4
GP08C-05	D/26	12/17/99		µg/L	**5.2**	**140 JH**	**57 JH**	**3.4**	<1	**3.5**	**1.2**	<1	<1	<1	<5.4
GPA31-2	S/20.5	12/22/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	**11**	<1	<5.4
GPA31-2	D/31	12/22/97		µg/L	**1.9**	**110**	**19**	<1	<1	<1	<1	<1	**8.1**	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethe
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Kansas Plating, Inc,
HOC-10 Data, 5/25/96

New STA_ID2	S_DATE	CHEM REPORT NAME	RESULT	ECT_F	T_LI	UNITS
KPI-GPW-ALLEY	5/25/96	Benzene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	1,1-Dichloroethane	23		5	ug/L
KPI-GPW-ALLEY	5/25/96	Tetrachloroethene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Trichloroethene	110		5	ug/L
KPI-GPW-ALLEY	5/25/96	1,1,2,2-Tetrachloroethane		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Bromomethane		U	10	ug/L
KPI-GPW-ALLEY	5/25/96	Styrene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Carbon disulfide		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Methyl ethyl ketone		U	100	ug/L
KPI-GPW-ALLEY	5/25/96	cis-1,2-Dichloroethene	29		5	ug/L
KPI-GPW-ALLEY	5/25/96	Bromoform		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Xylene (Total)		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	2-Hexanone		U	50	ug/L
KPI-GPW-ALLEY	5/25/96	Ethylbenzene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Chlorobenzene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Toluene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	1,2-Dichloroethane		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	1,1,2-Trichloroethane		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Chloromethane		U	10	ug/L
KPI-GPW-ALLEY	5/25/96	2-Chloroethylvinyl ether		U	10	ug/L
KPI-GPW-ALLEY	5/25/96	Vinyl chloride		U	10	ug/L
KPI-GPW-ALLEY	5/25/96	1,1,1-Trichloroethane	560		25	ug/L
KPI-GPW-ALLEY	5/25/96	Methylene chloride		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Acetone		U	100	ug/L
KPI-GPW-ALLEY	5/25/96	1,1-Dichloroethene	82		5	ug/L
KPI-GPW-ALLEY	5/25/96	trans-1,2-Dichloroethene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Dibromochloromethane		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	4-Methyl-2-pentanone		U	50	ug/L
KPI-GPW-ALLEY	5/25/96	Chloroethane		U	10	ug/L
KPI-GPW-ALLEY	5/25/96	cis-1,3-Dichloropropene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Carbon Tetrachloride		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	trans-1,3-Dichloropropene		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	1,2-Dichloropropane		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Bromodichloromethane		U	5	ug/L
KPI-GPW-ALLEY	5/25/96	Vinyl acetate		U	50	ug/L
KPI-GPW-ALLEY	5/25/96	Chloroform		U	5	ug/L

1993 WND-40 DATA

Appendix A Table 1
29 & Mead Investigation
VOC analytical Results in Groundwater
North Industrial Corridor - Wichita, Kansas

Map ID		WND-37_S,D	WND-37_S,D	WND-37_S,D	WND-37_S,D	WND-38_S,D	WND-38_S,D	WND-39_S,D	WND-39_S,D	WND-40_S,D	WND-40_S,D	WND-41_S,D	WND-41_S,D
Station ID		WND-37D	WND-37D	WND-37S	WND-37S	WND-38D	WND-38S	WND-39D	WND-39S	WND-40D	WND-40S	WND-41D	WND-41S
Depth Interval/Depth		D/	Q1 D/30'	S/	Q1 S/15'	D/	S/	D/	S/	D/	S/	D/	S/
Date		6/4/92	6/4/92	6/4/92	6/4/92	4/6/93	4/6/93	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93	4/7/93
Parameter	Units												
1,1,1,2-Tetrachloroethane	ug/L					<0.4	<0.4	<2	<2	<2	<2	<20	<2
1,1,1-Trichloroethane	ug/L	1.8	1	<0.2	<0.1	7.3	<0.4	7.4	7.5	59	23	<20	<2
1,1,2,2-Tetrachloroethane	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
1,1,2-Trichloroethane	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
1,1-Dichloroethane	ug/L	1.1	<1	<0.2	<0.1	<0.4	<0.4	9	<2	18	15	6.7	<2
1,1-Dichloroethene	ug/L	1.1	<2.5	<0.2	<0.25	<0.4	<0.4	<2	<2	22	11	3.3	<2
1,2-Dibromomethane	ug/L												
1,2-Dichlorobenzene	ug/L	<0.8	<1.5	<0.8	<0.15	<0.4	<0.4	<2	<2	<2	<2	<20	<2
1,2-Dichloroethane	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
1,2-Dichloropropane	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
1,3-Dichlorobenzene	ug/L	<0.8	<1.5	<0.8	<0.15	<0.4	<0.4	<2	<2	<2	<2	<20	<2
1,4-Dichlorobenzene	ug/L	<0.8	<1.5	<0.8	<0.15	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Benzene	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Bromobenzene	ug/L					<0.4	<0.4	<2	<2	<2	<2	<20	<2
Bromodichloromethane	ug/L	<0.4	<1	<0.4	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Bromoform	ug/L	<1.2	<4	<1.2	<0.4	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Bromomethane	ug/L	<1.2	<25	<1.2	<2.5	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Carbon disulfide	ug/L												
Carbon Tetrachloride	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Chlorobenzene	ug/L	<0.2	<2	<0.2	<0.2	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Chloroethane	ug/L	<0.8	<5	<0.8	<0.5	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Chloroform	ug/L	0.3	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	5.1	2.3	<2
Chloromethane	ug/L	<5	<25	<5	<2.5	<0.4	<0.4	2.5	<2	<2	<2	<20	<2
cis-1,2-Dichloroethene	ug/L	5.3	5	0.7	0.6	99	5.3	<2	13	16	10	140	25
cis-1,3-Dichloropropene	ug/L	<0.3	<1	<0.3	<0.1	<0.4	<0.4	24	<2	<2	<2	<20	<2
Dibromochloromethane	ug/L	<0.3	<2	<0.3	<0.2	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Dichlorodifluoromethane	ug/L		<25		<2.5	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Ethylbenzene	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
m,p-Xylene	ug/L		<1		<0.1								
Methylene chloride	ug/L	<0.8	<1	<0.8	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
MTBE	ug/L												
o-Xylene	ug/L		<1		<0.1								
Tetrachloroethane	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	5.8	3.8	<2	<2	7.7	5.7
Toluene	ug/L	<0.2	<1	<0.2	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	4.8
trans-1,2-Dichloroethene	ug/L	<0.2	<1	<0.2	<0.1	4.8	<0.4	<2	<2	<2	<2	5.1	<2
trans-1,3-Dichloropropene	ug/L	<0.3	<1	<0.3	<0.1	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Trichloroethene	ug/L	63	67	22	22.5	470	46	240	230	13	39	580	44
Trichlorofluoromethane	ug/L	<0.3	<5	<0.3	<0.5	<0.4	<0.4	85	12	<2	<2	17	3.2
TVOCs	ug/L												
Vinyl chloride	ug/L	<0.8	<5	<0.8	<0.5	<0.4	<0.4	<2	<2	<2	<2	<20	<2
Xylene (Total)	ug/L	<0.4		<0.4		<0.4	<0.4	<2	<2	<2	<2	<20	11

Additional VOC analytes reported non-
< = Not detected at this value
Blank = This chemical not analyzed in t
B = Chemical detected in associated bl
J = Estimated value
E = Estimated value

NIC Phase 2 Data
Kansas Plating, Inc.

Station	Date_Coll	Depth	QC Code	Compound	Results	PRL	Units
GP03F-01	11/22/99	17		trans-1,2-Dichloroethene	ND	1	ug/l
GP03F-01	11/22/99	17		Tetrachloroethene	ND	1	ug/l
GP03F-01	11/22/99	17		Chloromethane	ND	1	ug/l
GP03F-01	11/22/99	17		cis-1,2-Dichloroethene	13	1	ug/l
GP03F-01	11/22/99	17		cis-1,3-Dichloropropene	ND	1	ug/l
GP03F-01	11/22/99	17		Dibromochloromethane	ND	1	ug/l
GP03F-01	11/22/99	17		Ethylbenzene	ND	1	ug/l
GP03F-01	11/22/99	17		M&P-Xylene	ND	1	ug/l
GP03F-01	11/22/99	17		Chloroform	ND	1	ug/l
GP03F-01	11/22/99	17		Methylene Chloride	ND	1	ug/l
GP03F-01	11/22/99	17		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-01	11/22/99	17		Trichloroethene	170	10	ug/l
GP03F-01	11/22/99	17		Trichlorofluoromethane	ND	1	ug/l
GP03F-01	11/22/99	17		Vinyl Chloride	ND	1	ug/l
GP03F-01	11/22/99	17		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	17		1,2-Dichloroethane	ND	1	ug/l
GP03F-01	11/22/99	17		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-01	11/22/99	17		Benzene	ND	1	ug/l
GP03F-01	11/22/99	17		Bromodichloromethane	ND	1	ug/l
GP03F-01	11/22/99	17		Bromoform	ND	1	ug/l
GP03F-01	11/22/99	17		1,1,1-Trichloroethane	68	1	ug/l
GP03F-01	11/22/99	17		Carbon Tetrachloride	ND	1	ug/l
GP03F-01	11/22/99	17		O-Xylene (1,2-Dimethylbenzene)	ND	1	ug/l
GP03F-01	11/22/99	17		Bromomethane	ND	1	ug/l
GP03F-01	11/22/99	17		1,1-Dichloroethane	4.4	1	ug/l
GP03F-01	11/22/99	17		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-01	11/22/99	17		1,1-Dichloroethene	19	1	ug/l
GP03F-01	11/22/99	17		1,2-Dichloropropane	ND	1	ug/l
GP03F-01	11/22/99	17		Chloroethane	ND	1	ug/l
GP03F-01	11/22/99	17		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	17		Chlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	17		1,2-Dichlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	17		Toluene	ND	1	ug/l
GP03F-01	11/22/99	25		Toluene	ND	1	ug/l
GP03F-01	11/22/99	25		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	25		1,2-Dichloropropane	ND	1	ug/l
GP03F-01	11/22/99	25		1,2-Dichloroethane	ND	1	ug/l
GP03F-01	11/22/99	25		1,2-Dichlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	25		1,1-Dichloroethene	8.6	1	ug/l
GP03F-01	11/22/99	25		1,1-Dichloroethane	2.4	1	ug/l
GP03F-01	11/22/99	25		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-01	11/22/99	25		1,1,1-Trichloroethane	20	1	ug/l
GP03F-01	11/22/99	25		Chloroethane	ND	1	ug/l
GP03F-01	11/22/99	25		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-01	11/22/99	25		Trichloroethene	48	1	ug/l
GP03F-01	11/22/99	25		Benzene	ND	1	ug/l
GP03F-01	11/22/99	25		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-01	11/22/99	25		Trichlorofluoromethane	ND	1	ug/l

NIC Phase 2 Data
Kansas Plating, Inc.

Station	Date_Coll	Depth	QC Code	Compound	Results	PRL	Units
GP03F-01	11/22/99	25		Tetrachloroethene	ND	1	ug/l
GP03F-01	11/22/99	25		O-Xylene (1,2-Dimethylbenzene)	ND	1	ug/l
GP03F-01	11/22/99	25		Methylene Chloride	ND	1	ug/l
GP03F-01	11/22/99	25		Ethylbenzene	ND	1	ug/l
GP03F-01	11/22/99	25		Dibromochloromethane	ND	1	ug/l
GP03F-01	11/22/99	25		cis-1,3-Dichloropropene	ND	1	ug/l
GP03F-01	11/22/99	25		cis-1,2-Dichloroethene	7.2	1	ug/l
GP03F-01	11/22/99	25		Chloromethane	ND	1	ug/l
GP03F-01	11/22/99	25		Chloroform	ND	1	ug/l
GP03F-01	11/22/99	25		Vinyl Chloride	ND	1	ug/l
GP03F-01	11/22/99	25		M&P-Xylene	ND	1	ug/l
GP03F-01	11/22/99	25		Carbon Tetrachloride	ND	1	ug/l
GP03F-01	11/22/99	25		Bromoform	ND	1	ug/l
GP03F-01	11/22/99	25		Bromomethane	ND	1	ug/l
GP03F-01	11/22/99	25		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	25		Chlorobenzene	ND	1	ug/l
GP03F-01	11/22/99	25		Bromodichloromethane	ND	1	ug/l
GP03F-01	11/22/99	25		trans-1,2-Dichloroethene	ND	1	ug/l
GP03F-02	11/23/99	17		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	17		1,1-Dichloroethane	10	1	ug/l
GP03F-02	11/23/99	17		Dibromochloromethane	ND	1	ug/l
GP03F-02	11/23/99	17		cis-1,2-Dichloroethene	110	20	ug/l
GP03F-02	11/23/99	17		Vinyl Chloride	ND	1	ug/l
GP03F-02	11/23/99	17		Trichlorofluoromethane	ND	1	ug/l
GP03F-02	11/23/99	17		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-02	11/23/99	17		Trichloroethene	1100	20	ug/l
GP03F-02	11/23/99	17		Chloroform	1.3	1	ug/l
GP03F-02	11/23/99	17		Bromodichloromethane	ND	1	ug/l
GP03F-02	11/23/99	17		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	17		1,1,1-Trichloroethane	140	20	ug/l
GP03F-02	11/23/99	17		Chlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	17		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-02	11/23/99	17		Bromomethane	ND	1	ug/l
GP03F-02	11/23/99	17		trans-1,2-Dichloroethene	8.0	1	ug/l
GP03F-02	11/23/99	17		Carbon Tetrachloride	ND	1	ug/l
GP03F-02	11/23/99	17		1,2-Dichloropropane	ND	1	ug/l
GP03F-02	11/23/99	17		Bromoform	ND	1	ug/l
GP03F-02	11/23/99	17		1,2-Dichloroethane	ND	1	ug/l
GP03F-02	11/23/99	17		1,2-Dichlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	17		1,1-Dichloroethene	32	1	ug/l
GP03F-02	11/23/99	17		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-02	11/23/99	17		Tetrachloroethene	15	1	ug/l
GP03F-02	11/23/99	17		Toluene	ND	1	ug/l
GP03F-02	11/23/99	17		cis-1,3-Dichloropropene	ND	1	ug/l
GP03F-02	11/23/99	17		O-Xylene (1,2-Dimethylbenzene)	ND	1.1	ug/l
GP03F-02	11/23/99	17		Methylene Chloride	ND	1	ug/l
GP03F-02	11/23/99	17		M&P-Xylene	ND	1.3	ug/l
GP03F-02	11/23/99	17		Ethylbenzene	ND	1	ug/l

NIC Phase 2 Data
Kansas Plating, Inc.

Station	Date_Coll	Depth	QC Code	Compound	Results	PRL	Units
GP03F-02	11/23/99	17		Chloromethane	ND	1	ug/l
GP03F-02	11/23/99	17		Chloroethane	ND	1	ug/l
GP03F-02	11/23/99	17		Benzene	ND	1	ug/l
GP03F-02	11/23/99	35		1,1,1-Trichloroethane	6.9	1	ug/l
GP03F-02	11/23/99	35		Bromoform	ND	1	ug/l
GP03F-02	11/23/99	35		Trichlorofluoromethane	ND	1	ug/l
GP03F-02	11/23/99	35		Trichloroethene	91	5	ug/l
GP03F-02	11/23/99	35		Chloroethane	ND	1	ug/l
GP03F-02	11/23/99	35		1,1-Dichloroethene	4.0	1	ug/l
GP03F-02	11/23/99	35		Chlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	35		O-Xylene (1,2-Dimethylbenzene)	ND	1.1	ug/l
GP03F-02	11/23/99	35		Methylene Chloride	ND	1	ug/l
GP03F-02	11/23/99	35		M&P-Xylene	ND	1.3	ug/l
GP03F-02	11/23/99	35		Ethylbenzene	ND	1	ug/l
GP03F-02	11/23/99	35		Dibromochloromethane	ND	1	ug/l
GP03F-02	11/23/99	35		trans-1,2-Dichloroethene	1.1	1	ug/l
GP03F-02	11/23/99	35		Bromomethane	ND	1	ug/l
GP03F-02	11/23/99	35		Carbon Tetrachloride	ND	1	ug/l
GP03F-02	11/23/99	35		1,2-Dichloroethane	ND	1	ug/l
GP03F-02	11/23/99	35		Bromodichloromethane	ND	1	ug/l
GP03F-02	11/23/99	35		Benzene	ND	1	ug/l
GP03F-02	11/23/99	35		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	35		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	35		1,2-Dichloropropane	ND	1	ug/l
GP03F-02	11/23/99	35		cis-1,3-Dichloropropene	ND	1	ug/l
GP03F-02	11/23/99	35		1,2-Dichlorobenzene	ND	1	ug/l
GP03F-02	11/23/99	35		1,1-Dichloroethane	1.7	1	ug/l
GP03F-02	11/23/99	35		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-02	11/23/99	35		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-02	11/23/99	35		Chloroform	ND	1	ug/l
GP03F-02	11/23/99	35		Toluene	ND	1	ug/l
GP03F-02	11/23/99	35		Chloromethane	ND	1	ug/l
GP03F-02	11/23/99	35		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-02	11/23/99	35		Vinyl Chloride	1.8	1	ug/l
GP03F-02	11/23/99	35		Tetrachloroethene	ND	1	ug/l
GP03F-02	11/23/99	35		cis-1,2-Dichloroethene	30	1	ug/l
GP03F-03	12/01/99	17		Bromodichloromethane	ND	1	ug/l
GP03F-03	12/01/99	17		Methylene Chloride	ND	1	ug/l
GP03F-03	12/01/99	17		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	17		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-03	12/01/99	17		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-03	12/01/99	17		1,1-Dichloroethane	7.5	1	ug/l
GP03F-03	12/01/99	17		1,1-Dichloroethene	11	1	ug/l
GP03F-03	12/01/99	17		1,2-Dichlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	17		Vinyl Chloride	ND	1	ug/l
GP03F-03	12/01/99	17		Benzene	ND	1	ug/l
GP03F-03	12/01/99	17		trans-1 2-Dichloroethene	3.7	1	ug/l
GP03F-03	12/01/99	17		Bromomethane	ND	1	ug/l

NIC Phase 2 Data
Kansas Plating, Inc.

Station	Date_Coll	Depth	QC Code	Compound	Results	PRL	Units
GP03F-03	12/01/99	17		Chlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	17		1,2-Dichloropropane	1.3	1	ug/l
GP03F-03	12/01/99	17		Bromoform	ND	1	ug/l
GP03F-03	12/01/99	17		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	17		M&P-Xylene	ND	1.3	ug/l
GP03F-03	12/01/99	17		1,2-Dichloroethane	ND	1	ug/l
GP03F-03	12/01/99	17		Tetrachloroethene	3.1	1	ug/l
GP03F-03	12/01/99	17		Carbon Tetrachloride	11	1	ug/l
GP03F-03	12/01/99	17		cis-1,2-Dichloroethene	30	1	ug/l
GP03F-03	12/01/99	17		cis-1,3-Dichloropropene	ND	1	ug/l
GP03F-03	12/01/99	17		Trichloroethene	420	5	ug/l
GP03F-03	12/01/99	17		Ethylbenzene	ND	1	ug/l
GP03F-03	12/01/99	17		Trichlorofluoromethane	ND	1	ug/l
GP03F-03	12/01/99	17		Chloromethane	ND	1	ug/l
GP03F-03	12/01/99	17		O-Xylene (1,2-Dimethylbenzene)	ND	1.1	ug/l
GP03F-03	12/01/99	17		Chloroform	1.3	1	ug/l
GP03F-03	12/01/99	17		Toluene	ND	1	ug/l
GP03F-03	12/01/99	17		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-03	12/01/99	17		Chloroethane	ND	1	ug/l
GP03F-03	12/01/99	17		Dibromochloromethane	ND	1	ug/l
GP03F-03	12/01/99	17		1,1,1-Trichloroethane	70	5	ug/l
GP03F-03	12/01/99	32		1,2-Dichlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	32		1,1,1-Trichloroethane	52	5	ug/l
GP03F-03	12/01/99	32		M&P-Xylene	ND	1.3	ug/l
GP03F-03	12/01/99	32		Methylene Chloride	ND	1	ug/l
GP03F-03	12/01/99	32		Toluene	ND	1	ug/l
GP03F-03	12/01/99	32		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-03	12/01/99	32		1,1-Dichloroethane	7.5	1	ug/l
GP03F-03	12/01/99	32		Ethylbenzene	ND	1	ug/l
GP03F-03	12/01/99	32		Vinyl Chloride	ND	1	ug/l
GP03F-03	12/01/99	32		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	32		Chloroethane	ND	1	ug/l
GP03F-03	12/01/99	32		1,2-Dichloropropane	ND	1	ug/l
GP03F-03	12/01/99	32		Bromomethane	ND	1	ug/l
GP03F-03	12/01/99	32		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	32		Trichlorofluoromethane	ND	1	ug/l
GP03F-03	12/01/99	32		Trichloroethene	71	5	ug/l
GP03F-03	12/01/99	32		1,1-Dichloroethene	20	1	ug/l
GP03F-03	12/01/99	32		Benzene	ND	1	ug/l
GP03F-03	12/01/99	32		1,2-Dichloroethane	ND	1	ug/l
GP03F-03	12/01/99	32		Bromoform	ND	1	ug/l
GP03F-03	12/01/99	32		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-03	12/01/99	32		Bromodichloromethane	ND	1	ug/l
GP03F-03	12/01/99	32		Dibromochloromethane	ND	1	ug/l
GP03F-03	12/01/99	32		Chloroform	1.3	1	ug/l
GP03F-03	12/01/99	32		O-Xylene (1,2-Dimethylbenzene)	ND	1.1	ug/l
GP03F-03	12/01/99	32		Chloromethane	ND	1	ug/l
GP03F-03	12/01/99	32		Tetrachloroethene	ND	1	ug/l

NIC Phase 2 Data
Kansas Plating, Inc.

Station	Date_Coll	Depth	QC Code	Compound	Results	PRL	Units
GP03F-03	12/01/99	32		Carbon Tetrachloride	12	1	ug/l
GP03F-03	12/01/99	32		cis-1,2-Dichloroethene	16	1	ug/l
GP03F-03	12/01/99	32		Chlorobenzene	ND	1	ug/l
GP03F-03	12/01/99	32		trans-1,2-Dichloroethene	1.2	1	ug/l
GP03F-03	12/01/99	32		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-03	12/01/99	32		cis-1,3-Dichloropropene	ND	1	ug/l
GP03F-04	12/01/99	17		Benzene	ND	1	ug/l
GP03F-04	12/01/99	17		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-04	12/01/99	17		1,1-Dichloroethene	ND	1	ug/l
GP03F-04	12/01/99	17		Bromodichloromethane	ND	1	ug/l
GP03F-04	12/01/99	17		Vinyl Chloride	ND	1	ug/l
GP03F-04	12/01/99	17		Ethylbenzene	ND	1	ug/l
GP03F-04	12/01/99	17		1,1,1-Trichloroethane	ND	1	ug/l
GP03F-04	12/01/99	17		Chloromethane	ND	1	ug/l
GP03F-04	12/01/99	17		Trichlorofluoromethane	ND	1	ug/l
GP03F-04	12/01/99	17		Carbon Tetrachloride	ND	1	ug/l
GP03F-04	12/01/99	17		Trichloroethene	ND	1	ug/l
GP03F-04	12/01/99	17		1,2-Dichlorobenzene	2.4	1	ug/l
GP03F-04	12/01/99	17		1,2-Dichloroethane	ND	1	ug/l
GP03F-04	12/01/99	17		1,2-Dichloropropane	ND	1	ug/l
GP03F-04	12/01/99	17		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-04	12/01/99	17		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-04	12/01/99	17		Dibromochloromethane	ND	1	ug/l
GP03F-04	12/01/99	17		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-04	12/01/99	17		Bromoform	ND	1	ug/l
GP03F-04	12/01/99	17		Chloroethane	ND	1	ug/l
GP03F-04	12/01/99	17		Chlorobenzene	ND	1	ug/l
GP03F-04	12/01/99	17		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-04	12/01/99	17		cis-1,3-Dichloropropene	ND	1	ug/l
GP03F-04	12/01/99	17		Bromomethane	ND	1	ug/l
GP03F-04	12/01/99	17		Toluene	ND	1	ug/l
GP03F-04	12/01/99	17		Chloroform	ND	1	ug/l
GP03F-04	12/01/99	17		1,1-Dichloroethane	ND	1	ug/l
GP03F-04	12/01/99	17		Tetrachloroethene	ND	1	ug/l
GP03F-04	12/01/99	17		O-Xylene (1,2-Dimethylbenzene)	ND	1.1	ug/l
GP03F-04	12/01/99	17		Methylene Chloride	ND	1	ug/l
GP03F-04	12/01/99	17		M&P-Xylene	ND	1.3	ug/l
GP03F-04	12/01/99	17		trans-1,2-Dichloroethene	ND	1	ug/l
GP03F-04	12/01/99	17		cis-1,2-Dichloroethene	ND	1	ug/l
GP03F-04	12/01/99	30		Bromoform	ND	1	ug/l
GP03F-04	12/01/99	30		Dibromochloromethane	ND	1	ug/l
GP03F-04	12/01/99	30		Tetrachloroethene	ND	1	ug/l
GP03F-04	12/01/99	30		Bromomethane	ND	1	ug/l
GP03F-04	12/01/99	30		Carbon Tetrachloride	ND	1	ug/l
GP03F-04	12/01/99	30		Chlorobenzene	ND	1	ug/l
GP03F-04	12/01/99	30		Chloroform	ND	1	ug/l
GP03F-04	12/01/99	30		Bromodichloromethane	ND	1	ug/l
GP03F-04	12/01/99	30		cis-1,3-Dichloropropene	ND	1	ug/l

NIC Phase 2 Data
Kansas Plating, Inc.

Station	Date_Coll	Depth	QC Code	Compound	Results	PRL	Units
GP03F-04	12/01/99	30		Chloroethane	ND	1	ug/l
GP03F-04	12/01/99	30		Ethylbenzene	ND	1	ug/l
GP03F-04	12/01/99	30		M&P-Xylene	ND	1.3	ug/l
GP03F-04	12/01/99	30		Methylene Chloride	ND	1	ug/l
GP03F-04	12/01/99	30		Trichlorofluoromethane	ND	1	ug/l
GP03F-04	12/01/99	30		1,4-Dichlorobenzene	ND	1	ug/l
GP03F-04	12/01/99	30		O-Xylene (1,2-Dimethylbenzene)	ND	1.1	ug/l
GP03F-04	12/01/99	30		cis-1,2-Dichloroethene	5.8	1	ug/l
GP03F-04	12/01/99	30		1,2-Dichlorobenzene	ND	1	ug/l
GP03F-04	12/01/99	30		Toluene	ND	1	ug/l
GP03F-04	12/01/99	30		1,2-Dichloropropane	ND	1	ug/l
GP03F-04	12/01/99	30		Chloromethane	ND	1	ug/l
GP03F-04	12/01/99	30		1,2-Dichloroethane	ND	1	ug/l
GP03F-04	12/01/99	30		Vinyl Chloride	ND	1	ug/l
GP03F-04	12/01/99	30		1,1-Dichloroethene	ND	1	ug/l
GP03F-04	12/01/99	30		1,3-Dichlorobenzene	ND	1	ug/l
GP03F-04	12/01/99	30		1,1,2-Trichloroethane	ND	1	ug/l
GP03F-04	12/01/99	30		1,1-Dichloroethane	ND	1	ug/l
GP03F-04	12/01/99	30		trans-1,3-Dichloropropene	ND	1	ug/l
GP03F-04	12/01/99	30		trans-1,2-Dichloroethene	ND	1	ug/l
GP03F-04	12/01/99	30		1,1,2,2-Tetrachloroethane	ND	1	ug/l
GP03F-04	12/01/99	30		Benzene	ND	1	ug/l
GP03F-04	12/01/99	30		1,1,1-Trichloroethane	ND	1	ug/l
GP03F-04	12/01/99	30		Trichloroethene	11	1	ug/l
GP08C-01	12/17/99	17		Toluene	ND	1	ug/l
GP08C-01	12/17/99	17		Ethylbenzene	ND	1	ug/l
GP08C-01	12/17/99	17		Vinyl Chloride	3.0	1	ug/l
GP08C-01	12/17/99	17		cis-1,3-Dichloropropene	ND	1	ug/l
GP08C-01	12/17/99	17		cis-1,2-Dichloroethene	63	1	ug/l
GP08C-01	12/17/99	17		Chloroform	ND	1	ug/l
GP08C-01	12/17/99	17		M&P-Xylene	ND	1.3	ug/l
GP08C-01	12/17/99	17		Trichlorofluoromethane	ND	1	ug/l
GP08C-01	12/17/99	17		Chloromethane	ND	1	ug/l
GP08C-01	12/17/99	17		Bromodichloromethane	ND	1	ug/l
GP08C-01	12/17/99	17		Chloroethane	ND	1	ug/l
GP08C-01	12/17/99	17		Tetrachloroethene	2.6	1	ug/l
GP08C-01	12/17/99	17		Carbon Tetrachloride	ND	1	ug/l
GP08C-01	12/17/99	17		1,3-Dichlorobenzene	ND	1	ug/l
GP08C-01	12/17/99	17		Benzene	ND	1	ug/l
GP08C-01	12/17/99	17		Bromomethane	ND	1	ug/l
GP08C-01	12/17/99	17		Bromoform	ND	1	ug/l
GP08C-01	12/17/99	17		1,2-Dichloropropane	ND	1	ug/l
GP08C-01	12/17/99	17		1,2-Dichloroethane	ND	1	ug/l
GP08C-01	12/17/99	17		1,2-Dichlorobenzene	ND	1	ug/l
GP08C-01	12/17/99	17		1,1-Dichloroethene	1.1	1	ug/l
GP08C-01	12/17/99	17		1,1-Dichloroethane	3.1	1	ug/l
GP08C-01	12/17/99	17		Chlorobenzene	ND	1	ug/l
GP08C-01	12/17/99	17		1,1,2,2-Tetrachloroethane	ND	1	ug/l

Capture Zone Analysis

CDM Camp Dresser & McKee

CLIENT City of Wichita
PROJECT NIC SITE
DETAIL KPI DATA EVALUATION

JOB NO. 2355-2045G-R1.TSK18
DATE CHECKED 8/28/00
CHECKED BY G. McInerney

COMPUTED BY A.H.
DATE 8/24/00
PAGE NO. 1/1

Calculation Brief - Kansas Plating Inc., Wichita, KS - Capture Zone Analysis

Purpose: Determine downgradient extent of KPI's production wells

Method: Use of Uniform Flow Equation (Todd, 1980)

Assumptions: Entire pumping conducted at one well
Net pumping rate = 30 gpm (Q)
Aquifer thickness = 20 ft (b)
Aquifer T = 104,286 GPD/ft
Water table gradient = 0.0018 (i)

Procedure: 1) Convert T to Hydraulic Conductivity (K)
2) Convert Q to ft^3/d, 3) Calculate distance to downgradient stagnation point (X_L) via Uniform Flow Equation rearranged for this parameter $\left(X_L = \frac{Q}{2\pi K b i}\right)$

1) Conversion of T to K

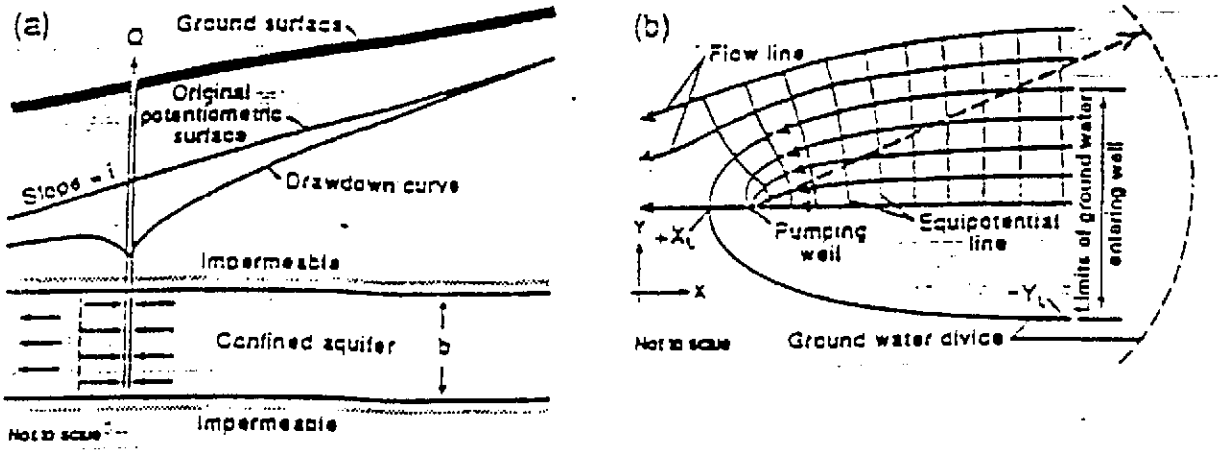
$$K = \frac{104{,}286 \text{ GAL}}{ft \cdot d} \times \frac{1\ ft^3}{7.48 \text{ GAL}} \times \frac{1}{20 ft} = 697\ ft/d$$ ✓ GMA 8/28/00

2) Convert $\frac{30 \text{ GAL}}{\text{MINUTE}}$ to ft^3/d

$$Q = \frac{30 \text{ GAL}}{\text{MINUTE}} \times \frac{1440 \text{ MINUTES}}{d} \times \frac{1 ft^3}{7.48 \text{ GAL}} = 5775\ ft^3/d$$ ✓

3) $$X_L = \frac{5775\ ft^3/d}{2\pi(697\ ft/d)(20 ft)(0.0018)} = \boxed{36.63\ ft}$$ ✓

Conclusion: Using Todd's Method, extent of downgradient capture zone is approximately 37 feet.



Uniform-flow equation: $-\frac{Y}{X} = \tan\left(\frac{2\pi Kbi}{Q}Y\right)$

Distance to down-gradient null point: $X_L = -\frac{Q}{2\pi Kbi}$

Boundary limit: $Y_L = \pm\frac{Q}{2Kbi}$

Where: Q = Well-pumping rate
K = Hydraulic conductivity
b = Saturated thickness
i = Hydraulic gradient
π = 3.1416

Figure 24. Ground-water flow field for cone of depression of a pumping well with a regional ground-water flow gradient. Uniform flow equation (Todd, 1980) can be used to calculate down gradient null point and lateral extent of zone of contribution.

From Groundwater Hydrology, 1980, Todd, D.K.; John Wiley & Sons, NY, Page 122.

Appendix L-17
Kreonite East

PRP Evaluation Summary

Kreonite East

1123 North Mosley (Northwest of 10th and Mosley)

Potential Source Area 08C

Contaminants of Concern – 1,1,1-TCA and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Degradation Pathways
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Kreonite East

Data indicate that the Kreonite East (KRE) at 1123 North Mosley is a potential source of low-level chlorinated VOC contamination. Groundwater sampling data collected during the NIC RI indicates the presence of 1,1,1-Trichlororethane (TCA) in groundwater downgradient of the KRE facility CSI.

Groundwater samples collected during Phase 2 of the NIC RI from the shallow aquifer at Geoprobe locations GP08C-04, GP-08C-05 and GP-08C-07, which are immediately downgradient of the KRE facility, contained TCA concentrations of 50 µg/L, 8.1 µg/L and 1.5 µg/L respectively. During Phase1/1A of the NIC RI, TCA was reported in a shallow groundwater sample upgradient of the KRE facility. This was Geoprobe location GP#18-7 at 2.6 µg/L. However, TCA was not detected (<1.0 µg/L) when this location was resampled during Phase 2, nor was it detected in shallow groundwater samples upgradient of the facility from locations GPA-31-01 (Phase 1/1A) and GP08C-01, GP08C-02, GPA-08C-06, GP08C-08, GP08C-09 (Phase 2). Information supplied by Kreonite, Inc. (Kreonite 1998) indicates historical use of 1,1,1-TCA at their facility located at 715 E. 10th (just west of this property). However, no documentation of the use or storage of TCA at this property has been obtained at this time.

Groundwater Flow

Site-wide water table maps presented in the Phase 1/1a Technical Memorandum indicate a groundwater flow is to the south (April/May 1998, or south-southeast (October 1997. south. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south and south-southeast, respectively. Facility-specific groundwater flow is not well defined.

References

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Kreonite, Inc.1998, North Industrial Corridor Redevelopment District, Application for Certificate and Release for Environmental Conditions. November 11.

GTI 1992, *Remedial Investigation Report, 29th and Mead RI/FS,* Groundwater Technology, Inc. Prepared for Wichita North Industrial District, August 27, 1991, revised June 12, 1992.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 1123 N. Mosley

Current Owner/Business: Awnings Plus
Mathew Menges

Contact Person:

Mailing Address: 5042 S. Woodlawn
Derby, KS 67037-8615

Phone Number:

Other information: Kreonite
% Kent Brown
715 E. 10th
PO Box 2099
Wichita, KS 67201
(316) 263-1111

Name of Company:		Kreonite East
Name and/or Contact Person:		
Street Address of Company:		**1123 N Mosley**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1123 N Mosley"
Phone Number of Contact:		
History:	1951	No Listing
	1961	Tru-Scale Inc. (br) (plastics)
	1965	Carbo Inc. (packaging)
	1970	Vacant
	1975	Parts & Equipment Mfg. Co (starter drives)
	1980	(1123)-Kreonite Inc. (storage); (1125)-Kreonite Inc. (storage)
	1984/5	(1123)-Kansas Plating (parking lot)
	1990	(1123)-Kansas Plating (parking lot)
	1995/6	(1123)-Kansas Plating Inc. (parking lot)
	2000	Awnings Plus (canvas rltd products)

RCRA Info:

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -00981
Page: 1

Pin: 125160240201000

Name MENGES, MATTHEW L
Situs 1123 N MOSLEY ST
WICHITA KS

Phone
Mail 5042 S WOODLAWN
To DERBY KS 67037-8615

Tax	2,450.31
Specials	6.30
Total	2,456.61

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 119532

Add Keys & B-981-1

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

WICHITA WATER & SEWER DEPARTMENT
SEWAGE TREATMENT DIVISION
PRETREATMENT PROGRAMS
INDUSTRIAL TELEPHONE CONTACT RECORD

DATE: 9/10/91

TIME: 0910

NAME OF INDUSTRY: Kreonite

TELEPHONE NUMBER: 263-1111

CONTACT PERSON: Scott Jensen (attorney) 267-7361

WHO INITIATED CONTACT: Scott Jensen

MESSAGE: Concern on Drainage north of 10th Street between Mead & Santa Fe Streets. Kreonite is working on their storm water plan. The Company owns the property from 9th & 11th Streets between Mead & Santa Fe. They believe between 9th & 10th the sewers are known. Our problem spot is north of 10th Street from the alley to Mead. There is an open drain in the gravel lot behind the building facing the street. This drain is full of mud & needs to be cleaned to determine flow. I suggested the drain be cleaned by Kreonite and flow established. When this has been completed Dan or I will run a dye check to verify.

SIGNED BY: [signature]

W0659563

Wally / Don

B-118 + 119 ~~Don~~
715 E. 10th
A-38 + A-327-55

Kleonite needs some info about their sanitary and/or storm sewer. Would you please do some legwork on this. Initially check on the sewer maps - you may need to check on 7th floor - The location is on Mead between 10th & 11th

Kleonite has this info:
Book A-2 pg 385 W. Submain
D 10th Lateral N or S.

We may end up doing some Dye Studies. Please get to ASAP. This is a request from the CM

Thanks

W0659564

5/ Sept 91

Kroenite
715 E 10th Street
Wichita Ks 263-1111
Contact Jerry Border Ext 282

Don Livengood Picked up Both sanitary & storm sewer maps around this location, as a survey was being Run to determine where various sewers Ran & what areas they Drained. I called on Kroenite to ascertain what Problem areas needed Further clarification.

Kroenite company spans Both sides of 10 Street from meek to Santa Fe. The storm sewer Runs East & west in 10th street and the sanitary sewer Runs north & South in what use to be the alley. There is one storm sewer behind the Building on the north side of 10th street & East of the alley which is full of Dirt & Growth which no one is sure where it Drains. Further time will be spent to Determine where it Flows.

Wally Dunlap

W0659565

PHOTOGRAPHIC AND GRAPHIC ARTS LABORATORY SYSTEMS AND EQUIPMENT
715 E. 10th St. P.O. Box 2099 Wichita, KS 67201-2099 U.S.A. (316) 263-1111 Fax: (316) 263-6829

EPA ID # KSD007233976

September 30, 1993

Ms Teresa Hansen
Kansas Department of Health and Environment
Bureau of Air and Waste Management
1919 Amidon, Suite 130
Wichita, KS 67203-2118

Ms Hansen:

Response to discrepancies noted on Hazardous waste inspection on July 22, 1993:

1) Kreonite, Inc. is disposing of rags contaminated with F-listed solvent (F005) into the trash. This is violation of K.S.A. 65-3441.

   Kreonite has discontinued use of F005 solvents for cleaning or degreasing.

2) Kreonite, Inc. failed to determine if the paint filters are a hazardous waste. This is in violation of K.A.R. 28-31-4(b).

   I have sent a sample of paint booth filter to A & E Analytical for TCLP Test. I will forward the results to you, when I receive them.

3) Kreonite, Inc. failed to determine if the waste antifreeze is a hazardous waste. This is in violation of K.A.R. 28-31-4(b).

   Waiting for additional information, per our phone conversation September 29, 1993.

4) Kreonite Inc.'s notification of hazardous waste activity does not accurately identify the waste codes of waste currently generated t the facility. This is in violation of K.A.R. 28-31-4(c).

   I have updated waste codes that pertain to waste generated. I have omitted D002(Corrosive Waste). We do not anticipate shipping any corrosive waste. See Enclosed copy of subsequent notification.

5) Kreonite, Inc. could not provide Land Disposal Restriction Notices for the following waste shipments:

Manifest Number	*Date Shipped*
00034	03-18-93
00032	01-29-92
00031	12-26-91
00030	01-03-91
00029	12-28-90
00028	07-05-90

These are in violation of K.A.R. 28-31-14.

See enclosed copies of Land Disposal Restriction Notices.

6) One 55-gallon satellite accumulation drum containing waste paint related material was not closed. This is in violation of K.A.R. 28-31-4(j)(l)(A). (This drum was closed during the inspection.)

All employees have been instructed to keep the lid on the fifty gallon satellite accumulation drums, except when putting waste into them.

7. One two gallon satellite accumulation can containing waste MEK was not labeled with the words "Hazardous Waste" as required by K.A.R. 28-31-4(j)(l)(B).

Attached Hazardous Waste Label on container.

8) Weekly inspections were not being conducted as required by K.A.R. 28-31-4(f). In addition, these inspections must be documented on a log as required by K.A.R. 28-31-4(k).

Made a inspection log that notes when hazardous waste is move into holding area. All hazardous waste in holding areas will be inspected weekly. See enclosed copy.

9) Kreonite Inc's contingency plan is deficient in the following areas:

a) KDHE phone number is incorrect.
b) does not include all waste streams.
c) does not include acetone distillation unit.
d) includes building at 400 E 18th.

These are in violation of K.A.R. 28-31-4(g)(l)(4).
See enclosed updated Contingency Plan.

Sincerely,

Jerry Border
Plant Engineering Services

USPCI
A Subsidiary of Union Pacific Corporation

Form LDR N-1

Notification of Waste Subject to Land Disposal Restrictions

Manifest number associated with waste shipment	Generator Name
00029	Kreonite

Pursuant to 40 CFR 268.7 (a), I hereby notify USPCI that this waste shipment contains a waste(s) that is (are) restricted under the land disposal restrictions contained in either 40 CFR 268 or RCRA Section 3004 (d). This shipment contains one or more of the following wastes which are subject to the listed treatment requirements.

Waste code overlap require all applicable codes, including characteristics, be applied even to listed (F,K,U,P) wastes

Waste (check appropriate boxes) — **Treatment Standard**

1. ☐ **California List Waste (applies to all states)** — **Complete Reverse Side**

2. ☒ **F-Solvents** ☐ F001 ☐ F002 ☐ F003 ☐ F004 ☒ F005 — **Complete Reverse Side**

3.

	List all D,F,K,U, or P Waste Codes (eg. F006, D003)	Subcategory (if any)	Treatability Group (eg. wastewater or nonwastewater)	Treatment Standard in 40CFR 268.41(a)	268.42 (a)	268.43 (a)	If Required Method insert proper 5-letter code	USPCI acceptance #
A.	D001	High TOC	NWW		✓		ISUBS, CRGS, INCIN	#90507
B.	F005	NA	"	✓			NA	"
C.								
D.								
E.								
F.								
G.								
H.								
I.								
J.								
K.								
L.								
M.								
N.								
O.								
P.								

4. ☐ **Multi-source leachate F039** — **Treatment Standards attached Constituents which are applicable are marked**

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less than 1% T.O.C.

5. **Deadline Extensions**

Certain LDR restricted wastes are permitted to be placed in a land disposal unit after the deadline provided they meet other applicable conditions. Restricted wastes which qualify for a deadline extension are as follows:

	Check applicable date:	List waste codes for which extension applies
A.	☐ November 8, 1990	
B.	☐ May 8, 1992	
C.	☐ Other: please provide date	

REV JUL 1990

Form LDR N-1

USPCI
A Subsidiary of Union Pacific Corporation

Notification of Waste Subject to Land Disposal Restrictions

Manifest number associated with waste shipment	Generator Name
00030	Kreonite, Inc. Wichita

Pursuant to 40 CFR 268.7 (a), I hereby notify USPCI that this waste shipment contains a waste(s) that is (are) restricted under the land disposal restrictions contained in either 40 CFR 268 or RCRA Section 3004 (d). This shipment contains one or more of the following wastes which are subject to the listed treatment requirements.

Waste code overlap require all applicable codes, including characteristics, be applied even to listed (F,K,U,P) wastes

Waste (check appropriate boxes) — **Treatment Standard**

1. ☐ **California List Waste (applies to all states)** — **Complete Reverse Side**

2. ☐ **F-Solvents** ☐ F001 ☐ F002 ☐ F003 ☐ F004 ☐ F005 — **Complete Reverse Side**

3.

	List all D,F,K,U, or P Waste Codes (eg. F006, D003)	Subcategory (if any)	Treatability Group (eg. wastewater or nonwastewater)	Treatment Standard in 40CFR 268.41(a)	268.42 (a)	268.43 (a)	If Required Method insert proper 5-letter code	USPCI acceptance #
A.	D007	N/A	Waste water			✓	NA	~~[illegible]~~ 43256-3531
B.								
C.								
D.								
E.								
F.								
G.								
H.								
I.								
J.								
K.								
L.								
M.								
N.								
O.								
P.								

4. ☐ **Multi-source leachate F039** — **Treatment Standards attached Constituents which are applicable are marked**

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less than 1% T.O.C.

5. **Deadline Extensions**

Certain LDR restricted wastes are permitted to be placed in a land disposal unit after the deadline provided they meet other applicable conditions. Restricted wastes which qualify for a deadline extension are as follows:

	Check applicable date:	List waste codes for which extension applies
A.	☐ November 8, 1990	
B.	☐ May 8, 1992	
C.	☐ Other: please provide date	

REVJUL1990

USPCI

Form LDR N-:

Notification of Waste Subject to Land Disposal Restrictions

Manifest number associated with waste shipment	Generator Name
00031 HA	Kraft

Pursuant to 40 CFR 268.7 (a), I hereby notify USPCI that this waste shipment contains a waste(s) that is (are) restricted under the land disposal restrictions contained in either 40 CFR 268 or RCRA Section 3004 (d). This shipment contains one or more of the following wastes which are subject to the listed treatment requirements.

Waste code overlap require all applicable codes, including characteristics, be applied even to listed (F,K,U,P) wastes

Waste (check appropriate boxes)	Treatment Standard
1. ☐ California List Waste (applies to all states)	Complete Reverse Side
2. ☑ F-Solvents ☐ F001 ☐ F002 ☐ F003 ☐ F004 ☑ F005	Complete Reverse Side

3.

	List all D,F,K,U, or P Waste Codes (eg. F006, D003)	Subcategory (if any)	Treatability Group (eg. wastewater or nonwastewater)	Treatment Standard in 40CFR 268.41(a)	268.42 (a)	268.43 (a)	If Required Method insert proper 5-letter code	USPCI acceptance #
A.	D001	HiTOC	NWW		—		Fres Fuze Inc	WI 91 001
B.	F005			—				
C.								
D.								
G.								
H.								
I.								
J.								
K.								
L.								
M.								
N.								
O.								
P.								

4. ☐ Multi-source leachate F039 — **Treatment Standards attached Constituents which are applicable are marked**

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less than 1% T.O.C.

5. **Deadline Extensions**

Certain LDR restricted wastes are permitted to be placed in a land disposal unit after the deadline provided they meet other applicable conditions. Restricted wastes which qualify for a deadline extension are as follows:

	Check applicable date:	List waste codes for which extension applies
A.	☐ November 8, 1990	
B.	☐ May 8, 1992	
C.	☐ Other: please provide date	

USPCI

Form LDR N-

Notification of Waste Subject to Land Disposal Restrictions

Manifest number associated with waste shipment	Generator Name
00031 11B	Kiromit

Pursuant to 40 CFR 268.7 (a), I hereby notify USPCI that this waste shipment contains a waste(s) that is (are) restricted under the land disposal restrictions contained in either 40 CFR 268 or RCRA Section 3004 (d). This shipment contains one or more of the following wastes which are subject to the listed treatment requirements.

Waste code overlap require all applicable codes, including characteristics, be applied even to listed (F,K,U,P) wastes

Waste (check appropriate boxes) — **Treatment Standard**

1. ☐ **California List Waste (applies to all states)** — **Complete Reverse Side**

2. ☐ **F-Solvents** ☐ F001 ☐ F002 ☐ F003 ☐ F004 ☐ F005 — **Complete Reverse Side**

3.

	List all D,F,K,U, or P Waste Codes (eg. F006, D003)	Subcategory (if any)	Treatability Group (eg. wastewater or nonwastewater)	Treatment Standard in 40CFR 268.41(a)	268.42 (a)	268.43 (a)	If Required Method insert proper 5-letter code	USPCI acceptance #
A.	D002				—			W91-4440
B.	D007				—			
C.								
D.								
E.								
G.								
H.								
I.								
J.								
K.								
L.								
M.								
N.								
O.								
P.								

4. ☐ **Multi-source leachate F039** — **Treatment Standards attached Constituents which are applicable are marked**

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less than 1% T.O.C.

5. **Deadline Extensions**

Certain LDR restricted wastes are permitted to be placed in a land disposal unit after the deadline provided they meet other applicable conditions. Restricted wastes which qualify for a deadline extension are as follows:

Check applicable date:	List waste codes for which extension applies
☐ November 8, 1990	
☐ May 8, 1992	
☐ Other: please provide date	

REV JUL 1990

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. K S D 0 0 7 2 3 3 9 7 6 — Manifest Document No. 0 0 0 3 2

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KREONITE INC
PO BOX 2099, WICHITA, KS 67201

4. Generator's Phone (316) 263-1111 ext 282

A. State Manifest Document Number: 00518836

B. State Generator's ID: APPLIED FOR

5. Transporter 1 Company Name: W.P.L. TRUCKING INC

6. US EPA ID Number: T X D 0 5 0 6 4 1 4 6 3

C. State Transporter's ID: 36746 40369

D. Transporter's Phone: 713 452 1504

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
ALPHA OMEGA RECYCLING INC
315 WHATLEY ROAD
LONGVIEW, TX 75604

10. US EPA ID Number: T X D 9 8 1 5 1 4 3 8 3

G. State Facility's ID: 37531

H. Facility's Phone: 903 297 7272

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	RQ HAZARDOUS WASTE SOLID NOS ORM-E NA 9189 rq= 1# D 007	X	0 0 2	D M	7 6 5	P	APPLIED FOR
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: T-59

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: GERALD A BORDER — Signature: [signature] — Month Day Year: 0 1 2 9 9 2

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Preston Wolf — Signature: [signature] — Month Day Year: 0 1 2 9 9 2

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: KARL KERR — Signature: [signature] — Month Day Year: 0 1 3 1 9 2

Kreonite

PHOTOGRAPHIC AND GRAPHIC ARTS LABORATORY SYSTEMS AND EQUIPMENT
715 E. 10th St. P.O. BOX 2099 WICHITA, KANSAS 67201 U.S.A. (316) 263-1111 TELEX 417 346

GENERATOR NOTIFICATION TO TREATMENT, STORAGE, OR RECYCLING FACILITY

In accordance with 40CFR268.44 and following, certain wastes, identified in 40CFR261.31 through 40CFR261.34 as EPA Hazardous Waste are prohibited from land disposal.

Accordingly, this notification is submitted by KREONITE INC. to Alpha Omega Recycling, Inc. in accordance with the Land Disposal Restrictions KREONITE INC. is required to provide the following information to the treatment, storage, or recycling facility receiving the hazardous waste accompanying this manifest:

1. EPA Hazardous Waste Number D007.

2. The corresponding treatment standards of 40CFR268,41m expressed as concentration in the waste extract:

	Wastewater Sludges from Electroplating	"D" Wastes
Cadmium	0.066 mg/l	1.0 mg/l
Chromium	5.2 mg/l	5.0 mg/l
Lead	.51 mg/l	5.0 mg/l
Nickel	.32 mg/l	n/a
Silver	.072 mg/l	5.0 mg/l
Cyanides (Total)	Reserved	

3. Manifest number with this shipment 00032.

4. Waste Analysis Data (where available) Attached - [ ] yes [X] no

[signature] PLANT ENG. SERVICES 1/29/92
Signed by Title Date

Company name: KREONITE INC.

NOTE: A copy of this notice must accompany each manifested shipment as required by 40CFR258.7(a) (4)

TEXAS WATER COMMISSIO

REQUEST FOR TEXAS WASTE CODE AND AUTHORIZATION FOR SHIPMENT OF CLASS I AND/OR EPA HAZARDOUS WASTE

Pursuant to the generator notification requirements of 31 TAC Section 335.6, the generator of a solid waste is required to submit to the TWC detailed written information pertaining to the composition and characteristics of the waste.

Please type or print legibly:

JERRY BORDER
KREONITE INC
PO BOX 2099
wichita, ks 67201

GENERATOR CONTACT PERSON
GENERATOR COMPANY NAME
GENERATOR MAILING ADDRESS
CITY, STATE, ZIP CODE
PHONE NO. (316) 263 - 1111

TWC Registration No. 090970 U. S. EPA Identification No. KSD 007233976
(Leave blank if not registered)

Generating Site Location 715 E 10TH WICHITA, KS 67214

☐ Same As Above

Designated Treatment, Storage, and/or Disposal Facility Name and Address ALPHA OMEGA RECYCLING INC
315 WHATLEY ROAD, LONGVIEW TEXAS 75604

Description of Waste (do not use DOT description or trade names)	Is the Waste a Hazardous Waste/40 CFR 262.11 (Yes/No)	EPA Code	For TWC Assignment of Texas Waste Code Number (TWC USE ONLY)
1. CHROMIUM HYDROXIDE	YES	D 007	908210
2.			
3.			
4.			

I certify that the above information is correct to the best of my knowledge.

I, GERALD A BORDER, (NAME, Please Print)

am employed by KREONITE INC (COMPANY NAME)

PO BOX 2099 WICHITA, KS 67201 (MAILING ADDRESS)

and am authorized to sign this certification for KREONITE INC. (COMPANY NAME)

TWC Waste Code(s) authorized for:
☐ One-time Only ☒ For Continued Use
Processed Date: 2-4-92
Approved:
TWC District 02 Office

Mail to: Texas Water Commission
Notification Unit
P.O. Box 13087
Austin, Texas 78711-3087
Phone: (512) 463-8175
FAX: (512) 475-2215

(SIGNATURE) 1-22-92 (DATE) (316) 263-1111 ext 282 (PHONE NUMBER)

TWC-0757 (Rev. 08-20-91)

USPCI

Notification of Waste Subject to Land Disposal Restrictions

Manifest number associated with waste shipment: 00033

Generator Name: [illegible]

Pursuant to 40 CFR 268.7 (a), I hereby notify that this waste shipment contains a waste(s) that is (are) restricted under the land disposal restrictions contained in either 40 CFR 268 or RCRA Section 3004 (d). This shipment contains one or more of the following wastes which are subject to the listed treatment requirements.

Waste (check appropriate boxes) — Treatment Standard

☒ F-Solvents ☐ F001 ☐ F002 ☒ F003 ☐ F004 ☒ F005 — Complete Reverse Side

	List all D,F,K,U, or P Waste Codes (eg. F006, D003)	Subcategory (if any)	Treatability Group (eg. wastewater or nonwastewater)	Treatment Standard in 40CFR 268.41(a) CCWE	Treatment Standard in 40CFR 268.43 (a) CCW	If Required Method insert proper 5-letter code	USPCI acceptance #	California List ✓ if applicable Complete reverse side
A.	D001	HiTac	NWW		—		WI 910001	☐
B.	F003			—				☐
C.	F005			—				☐
D.								☐
E.								☐
F.								☐
G.								☐
H.								☐
I.								☐
J.								☐
K.								☐
L.								☐
M.								☐
N.								☐
O.								☐

☐ Multi-source leachate F039

Treatment Standards must be attached
Constituents which are applicable are marked

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less than 1% T.O.C.

Deadline Extensions

Certain LDR restricted wastes are permitted to be placed in a land disposal unit after the deadline provided they meet other applicable conditions. Restricted wastes which qualify for a deadline extension are as follows:

Check applicable date:	List waste codes for which extension applies
☐ November 8, 1990	
☐ May 8, 1992	
☐ Other: please provide date:	

Signature: [signature] Printed Name: Gerald A Bowser Date: 4/7/92

EVSEPT90

GENERATOR MUST RETAIN COPY FOR RECORDS

USPCI
A Subsidiary of Union Pacific Corporation

Form LDR N-

Notification of Wast
Subject to Land Disposal Restriction:

Manifest number associated with waste shipment	Generator Name
[illegible]4	Kreonite

ursuant to 40 CFR 268.7 (a), I hereby notify that this waste shipment contains a waste(s) that is (are) restricted under the land disposa restrictions contained in either 40 CFR 268 or RCRA Section 3004 (d). This shipment contains one or more of the following wastes which ar subject to the listed treatment requirements.

Waste (check appropriate boxes) — **Treatment Standard**

1. ☒ F-Solvents ☐ F001 ☐ F002 ☒ F003 ☐ F004 ☒ F005 — **Complete Reverse Side**

2.

	List all D,F,K,U, or P Waste Codes (eg. F006, D003)	Subcategory (if any)	Treatability Group (eg. wastewater or nonwastewater)	Treatment Standard in 40CFR 268.41(a) CCWE	Treatment Standard in 40CFR 268.43(a) CCW	If Required Method insert proper 5-letter code	USPCI acceptance #	California List ✓ if applicable complete reverse side
A.	D001	High TOC	NWW			INCIN F005	WI 91-0001	☐
B.	F003		"		X			☐
C.	F005		"		X			☐
D.								☐
E.								☐
F.								☐
G.								☐
H.								☐
I.								☐
J.								☐

☐ **Multi-source leachate F039**

Treatment Standards must be attached
Constituents which are applicable are marked

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less then 1% T.O.C.

4. **Hazardous Debris Notification**

☐ This hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45.

Contaminants Subject to Treatment (please list waste codes applicable to the debris)													

FACILITY: Note that "Contaminants Subject to Treatment" are those constituents applicable to a waste code listed above for which a BDAT treatment standard has been promulgated in 40 CFR 268.41 or 268.43.

5. **Deadline Extensions and Variances**

Certain LDR restricted wastes can be placed in a land disposal unit after the effective date of a prohibition provided they are subject to a extensions or variance. Restricted wastes which quality for a deadline extension are as follows:

	Check applicable line	List waste codes for which extension applies
A.	☐ Hazardous Debris (May 8, 1993)	
B.	☐ Hazardous Soil (May 8, 1993)	
C.	☐ F037, F038 removed from surface impoundments (June 30, 1994)	
D.	☐ F037, F038 routinely generated (June 30, 1993)	
E.	☐ Debris contaminated with newly listed waste (June 30, 1994)	
F.	☐ other _____	

Signature _____ Printed Name _____ Date _____

EVNOV92

GENERATOR MUST RETAIN COPY FOR RECORDS

RECEIVED
BUREAU OF
AUG 2 1993
WASTE MANAGEMENT

Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Date Received (For Official Use Only)

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

[ ] A. First Notification [X] B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007233976

II. Name of Installation (Include company and specific site name)

KREONIE INC

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 715 E 10 STREET

City or Town: WICHITA State: KS Zip Code: 67214-

County Code: 173 County Name: SEDGWICK

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: PO BOX 2099

City or Town: ICHITA State: KS Zip Code: 67201-

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): BORDER (first): GERALD

Job Title: PLANT ENG SERVICES Phone Number (area code and number): 316-263-1111

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: PO BOX 2099

City or Town: WICHITA State: KS Zip Code: 67201-

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: KREONITE INC

Street, P.O. Box, or Route Number: PO BOX 2099

City or Town: WICHITA State: KS Zip Code: 67201-

Phone Number (area code and number)	B. Land Type	C. Owner Type	D. Change of Owner	(Date Changed) Month Day Year
316-263-1111	P	P	Yes [ ] No [X]	

HAZARDOUS WASTE CONTAINER STORAGE AREA
WEEKLY INSPECTION LOG SHEET

Facility Name _____

Storage Area Location at Facility _____

Inspectors Name & Title _____

	ITEM	TYPES OF PROBLEMS	Week Of:		Week Of:		Week Of:		Week Of:	
			STATUS		STATUS		STATUS		STATUS	
			Acceptable	Unacceptable	Acceptable	Unacceptable	Acceptable	Unacceptable	Acceptable	Unacceptable
1.	Sealing of containers	Open lids. Sign/s not in place.								
2.	Labeling of containers	No Label. Improper identifications. Date missing.								
3.	Containers	Corrosion. Leakage. Structural defects.								
4.	Base or Foundation	Cracks. Spilling. Uneven Settlement. Erosion. Wet Spots.								
5.	Dikes	Cracks. Deterioration								
6	Sump Area	Cracks. Spilling. Uneven Settlement Erosion. Wet Spots.								
7.	Warning Signs	Not provided. Damaged.								
8.	No Hazardous Waste in Storage									

	ITEM	TYPES OF PROBLEMS	Week Of:		Week Of:		Week Of:		Week Of:	
			STATUS		STATUS		STATUS		STATUS	
			Acceptable	Unacceptable	Acceptable	Unacceptable	Acceptable	Unacceptable	Acceptable	Unacceptable
1.	Sealing of containers	Open lids. Sign/s not in place.								
2.	Labeling of containers	No Label. Improper identifications. Date missing.								
3.	Containers	Corrosion. Leakage. Structural defects.								
4.	Base or Foundation	Cracks. Spilling. Uneven Settlement. Erosion. Wet Spots.								
5.	Dikes	Cracks. Deterioration								
6	Sump Area	Cracks. Spilling. Uneven Settlement Erosion. Wet Spots.								
7.	Warning Signs	Not provided. Damaged.								
8.	No Hazardous Waste in Storage									

Observations include item number: _____

Date and nature of repairs/remedial action: _____

KEEP THIS RECORD FOR THREE YEARS

Date Completed: _____

95-0568 9/93

RECEIVED
BUREAU OF
AUG 2 1993
WASTE MANAGEMENT

Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Date Received (For Official Use Only)

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

[ ] A. First Notification [X] B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007239976

II. Name of Installation (Include company and specific site name)

KREONIE INC

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 715 E 10 STREET

City or Town: WICHITA State: KS Zip Code: 67214-

County Code: 173 County Name: SEDGWICK SC01 02

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: PO BOX 2099

City or Town: WICHITA State: KS Zip Code: 67201-

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): BORDER (first): GERALD

Job Title: PLANT ENG SERVICES Phone Number (area code and number): 316-263-1111

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: PO BOX 2099

City or Town: WICHITA State: KS Zip Code: 67201-

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: KREONITE INC

Street, P.O. Box, or Route Number: PO BOX 2099

City or Town: WICHITA State: KS Zip Code: 67201-

Phone Number (area code and number): 316-263-1111

B. Land Type: P

C. Owner Type: P

D. Change of Owner: Yes [ ] No [X]

(Date Changed) Month Day Year

KREONITE INC.

INDEX

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I RCRA EMERGENCY / CONTINGENCY PLAN

(40 CRF 264-Subpart C, D 270.14(b)(7))

COMPANY NAME		Kreonite, Inc			
ADDRESS		715 East Tenth Street			
LOCATION		Latitude 37 degree 42 min. Longitude 97 degree 20 min.			
CITY	Wichita	STATE	Kansas	ZIP CODE	67214
TELEPHONE	316-263-1111			EPA ID#	KSD007233976

FACILITY DESCRIPTION:

Please refer to enlarged facilities drawing for buildings that are associated with 715 East Tenth Street. Buildings are #1 thru #11; some have different street addresses but are in the same manufacturing complex, except for buildings #12 and #13 (720 East Tenth Street) which are located North of Tenth Street, and Building #20 that is located 1123 N Mosley Street. Listed are buildings in same complex with different street addresses: Building #3, 710 East Ninth Street; Building #11, 720 East Ninth Street; Building #10, 725 East Tenth Street.

The only buildings that have sprinklers for fire protection are buildings #3 and #11; the remaining have no alarms nor sprinkler systems.

The tank room, Paint, and Fiberglass Shop in Building #11 are the only three shops that generate hazardous waste.

PLEASE REFER TO FACILITY DRAWING WHILE READING FACILITY DESCRIPTION

BUILDING #1, 715 East Tenth Street - Administration Building:

Building is 94' 5" X 91', three stories with full basement; refurbished in 1975. Construction is prestressed concrete while the older part is concrete and brick. Exterior of building has tan stucco finish. Roof is flat prestressed concrete covered with asphalt and gravel covered.

The following is a brief description of buildings use. Third floor is used for Research and Development and has classrooms for training customers and employees. Second floor is used for Engineering, Service Department and Lab Design Department. First floor is used for Administration. Basement is used for Data Processing and Publication Departments.

BUILDING #2:

A 315' X 62' two-story, concrete and brick constructed building with full basement, flat asphalt roof and red brick exterior. Southeast side of building has a 24' X 110' wood/metal addition. The Southwest corner of ground floor houses the plant heating system, a 100HP low pressure boiler.

40 CFR 264 - Subpart C, D 270.14(b)(7)

The following is a brief description of buildings use.' Second floor is used for research and development department and a printer assembly department. The first floor is used for an Assembly and Storage Area. There is also a Spray Booth in this area used mostly for trimming fiberglass parts. The basement is used as a parts crib and electronics assembly area.

BUILDING #3, 710 East Ninth Street:

82' 2" X 89' green metal building with a 35.3' X 47.7' dock-high green metal addition on Southeast side. Main area in this building is used for assembling photographic processors and crating . The smaller addition is used for shipping and receiving. Building has a complete sprinkler system, with an alarm bell, and monitored by A.D.T.

BUILDING #4: Top Shop

94' 3" X 26' 8' red brick building with wood ceiling and flat asphalt roof. There are two departments in this building:

Roller shop: This shop fabricates rubber rollers for photo processors transports.
Glass penning shop: This shop prepares metal tubing for different coatings.

BUILDING #5. First Floor: Saw Shop

19' 5" X 34' 3" red brick building with wood ceiling. Saw Shop is located in this building. Saw Shop cuts plastic and metal tubing to lengths for manufacturing company products.

BUILDING #6. First Floor: Maintenance Shop

59' 5" X 34' 3" red brick building with wood ceiling. The Maintenance Department and weld shop is located in this building. Buildings #5 and #6 have a common second floor.

BUILDING #5 and #6, Second Floor:

79' X 34' 3" red brick constructed floor with wood ceiling and flat asphalt roof. This floor is used for storage and parts crib.

BUILDING #7, First Floor:

30' X 30' red brick constructed floor with wood ceiling and flat asphalt roof. The first floor is used for offices.

BUILDING #7, Basement:

30'X 30' concrete constructed wall with concrete ceiling. Basement houses the main electrical disconnects for buildings # 1, 2, 3, 4, 5, 6, 7, 8, 9, and part of building #11. Also located in the basement is A back-up Air Compressor and storage.

BUILDING #8: Weld Shop

53' X 51' red brick building with wood truss ceiling and a flat asphalt roof. The building is used for parts crib.

BUILDING #9: Processor Storage

53' X 51' red brick building with wood truss ceiling and flat asphalt roof. This building is used for storage.

BUILDING #10, 725 East Tenth Street: Wood Shop

100' X 100' green metal building that houses the Wood Shop. The Wood Shop cuts, laminates and details wood panels, that are assembled into laboratory furniture.

BUILDING #11, 720 East Ninth Street: Sheet Metal, Welding, Fiberglass, Metal Processing, and Paint Shops

Building 11 is divided into seven different areas. See plot plan on page 20 for details. All of building eleven is sprinkled and monitored by ADT, except for the metal awning.

11a) This area houses three shops:

1. Sheet Metal Shop cuts, forms and fabricates assembles for company products. 120' X 70' gray concrete-walled building; roof is semi-cylindrical wood with metal truss supports.
2. Fiberglass Shop uses molds, resins and fiberglass to make sink pans for photographic laboratory equipment.
3. Weld shop fabricates parts and assembly's for company products.

11b) Paint Shop

54' X 48' attached to the southeast section of building 11a. Concrete block walls flat asphalt roof with wood truss supports. The paint shop coats parts and assemblies for company products, using mostly powder and water born coatings.

11c) Metal Processing

58' X 30' attached to the southwest section of building #11a. Concrete block walls with flat asphalt roof with wood truss supports. Metal Processing has three processes, a aluminum conversion coating line, a photofinishing line and a nitric acid passivating line for stainless steal, see page 4 for detailed draining of Metal Processing and five through thirteen for information on the chemicals used in this operation.

11d) Air Compressor Room

13' X 13' brick room attached to the north side of building 11a, concrete block construction with metal roof. This room houses the main air supply for the plant, and two vacuum pumps for the fiberglass shop.

11e) Pump Room

13' X 32' brick room with a metal roof attached to the north side of building 11a. This room house the pumps that are used in the fiberglass operation. In this room is a solvent still for recycling Acetone. This room has containment incase of spills.

11f) Solvent Storage Area

13' X 21' concrete block and steel construction room with metal roof, this room is attached to the northwest side of building 11a the west side is open. This is used to dispense solvents, oil and metal processing chemicals. This room has containment in the event of a spill.

11g) Metal Awning

32' X 58' awning that cover the southwest covers of building 11a is used for storage.

40 CFR 264 - Subpart C, D 270.14(b)(7

BUILDING #12, 720 East Tenth Street: Plastic Molding Plant

Building is 19,000 square feet concrete and brick constructed walls, prestressed concrete ceiling with flat asphalt gravel roof. Exterior of building is finished with white brick on South and East sides while rest of building has a red brick finish. This building houses two shops: Tooling, that makes molds for plastic molding machines; and the plastic molding shop that makes plastic parts for the Company's products. There is approximately 25,000 pounds of raw plastic material stored in these building. The building is easily accessible from Tenth or Mead Street. Building #12 is the only building that has a part time second shift. There are normally four employees working until 12:00 am. Emergency information for second shift employees is listed on page #10.

BUILDING #13, located North and West of Building #12:

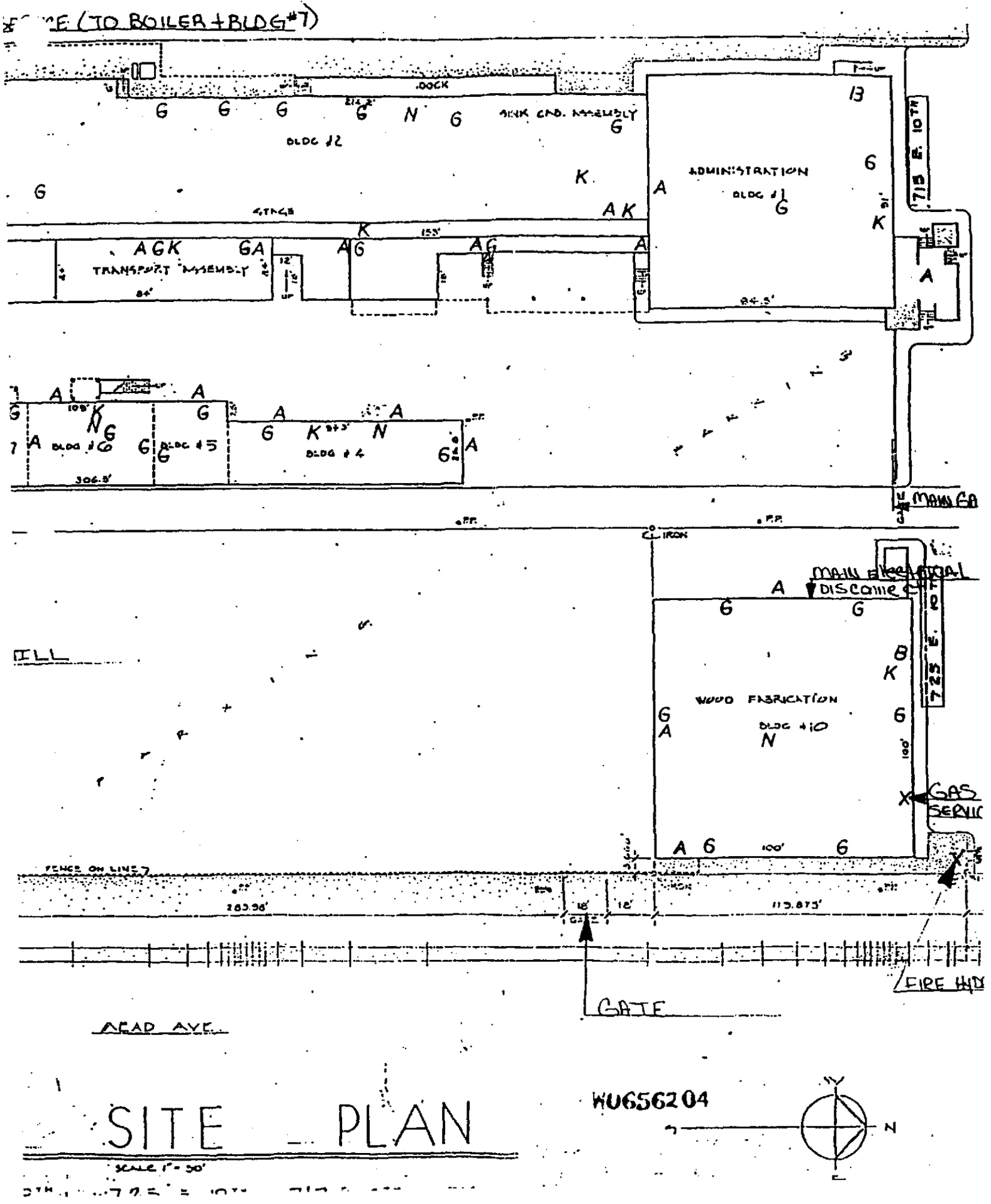
A 60' X 120' green concrete block building with wood beam ceiling and flat asphalt roof. Building is used for mold and plastic storage; normally there are no people in this building.

BUILDING #20, 1123 N MOSLEY:

Building is a 75' X 90' brick block construction building with a 22' X 29' addition on the southwest (see plot plan). Roof is flat, wood construction with steel truss supports and water-proofed with asphalt and tar paper. This building is used as a warehouse.

VI EMERGENCY EQUIPMENT 264.52e 264.32 264.33

BUILDINGS 3 AND 11 HAVE SPRINKLER SYSTEMS



W0656204

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

Barbara J. Sabol, Secretary

Forbes Field
Topeka, Kansas 66620-0110
913-862-9360

January 15, 1987

Mr. H. M. Basow
Kreonite Inc.
715 E. 10th Street
Wichita, Kansas 67201

Re: **Hazardous Waste Compliance Inspection**
KSD007233976 (South Plant)

Dear Mr. Basow:

On January 8, 1987 an inspection of your factory was conducted by this department to determine compliance with state and federal regulations concerning hazardous waste.

The inspection revealed your facility generated the following characteristic and listed hazardous wastes which are regulated and defined by 40 CFR, Part 261, Subpart C or D:

EPA Code	Wastes Generated
F005	methyl ethyl ketone
D001	Stoddard solvent
D001	mineral spirits
D002	caustic (Magnus 905)
D002	caustic (Diversey 909)
D002	sodium hydroxide (Aluminex)
D002, D007	chromic acid (Diversey 514)
D002, D005, D007	chromic acid/barium nitrate (Divercoat)

Since the quantity of hazardous waste generated by your firm is periodically more than 1,000 kilograms, your facility is classified as an **EPA generator** during the month in which that amount is exceeded. During that month your facility is regulated under 40 CFR, Part 262, as adopted by Kansas law.

Conversely, during the remainder of the year your facility is considered a **Kansas generator** and must comply with 40 CFR, Part 262, excluding 262.34(a)(4) as referenced by Kansas law.

Based on the information provided during the inspection, your facility was found to be in substantial compliance with state and federal hazardous waste regulations.

Your cooperation with the Hazardous Waste Program is appreciated. If you have any questions concerning this matter you can contact me at (316) 651-5532.

Sincerely,

David E. Kirsch

David E. Kirsch
Inspection and Enforcement Section
Bureau of Waste Management

DEK:ww/c128

cc:Thomas Gross
John Paul Goetz
District file

2.a. (cont.)

EPA Waste Code	Waste Material	Quantity/Month	Disposal Method
D002	Diversey-909	940 kg/annually	Discharged to sewer
D002	Aluminex	940 kg/2 years	ILWD of Missouri
D002-D007	Diversey-514	940 kg/2 years	ILWD of Missouri
D002-D005-D007	Divercoat 7-T	940 kg/2 years	ILWD of Missouri

b. D generator determine characteristics by testing or by applying knowledge of processes. Explain below:

Review of MSDS for products and knowledge of processes

1. If determined by testing, did generator use test method 261.21, 261.22, 261.23, or 261.24 or was equivalent test method used? _____ YES NO (NA)

   a. If equivalent method used, obtain copy of test method.

3. Are there any other wastes generated by generator? (YES) NO

   a. If yes, list below:

Waste Description	Method of Disposal
Paint booth air filters	Landfilled
Waste Oil	Radium Oil of Wichita

   b. Did the generator test these wastes to determine if hazardous? YES NO (NA)

   Explain if necessary:

4. Generator size classification:

   a. Does firm generate less than 100 kg of hazardous waste per month (Small quantity generator)? YES (NO)

   b. Does firm generate 100 kg or more but less than 1,000 kg. of hazardous waste per month (Kansas generator)? (YES) NO

   c. Does firm generate more than 1,000 kg of hazardous waste per month (EPA generator)? YES (NO)

Hazardous waste determination requirements:

[X] Adequate [ ] Inadequate

If generator generates less than 100 kg. of hazardous waste per month or accumulates less than 1,000 kg. stop here.

C. Manifests

1. Does generator ship waste off-site? YES NO

262.21 a. If yes, does manifest include:

1. Manifest document number? YES NO

2. Generator's name, address, phone number, and EPA ID number? YES NO

3. Name and EPA ID number of each transporter? YES NO

4. Name, address, and EPA ID number of designated facility? YES NO

5. Name, address, and EPA ID number of alternate facility if any. (The generator may also provide instructions to return waste to generator if undeliverable)? YES NO NA

6. Waste information required by DOT-Shipping name, (49 CFR 172.101, 172.202, 172.203) total quantity, type and number of containers? YES NO

7. Certification information - "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable regulations of DOT and EPA"? YES NO

262.23 b. Does generator retain copies of manifest? If yes, complete 1 through 4. YES NO

1. Does generator sign and date all manifests by hand? YES NO NA

2. Does generator obtain handwritten signature and date of acceptance from initial transporter? YES NO NA

3. Does generator retain copy of manifest signed by both generator and transporter? YES NO NA

262.40 4. Does generator retain copy of manifest signed and dated by T/S/D facility owner/operator for three years? YES NO NA

Manifesting requirements:

[X] Adequate [ ] Inadequate

D. Pre-Transport Requirements

262.30 1. Does generator package waste in accordance with DOT requirements (49 CFR 173, 178, and 179)? (YES) NO NA

262.31 2. Does generator label each package in accordance with DOT requirements (49 CFR 172)? (YES) NO NA

262.32 3. Does generator mark each package in accordance with DOT requirements (49 CFR 172)? (YES) NO NA

4. Does generator mark each container of 110 gallons or less as below: (YES) NO NA

Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. E.P.A.
Generator's Name and Address _____.

Manifest Document Number _____.

262.33 5. Does generator have placards to offer to transporters (49 CFR 172, Subpart F)? (YES) NO NA

Pre-transport requirements:

[X] Adequate [ ] Inadequate

E. Record Keeping and Reporting

262.40 1. Does generator keep a copy of completed manifests from designated facilities for three years? (YES) NO

2. Does generator keep a copy of each Annual Report and Exception Report for three years? (YES) NO NA

3. Does generator keep records of test results and waste analyses used in determining hazardous or non-hazardous nature of wastes for three years? (YES) NO NA

Record keeping and reporting requirements:

[X] Adequate [ ] Inadequate

F. Special Conditions

1. Has generator received from or transported to a foreign source any hazardous waste? YES (NO)

a. If yes, has generator [illegible] Reg[illegible]al Administrator? YES NO (NA)

b. Is waste manifested and signed by foreign cosignee? YES NO (NA)

c. If generator transports wastes out of the country, has confirmation of delivered shipment been received? YES NO (NA)

Special conditions requirements:

[X] Adequate [ ] Inadequate

G. Accumulation Time

262.34 1. Does generator temporarily store waste before transport for 90 days or less? (YES) NO NA

a. If yes, is waste placed in containers? (YES) NO NA

If yes,

1. Check overall condition of containers.

265.173 2. Are all containers holding hazardous waste closed during storage except when necessary to add or remove waste? (YES) NO NA

265.174 3. Does owner/operator inspect areas where containers are stored, at least weekly, for signs of leakage and/or deterioration caused by corrosion or other factors? (YES) NO NA

265.176 4. Are containers holding ignitible or reactive waste located at least 15 meters (50 feet) from the facility's property line? YES NO (NA)

265.177 5. If waste in containers is incompatible with other materials stored nearby, are the containers separated from the other materials by means of a dike, berm, wall, or other device? (YES) NO NA

b. If yes, is waste placed in tanks? YES (NO) NA

If yes, fill out tanks checklist except 265.193.

2. Is the date accumulation began clearly marked and visible for inspection on each container? (YES) NO NA

3. Is each containers and tank labeled or marked clearly with the words "Hazardous Waste"? YES NO NA

Note: If storage period exceeds 90 days then the facility is also a T/S/D facility. If facility is a T/S/D, go to T/S/D checklist here.

Accumulation time requirements:

[X] Adequate [ ] Inadequate [ ] Not Applicable

If generator is a Kansas generator stop here.

H. Requirements for Generators Operating Unpermitted Storage Facilities (Non T/S/D)

1. Does the owner/operator maintain at the facility, the following documents and records:

a. Job title and job description for each position related to hazardous waste management? YES NO

b. Description of type and amount of training to be given each person? YES NO

c. Records of training given to facility personnel? YES NO

Personnel training requirements:

[ ] Adequate [ ] Inadequate [ ] Not Applicable

---

2. The generator who accumulates waste on-site must meet the following requirements of preparedness and prevention (Subpart C):

265.31 a. Does an inspection of the facility show any evidence of fire, explosion, or contamination? YES NO

b. If applicable to the facility, is the facility equipped with:

1. Internal communication or alarm system easily accessible in case of emergency? YES NO NA

2. Telephone, hand-held two-way radio capable of summoning emergency response personnel? YES NO NA

	e ɔment, spill control equipment nd decontamination equipment provided?	YES	NO	NA
	d. Is water of adequate volume provided for hose streams, foam producing equipment, sprinklers, etc.?	YES	NO	NA
265.33	e. Is this equipment (a-d above) tested and maintained to assure its proper operation?	YES	NO	NA
265.35	f. Does a check of the facility show sufficient aisle space to allow unobstructed movement of personnel and equipment?	YES	NO	NA
265.37	g. If appropriate for the type(s) of waste handled has the owner/operator made arrangements with the local emergency authorities to familiarize them with the layout of facility, properties of wastes handled and associated hazards, places where facility personnel normally work, entrances to roads inside facility, and possible evacuation routes?	YES	NO	NA
	h. In areas where more than one police and fire department might respond, is there one designated authority?	YES	NO	NA
	i. If appropriate for the type(s) of waste handled does the owner/operator have agreements with State emergency response teams, emergency response contractors, and equipment suppliers?	YES	NO	NA
	j. If appropriate for the type(s) of waste handled has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries which could result from fires, explosions, or releases at the facility?	YES	NO	NA
	k. In cases where local authorities decline to enter into such arrangements, is the refusal entered in the operating record?	YES	NO	NA

Preparedness and prevention requirements:

[ ] Adequate [ ] Inadequate [ ] Not Applicable

---

3. The generator who accumulates waste on-site must also meet the contingency plan and emergency procedures requirements (Subpart D):

265.53 a. Is contingency plan maintained at the facility and have copies been provided to outside agencies which may be called upon to provide emergency services? YES NO

265.52 b. Does the plan describe arrangements made with emergency response personnel? YES NO

c. Does the plan list the name(s), home address, and phone numbers of designated emergency coordinator(s)? YES NO

d. Is an emergency coordinator available at all times? YES NO

e. Does the plan include a list of all emergency equipment at the facility, its location, a physical description of each item on the list, and a brief outline of its capabilities? YES NO

f. Does the plan include an evacuation plan for facility personnel? YES NO

Contingency plan and emergency procedures requirements:

[ ] Adequate [ ] Inadequate [ ] Not Applicable

Note: Determine if generator claims any information confidential.

Note: Complete section "I" only for those generators that also transport hazardous waste. This section should also be used for commercial transporting companies.

I. Transporter Requirements

1. In addition to the requirements for manifests given in section C(1)(a)(1) through section C(1)(a)(6) above, does the manifest include:

263.20 a. Signature of subsequent transporters, if any? YES NO NA

b. Signature signifying proper delivery to designated or alternate designated facility? YES NO

2. If the transporter transports wastes outside of U.S. do manifests show date waste left U.S.? YES NO NA

263.22 3. Does transporter keep copy of the manifest signed by generator, himself, and the next designated transporter or owner of T/S/D facility for three years? YES NO

J. INSPECTION SUMMARY:

Kreonite is a large manufacturer of photographic processing equipment. This inspection was conducted at their south plant which is located at 715 E. 10th Street in Wichita.

The spray paint process which had been operated at the north facility was relocated to the south plant during 1986. The paint booth was converted from a waterfall type to a dry, air filtration operation. All 8 air filters are replaced weekly and landfilled via a local refuse hauler. A review of the MSDS for the paints used in this process did not indicate a need to test the air filters for EP toxicity. Approximately 170 kilograms of waste methyl ethyl ketone (F005) are generated from the painting process each month.

The color-coding operation in the electric department generates approximately 6 kilograms of waste methyl ethyl ketone (F005) monthly.

The plant maintenance shop had a parts solvent bath which used Stoddard solvent (D001) and generated approximately 30 kilograms of waste solvent once annually. The tool & die shop also had a parts solvent bath which generated 15 kilograms of waste mineral spirits (D001) every 60 days.

Approximately 300 gallons of waste oil is generated annually by the maintenance of plant equipment and is disposed of by Radium Oil of Wichita.

The degreasing vat in the metal preparation room was converted from 1,1,1-trichloroethane to a hot caustic solution of Magnus 905. No caustic waste has been generated since the change over. However, approximately 1130 kilograms of waste caustic (D002) will be generated once a year. The preparation room also had a stainless steel acid-dip process which utilized a nitric acid tank that does not generate any waste acid.

An aluminum etching process had eight tanks which consisted of four chemical baths and four rinse water baths. A caustic solution, Diversey 909, was used in the first stage of the process. The waste from this tank is neutralized with sulfuric acid and discharged to the city sewer system. The second stage used sodium hydroxide which generates 940 kilograms of waste once every other year. An acidic solution, Diversey-514, was used in the third stage and it generates 940 kilograms of waste once every other year. The final stage in the etching process is a coating of Divercoat 7-T which also generates 940 kilograms of waste (D002) once every other year. All of the wastes from this process are disposed of by the ILWD Inc. of Missouri.

All of the rinse water tanks in the metal preparation room had a continuous overflow which were discharged to the city sewer system. Also, the water supply lines to the tanks were submerged below their liquid levels in order to provide circulation. A visual inspection revealed the lack of any back-siphoning devices in the water supply lines.

State of Kansas . . . John Carlin, *Governor*

DEPARTMENT OF HEALTH AND ENVIRONMENT

Barbara J. Sabol, *Secretary*

Forbes Field
Topeka, Kansas 66620-0110
913-862-9360

January 9, 1986

Mr. H. M. Basow
Kreonite Inc.
715 E. 10th Street
Wichita, Kansas 67201

RECEIVED
BUREAU OF
JAN 13 1987
WASTE
MANAGEMENT

Re: **Hazardous Waste Compliance Inspection**
KST210010500 (North Plant)

Dear Mr. Basow:

On January 8, 1987 an inspection of your facility was conducted by this department to determine compliance with state and federal regulations concerning hazardous waste.

The inspection revealed your facility generated waste acetone which is a listed hazardous waste and regulated by 40 CFR. This waste is defined in 40 CFR, Part 261, Subpart D, and is identified by EPA waste code F003. Your facility generates approximately 355 kilograms of hazardous waste monthly.

Since the monthly quantity of hazardous waste generated by your firm is more than 25 kilograms and less than 1,000 kilograms, your facility is classified as a **Kansas generator.** Therefore, you are regulated under 40 CFR, Part 262, excluding 262.34(a)(4), as adopted by K.A.R. 28-31-4. Your accumulation limit is 1,000 kilograms. To ensure you stay below this limit and do not become subject to further regulation, you should dispose of your waste on a regular basis.

Based on the information provided during the inspection, your facility was found to be in substantial compliance with state and federal hazardous waste regulations.

Your cooperation with the Hazardous Waste Program is appreciated. If you have any questions concerning this matter you can contact me at (316) 651-5532.

Sincerely,

David E. Kirsch
Inspection and Enforcement Section
Bureau of Waste Management

DEK:ww/c128

cc:Thomas Gross
John Paul Goetz
District file

John Carlin, Governor

Barbara J. Sabol, Secretary

Forbes Field
Topeka, Kansas 66620
913-862-9360

RCRA COMPLIANCE INSPECTION REPORT GENERATORS AND TRANSPORTERS CHECKLIST

A. General

Date 1-8-87 Time _____ EPA ID No. KST210010500

Facility Name KREONITE INC.

Street 400 E. 18th Street (North Plant)

City Wichita, Kansas Zip 67214

County Sedgwick Phone (316) 263-1111

Contacts Jerry Border and H.M. Basow

Inspector David Kirsch

Other _____

B. Hazardous Waste Determination

262.11 1. Does generator generate waste(s) listed in 261.31, 261.32, or 261.33? YES NO
If yes, list waste(s), EPA Hazardous Waste No. according to 40 CFR, Subpart D, and quantity/month:

EPA Hazardous Waste No.	Describe Waste Material	Quantity/Month	Method of Disposal
F003	Acetone	115 gal = 355 kg	CSI Wichita

2. Does generator generate waste(s), not listed, that exhibit hazardous characteristics (corrosivity, ignitability, reactivity, EP toxicity)? YES NO

a. If yes, list waste(s), EPA Hazardous Waste No. according to 40 CFR, Subpart C, and quantity.

EPA Hazardous Waste No.	Waste Material	Quantity/Month	Method of Disposal

b. L .s generator determine characte. .tics by testing or by applying knowledge of processes? Explain below:

Review of MSDS for products

1. If determined by testing, did generator use test method 261.21, 261.22, 261.23, or 261.24 or was equivalent test method used? _____ YES NO (NA)

   a. If equivalent method used, obtain copy of test method.

3. Are there any other wastes generated by generator? (YES) NO

   a. If yes, list below:

Waste Description	Method of Disposal
Air filters from spray booth	Landfilled

   b. Did the generator test these wastes to determine if hazardous? YES NO (NA)

   Explain if necessary:

   Review of MSDS for products

4. Generator size classification:

   a. Does firm generate less than 100 kg of hazardous waste per month (Small quantity generator)? YES (NO)

   b. Does firm generate 100 kg or more but less than 1,000 kg. of hazardous waste per month (Kansas generator)? (YES) NO

   c. Does firm generate more than 1,000 kg of hazardous waste per month (EPA generator)? YES (NO)

Hazardous waste determination requirements:

[X] Adequate [ ] Inadequate

If generator generates less than 100 kg. of hazardous waste per month or accumulates less than 1,000 kg. stop here.

C. Manifests

1. Does generator ship waste off-site? YES NO

262.21 a. If yes, does manifest include:

1. Manifest document number? YES NO

2. Generator's name, address, phone number, and EPA ID number? YES NO

3. Name and EPA ID number of each transporter? YES NO

4. Name, address, and EPA ID number of designated facility? YES NO

5. Name, address, and EPA ID number of alternate facility if any. (The generator may also provide instructions to return waste to generator if undeliverable)? YES NO NA

6. Waste information required by DOT-Shipping name, (49 CFR 172.101, 172.202, 172.203) total quantity, type and number of containers? YES NO

7. Certification information - "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable regulations of DOT and EPA"? YES NO

262.23 b. Does generator retain copies of manifest? If yes, complete 1 through 4. YES NO

1. Does generator sign and date all manifests by hand? YES NO NA

2. Does generator obtain handwritten signature and date of acceptance from initial transporter? YES NO NA

3. Does generator retain copy of manifest signed by both generator and transporter? YES NO NA

262.40 4. Does generator retain copy of manifest signed and dated by T/S/D facility owner/operator for three years? YES NO NA

Manifesting requirements:

[X] Adequate [ ] Inadequate

D. Pre-Trans t Requirements

262.30 1. Does generator package waste in accordance with DOT requirements (49 CFR 173, 178, and 179)? YES NO NA

262.31 2. Does generator label each package in accordance with DOT requirements (49 CFR 172)? YES NO NA

262.32 3. Does generator mark each package in accordance with DOT requirements (49 CFR 172)? YES NO NA

4. Does generator mark each container of 110 gallons or less as below: YES NO NA

Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. E.P.A.
Generator's Name and Address_____.

Manifest Document Number_____.

262.33 5. Does generator have placards to offer to transporters (49 CFR 172, Subpart F)? YES NO NA

Pre-transport requirements:

[X] Adequate [ ] Inadequate

E. Record Keeping and Reporting

262.40 1. Does generator keep a copy of completed manifests from designated facilities for three years? YES NO

2. Does generator keep a copy of each Annual Report and Exception Report for three years? YES NO NA

3. Does generator keep records of test results and waste analyses used in determining hazardous or non-hazardous nature of wastes for three years? YES NO NA

Record keeping and reporting requirements:

[X] Adequate [ ] Inadequate

F. Special Conditions

1. Has generator received from or transported to a foreign source any hazardous waste? YES NO

a. If [illegible], has generator filed a notic[illegible] ith the Regional Administrator? YES NO NA

b. Is waste manifested and signed by foreign cosignee? YES NO NA

c. If generator transports wastes out of the country, has confirmation of delivered shipment been received? YES NO NA

Special conditions requirements:

[X] Adequate [ ] Inadequate

G. Accumulation Time

262.34 1. Does generator temporarily store waste before transport for 90 days or less? YES NO NA

a. If yes, is waste placed in containers? YES NO NA

If yes,

1. Check overall condition of containers.

265.173 2. Are all containers holding hazardous waste closed during storage except when necessary to add or remove waste? YES NO NA

265.174 3. Does owner/operator inspect areas where containers are stored, at least weekly, for signs of leakage and/or deterioration caused by corrosion or other factors? YES NO NA

265.176 4. Are containers holding ignitible or reactive waste located at least 15 meters (50 feet) from the facility's property line? YES NO NA

265.177 5. If waste in containers is incompatible with other materials stored nearby, are the containers separated from the other materials by means of a dike, berm, wall, or other device? YES NO NA

b. If yes, is waste placed in tanks? YES NO NA

If yes, fill out tanks checklist except 265.193.

2. Is the date accumulation began clearly marked and visible for inspection on each container? YES NO NA

3. Is eac ontainers and tank labeled or ked clearly with the words "Hazardous Waste"? YES NO NA

Note: If storage period exceeds 90 days then the facility is also a T/S/D facility. If facility is a T/S/D, go to T/S/D checklist here.

Accumulation time requirements:

[X] Adequate [ ] Inadequate [ ] Not Applicable

If generator is a Kansas generator stop here.

H. Requirements for Generators Operating Unpermitted Storage Facilities (Non T/S/D)

1. Does the owner/operator maintain at the facility, the following documents and records:

a. Job title and job description for each position related to hazardous waste management? YES NO

b. Description of type and amount of training to be given each person? YES NO

c. Records of training given to facility personnel? YES NO

Personnel training requirements:

[ ] Adequate [ ] Inadequate [ ] Not Applicable

---

2. The generator who accumulates waste on-site must meet the following requirements of preparedness and prevention (Subpart C):

265.31 a. Does an inspection of the facility show any evidence of fire, explosion, or contamination? YES NO

b. If applicable to the facility, is the facility equipped with:

1. Internal communication or alarm system easily accessible in case of emergency? YES NO NA

2. Telephone, hand-held two-way radio capable of summoning emergency response personnel? YES NO NA

	c.	A portable fire extinguishers, control equipment, spill control equipment, and decontamination equipment provided?	YES	NO	NA
	d.	Is water of adequate volume provided for hose streams, foam producing equipment, sprinklers, etc.?	YES	NO	NA
265.33	e.	Is this equipment (a-d above) tested and maintained to assure its proper operation?	YES	NO	NA
265.35	f.	Does a check of the facility show sufficient aisle space to allow unobstructed movement of personnel and equipment?	YES	NO	NA
265.37	g.	If appropriate for the type(s) of waste handled has the owner/operator made arrangements with the local emergency authorities to familiarize them with the layout of facility, properties of wastes handled and associated hazards, places where facility personnel normally work, entrances to roads inside facility, and possible evacuation routes?	YES	NO	NA
	h.	In areas where more than one police and fire department might respond, is there one designated authority?	YES	NO	NA
	i.	If appropriate for the type(s) of waste handled does the owner/operator have agreements with State emergency response teams, emergency response contractors, and equipment suppliers?	YES	NO	NA
	j.	If appropriate for the type(s) of waste handled has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries which could result from fires, explosions, or releases at the facility?	YES	NO	NA
	k.	In cases where local authorities decline to enter into such arrangements, is the refusal entered in the operating record?	YES	NO	NA

Preparedness and prevention requirements:

[ ] Adequate [ ] Inadequate [ ] Not Applicable

---

3. The generator who accumulates waste on-site must also meet the contingency plan and emergency procedures requirements (Subpart D):

265.53	a. Is contingency plan maintained at the facility and have copies been provided to outside agencies which may be called upon to provide emergency services?	YES	NO
265.52	b. Does the plan describe arrangements made with emergency response personnel?	YES	NO
	c. Does the plan list the name(s), home address, and phone numbers of designated emergency coordinator(s)?	YES	NO
	d. Is an emergency coordinator available at all times?	YES	NO
	e. Does the plan include a list of all emergency equipment at the facility, its location, a physical description of each item on the list, and a brief outline of its capabilities?	YES	NO
	f. Does the plan include an evacuation plan for facility personnel?	YES	NO

Contingency plan and emergency procedures requirements:

[ ] Adequate [ ] Inadequate [ ] Not Applicable

Note: Determine if generator claims any information confidential.

Note: Complete section "I" <u>only</u> for those generators that also transport hazardous waste. This section should also be used for commercial transporting companies.

I. <u>Transporter Requirements</u>

1. In addition to the requirements for manifests given in section C(1)(a)(1) through section C(1)(a)(6) above, does the manifest include:

263.20	a. Signature of subsequent transporters, if any?	YES	NO	NA
	b. Signature signifying proper delivery to designated or alternate designated facility?	YES	NO	
	2. If the transporter transports wastes outside of U.S. do manifests show date waste left U.S.?	YES	NO	NA
263.22	3. Does transporter keep copy of the manifest signed by generator, himself, and the next designated transporter or owner of T/S/D facility for three years?	YES	NO	

J. INSPECTION SUMMARY:

Kreonite is a large manufacturer of photographic processing equipment. This inspection was conducted at their north plant which was located at 400 E. 18th Street in Wichita. The spray paint process which was in operation at this facility during the last inspection had been relocated to the south plant at 715 E. 10th Street.

The resin room was using the old spray paint booth to spray gel coat on fiberglass products. All 70 air filters are changed weekly and disposed of at the Brooks sanitary landfill. This operation generates approximately 2 drums of waste acetone (F003) monthly.

The pattern room was using acetone to clean-up tools during the production of forms for fiberglass products. This process generates approximately 5 gallons of acetone (F003) monthly.

Approximately 115 gallons (355 kilograms) of waste acetone is generated by this facility monthly. All waste acetone is recycled by CSI of Wichita.

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

Joseph F. Harkins, Secretary

Forbes Field
Topeka, Kansas 66620
913-862-9360

NON-NOTIFIER INSPECTION REPORT

A. GENERAL

Date July 20, 1983 Time

Facility Name Kreonite (South Plant)

Street 715 E. 10st. City Wichita

Zip 67214 County Sedgwick Phone 263-1111

Inspector(s) Dale T. Stuckey

Contact Gene Cox-Director of Facilities & Matt Basow-Vice President of Manufacturing Joe Border-Maintenance Supervisor Title

Nature of Business Makes photographic supplies

B. INDUSTRIAL WASTE

WASTE:	1,1,1-trichloroethane sludge	waste oil	paint thinner	paint sludge	centerless grinder slu
PROCESS:	clean out of degreaser	—	—	waterwash paintbooth	machine shop
IS WASTE HAZARDOUS? (Yes, No, Maybe)	YES	MAYBE	YES	MAYBE	NO
IF YES, GIVE EPA ID #:	F001	—	D001	—	—
IS WASTE EXEMPT DUE TO RECYCLING (261.6)	NO	YES	YES	NO	—
AMOUNT GEN. PER MONTH:	5 gal./yr.	300gal/yr	4gals.	5gals/yr	50gal/2m
PRESENT DISPOSAL METHOD:	county landfill	clearwater trucking Co.	Reid Supply	county landfill	county landfill
DISP. AUTH. IN EFFECT? (If yes, give No.)	NO	NO	NO	NO	NO
AMOUNT NOW IN STORAGE:	None	?	55gal drum	NONE	?
ACCUMULATION TIME:	—	?	?	—	?
TYPE OF CONTAINER:	—	300 gal tank	55 gal. drum	—	?
STORAGE CONDS. ADEQUATE?	—	YES	YES	—	?

1. Total monthly generation rate of known hazardous waste - 4-5 gallons

2. Is facility required to notify? YES NO
If yes, what reason was given for failure to notify? _____

C. HAZARDOUS WASTE MANAGEMENT PRACTICES

1. Are hazardous wastes or suspected hazardous wastes treated on site? YES NO

If yes, describe the treatment process: _____

2. Are hazardous wastes or suspected hazardous wastes benefically recycled, re-used, or reclaimed? YES NO

If yes, are they, listed Char
and is activity, on-site off-site

3. Are hazardous wastes or suspected hazardous waste presently disposed of on-site? YES NO

a. Have they been in the past? YES NO

If yes, describe They used to neutralize NaOH and send it down the sanitary sewer.

b. If hazardous wastes or suspected hazardous waste are disposed of via the sanitary sewer, has permission from the city been obtained? YES NO NA

4. Are hazardous wastes transported from the site? YES NO

If yes, by whom: Transport paint thinner drums to

To: the North Plant and from there it is picked up by Reid Supply.

State of Kansas . . .

DEPARTMENT OF HEALTH AND ENVIRONMENT

ENVIRONMENTAL SANITATION

HAZARDOUS WASTE GENERATOR'S SURVEY

Firm Kreonite, Inc. Date 3-25-80

City Wichita County SG State KS Zip 67201

Industry Contact H. M. Benson Inspector [illegible]

* *

1. Are hazardous wastes generated? (Yes) No

   If yes, what type? Acetone, paint thinner, Diversey Brite Dip, waste oil

2. Are hazardous wastes stored on the plant site? (Yes) No — No plant; Acetone, paint thin., waste oil

   More than 90 days Yes (No)

   Wastes are stored on site in? (circle) — acetone, paint thinner, oil

   Ponds (Barrels) (Tanks) Other ______

3. Are hazardous wastes treated? (Yes) No — Brite Dip

   Treatment Procedure neutralized and precipitated — sludge [illegible] landfill

4. Are hazardous wastes disposed of on site? (Yes) No

   If yes, in what manner. (circle) — Cooling water → sewer

   Injection wells Permitted? Yes No #______

   Landfilling Permitted? Yes No #______

   Sewer System (private) Permitted? Yes No #______

   Sewer System (municipal)

   Is waste pretreated (Yes) (No) — Brite Dip - no pH

   Is waste tested before disposal Yes (No)

   Incineration Permitted? Yes No #______

   Surface impoundment Permitted? Yes No #______

5. Are hazardous wastes transported from the site? Yes No

If yes, by whom? Midwest Oil Refining - waste oil; Reid Supply - Acetone + lacquer thinner; McGhee Refuse Service transportation grinder sludge to landfill

Is the transporter registered in Kansas? Yes No # HW 112

Wastes transported to: Reid Supply - Acetone + thinner; Midwest Oil Refining - waste oil

Wastes transported for: disposal (sludge) recycling

6. Water supply (describe)

Municipal YES - Wichita

Noncommunity Public (25 users) _____

Private Well for cooling purposes only

If dual supplies, are they connected? Yes No

Backflow prevention:

For entire plant? Yes No

Type and Location _____

Production areas protected from backflow? Yes No

Problem areas _____

7. Samples Collected

Material Sludge - may contain plastic + fine metals

Where collected Center less grinder in metals shop.

Material _____

Where collected _____

Material _____

Where collected _____

Material _____

Where collected _____

Material _____

Where collected _____

8. Have any wastes ever been disposed on site? Yes No

Type of waste _____

Location _____

Present Status _____

SPECIFIC INSTRUCTIONS AND ITEMS:

Left Bulletin 4.9

Would like copy of statutes, regs, etc.

Since they filled out the H.W. Generator's Report they have added a variety of metal treatments including a degreasing agent (Trichloroethane) and a number of Diversey Chem. Co. products (metal brightener, etc) + NITRIC acid. Safety data sheets were obtained for these chemicals. I was told that they waste out the Diversey Brite Dip (this is neutralized + precipitated waste to landfill) They said everything else (Diversey products, degreaser, + nitric acid) simply evaporate and as this happens fresh chemical is added. Tanks at main plant (also filt sludge) SHOULD THEY FILL OUT NEW H.W. GEN. REPORT

Also saw pile of empty used Silicone + scrap fiberglass that goes to landfill - IS THIS OK?

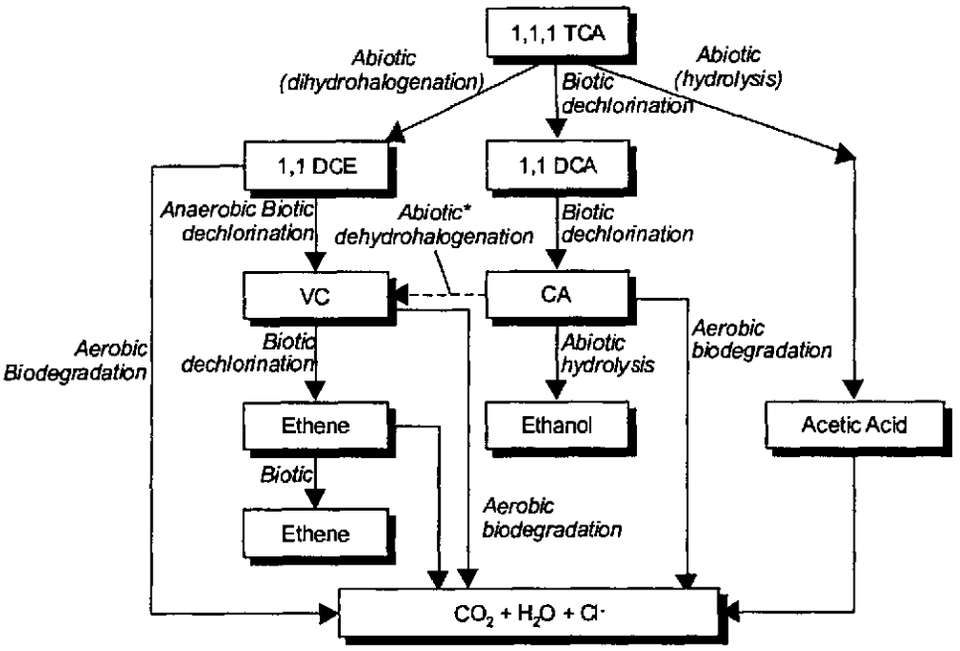
Similar from contractors grinders goes to landfill I mentioned this - it may contain plastics + other materials.

3/12/80 BES

Degradation Pathways

Figure 1

1,1,1-TCA Degradation Pathways



Application for Certification and Release

Send

NOV 12 1998

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, KREONITE, INC.,

(insert legal name(s) of party seeking certificate)

715 EAST 10TH STREET
P.O. BOX 2099
WICHITA, KS 67201-2099

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at: SEE ATTACHMENT A

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: TENANT AND PROPERTY MANAGER

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: SEE ATTACHMENT A

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

b. Commercial or Industrial. The property is or has been used for a commercial or industrial use. The Applicant states that it has undertaken a diligent inquiry of the environmental condition of the property, and to the personal knowledge of the Applicant, provided all information requested on the attached Environmental Disclosure Form and a copy of any environmental investigation reports performed on the property is enclosed herewith, and based upon the information identified therein, that such property during the period of interest of the Applicant is not, or has not been, the source of any release or threat of release of hazardous substances (as defined by Federal or State law or regulation), hazardous wastes, toxic chemicals, petroleum or petroleum products or other pollutants or contaminations ("Hazardous Substances") regulated under Federal, State, or Local Statutes, ordinances, regulations or guidelines ("Environmental Laws").

c. Lender. The Applicant is a lender on the property and has provided in good faith and to the best of its knowledge all additional information available to the Applicant concerning the environmental conditions of the property. Applicant is not liable or responsible for the submission of any false or misleading information, prepared or submitted by others relative to this property unless Applicant knows, or has reason to know, such information to be false or misleading.

5. That the Applicant makes this certification in anticipation of the benefits of a Certificate and Release for Environmental Conditions which may be granted to the Applicant by the City of Wichita and on behalf of the Kansas Department of Health and Environment ("KDHE") under the authority of a Settlement Agreement of November 14, 1995, between the City and KDHE ("City/KDHE Agreement"), and acknowledges that, if the facts stated herein or any information provided in connection herewith are found to be false or misleading, the Certificate and Release for Environmental Conditions will be null and void and of no effect, and the Applicant may be subject to penalty of law for providing false statements.

6. That the Applicant acknowledges and agrees that the KDHE's release and covenant not to sue provided in the City/KDHE Agreement is applicable and enforceable only if certain obligations of the City thereunder are being met and if such obligations have not become void or unenforceable by the operation of law, by the terms of this Agreement, or for any other reason.

7. That the Applicant agrees to grant to the City of Wichita, its agent, consultants, or persons working in cooperation with it, whatever reasonable access is necessary for the completion of the activities contemplated in the City/KDHE Agreement and in accordance with paragraph 126 of that Agreement, provided that such grant of access is to the extent of the Applicant's authority to grant access and the Applicant has no obligation to obtain any such authority it does not now possess. Any test results obtained from the Applicant's property under this paragraph will be made available to the Applicant upon reasonable request.

8. This Application is provided solely for the benefit of the City of Wichita and is furnished to induce the City to issue a Certificate and Release for Environmental Conditions. Nothing herein is intended to provide to any other party any third party beneficiary rights or causes of action.

9. This Application is submitted with the understanding that in order to review and act upon the Application the City of Wichita may require additional information reasonably related to the environmental condition of the property or the corporate predecessors of Application.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date shown.

Name: Carl E Christensen Jr
(signature)

Name: CARL E. CHRISTENSEN, JR., PRESIDENT
(print or type)

KREONITE, INC.

715 E. 10TH ST., WICHITA, KS
Address (print or type)

Date: NOV. 11, 1998

Subscribed and sworn to before me this 11 day of NOV., 1998.

Jon W. Querner
Notary Public

My appointment expires: August 19, 1999

JON W. QUERNER
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. _____

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for Commercial/Industrial property only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant KREONITE, INC. Date 11/11/98

Business Phone 263-1111 Home Phone

Legal Description SEE ATTACHMENT B

Property Tax Key # SEE ATTACHMENT B

Street Address of Property SEE ATTACHMENT B

(1) **General Information** - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER	DATES	TYPE OF BUSINESS/SITE USE
SEE	From: ____ To: Present	SEE ATTACHMENT C
ATTACHMENT C	From: ____ To: ____	
	From: ____ To: ____	
	From: ____ To: ____	

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES	DATES	TYPE OF BUSINESS/SITE USE
SEE	From: ____ To: Present	SEE ATTACHMENT C
ATTACHMENT C	From: ____ To: ____	
	From: ____ To: ____	
	From: ____ To: ____	

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☒Yes ☐No ☐Unknown NIC INVESTIGATION ONLY.

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses? ☐Yes ☒No ☐Unknown

(d) Has any type of environmental study been performed on this property? ☒Yes ☐No ☐Unknown
If yes, please identify and include a copy of the report. STUDIES PERFORMED AT THE REQUEST OF THE KDHE FOR THE NORTH INDUSTRIAL CORRIDOR (NIC) PROJECT.

(2) **Disposal of Wastes.**

(a) Are liquid or sludge wastes generated and/or stored on property? ☐Yes ☐No ☐Unknown
SEE RESPONSE TO ITEMS 3 AND 4 BELOW.

(b) What do the liquid wastes consist of?
SEE RESPONSE TO ITEMS 3 AND 4 BELOW.

(c) Has any type of characterization of these liquid wastes been conducted? ☐Yes ☐No ☒Unknown
If yes, include copy of results.

(3) Status of Possible Contamination of the Site.

(a) Has any hazardous substance (as defined in the application) been disposed of on the property?
☐Yes ☐No ☐Unknown SEE ATTACHMENT D

(b) Has the property ever been owned by any entity that used hazardous substances on the site?
☐Yes ☐No ☐Unknown SEE ATTACHMENT D

(c) Provide information concerning any release of hazardous substances from or onto the property, of which you are aware, by any prior owner or occupant. SEE ATTACHMENT D

(d) Are there any apparent or suspected areas of contamination on the property, including within any buildings or other structures? ☐Yes ☒No ☐Unknown

(e) Have all hazardous substances disposed of on the property or transported for disposal from the property been disposed of in compliance with federal, state and local requirements? ☐Yes ☐No ☒Unknown

If yes, give name, phone number and contact person, for each transporter utilized.

(f) If disposal of hazardous substances occurred on the property, state the date, method and location of such disposal.

(g) Has there been any test for, or specific knowledge of, contamination of subsurface soils or groundwater on your property?
☒Yes ☐No ☐Unknown If yes, include copy of results.
SEE RESPONSE TO ITEM 1(d) ABOVE.

(h) Have any hazardous substances been spilled or accidentally leaked from containers or equipment on the property?
☐Yes ☐No ☒Unknown

(i) Has there ever been a PCB leak, spill, or other contamination affecting the property.
☐Yes ☐No ☒Unknown If yes, please describe.

(4) Status of Usage of Chemicals

(a) During the period of your ownership or occupancy of the property, have chemicals been used or stored on the property?
☒Yes ☐No ☐Unknown ☐Not Applicable

If yes, please identify any and all chemicals used in connection with business activities. For each chemical identified, state: the quantity used; how and where it is stored; and how it is disposed of after use.

SEE ATTACHMENT E

(b) If chemicals are stored on property, have all necessary reports been filed with OSHA, EPA, and other federal, state and local authorities? ☐Yes ☐No ☒Unknown

(c) If such reports were filed, do they meet federal, state and local requirements?
☐Yes ☐No ☒Unknown State the names of individuals familiar with the filings and the location of the files.

(5) Status of Water Pollution Control.
(a) Does the facility have any wastewater? ☐Yes ☒No ☐Unknown

How is it managed or treated at present? In past?

(b) Are there any pits, ponds, lagoons, tanks? ☐Yes ☒No ☐Unknown

If yes, indicate how and when the structures were used, and what compounds have been stored in them.

(c) Is the property connected to the City sewage treatment system? ☒Yes ☐No

(d) Is there a pollution control permit from federal, state or local authorities for any such discharge?
☐Yes ☐No ☐Unknown

(e) Does the property have any records of water pollution discharges? ☐Yes ☐No ☐Unknown
State the location of such records and the individuals familiar with them.

SEE RESPONSE TO ITEM 3(c) ABOVE.

(f) Is there now or has there been a NPDES permit for the property? ☐Yes ☒No ☐Unknown

(g) Is there any sludge accumulated from any water pollution activities? ☐Yes ☒No ☐Unknown
If yes, where?

6) Status of Compliance with Requirements Relating to Petroleum Products.
(a) Are any petroleum products stored at the facility? ☐Yes ☐No ☐Unknown
If yes, how much and where are they stored?

SEE RESPONSE TO ITEM 4(a) ABOVE

(b) Are there any underground storage tanks at the property? ☐Yes ☒No ☐Unknown

Have they been registered with the Kansas Department of Health and Environment of other state, federal, or local agency?
☐Yes ☒No If registered, please attach a copy of the State Certificate.

(c) If applicable, please describe the location, age, construction, size and condition, of any underground storage tanks at the property. For each such underground storage tank, identify the petroleum product, solvent or other chemical which is being or was stored in the tank.

N/A

(d) Have the tanks been tested? ☐Yes ☐No ☐Unknown Results?

N/A

(e) Have any underground storage tanks been removed from, closed in place, or abandoned at the property?
☐Yes ☒No ☐Unknown If yes, please describe.

(f) Have any tanks presently or previously located at the property leaked or spilled?
☐Yes ☒No ☐Unknown If yes, please describe.

(7) Are there any water-wells on the property? ☒Yes ☐No If yes, for each well answer the following:

If tested, was this well found to contain hazardous substances? ☐Yes ☐No ☒Unknown If yes, please explain.

(a) If known, what was the water-well used for in the past?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other
SEE ATTACHMENT F

(b) What is the water-well used for currently?
☐Drinking ☐Irrigation ☐Manufacturing ☐Cooling System ☐Other
NOT USED CURRENTLY

(c) Has this well been tested for water quality or presence of hazardous substances? ☐Yes ☐No ☒Unknown

(d) Was the well found to contain hazardous substances? ☐Yes ☐No Explain. Attach copy of results.

(8) Is applicant the corporate successor of any other entity that was located on or owned the property? ☐Yes ☐No
If yes, list those corporate predecessors.

SEE RESPONSE TO ITEM 1(a) ABOVE.

(9) Is a loan pending based on the Release for Environmental Condition? ☐Yes ☒No
Is there a sale pending the Release for Environmental Conditions? ☐Yes ☒No
If yes, please indicate closing date _____.

Other comments:

ATTACHMENT A

ATTACHMENT A

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

2. Property Location	3. Owner of Record
715 East 10th Street	Facilities Limited
722 East 10th Street	Keystone Limited
725 East 10th Street	Facilities Limited
722 East 9th Street	Cedar Limited & Keystone Limited
1123 North Mosley	Seneca Limited
1133 North Santa Fe	Cedar Limited & Seneca Limited
1001 North Mead	Facilities Limited

Table I. Ownership History.

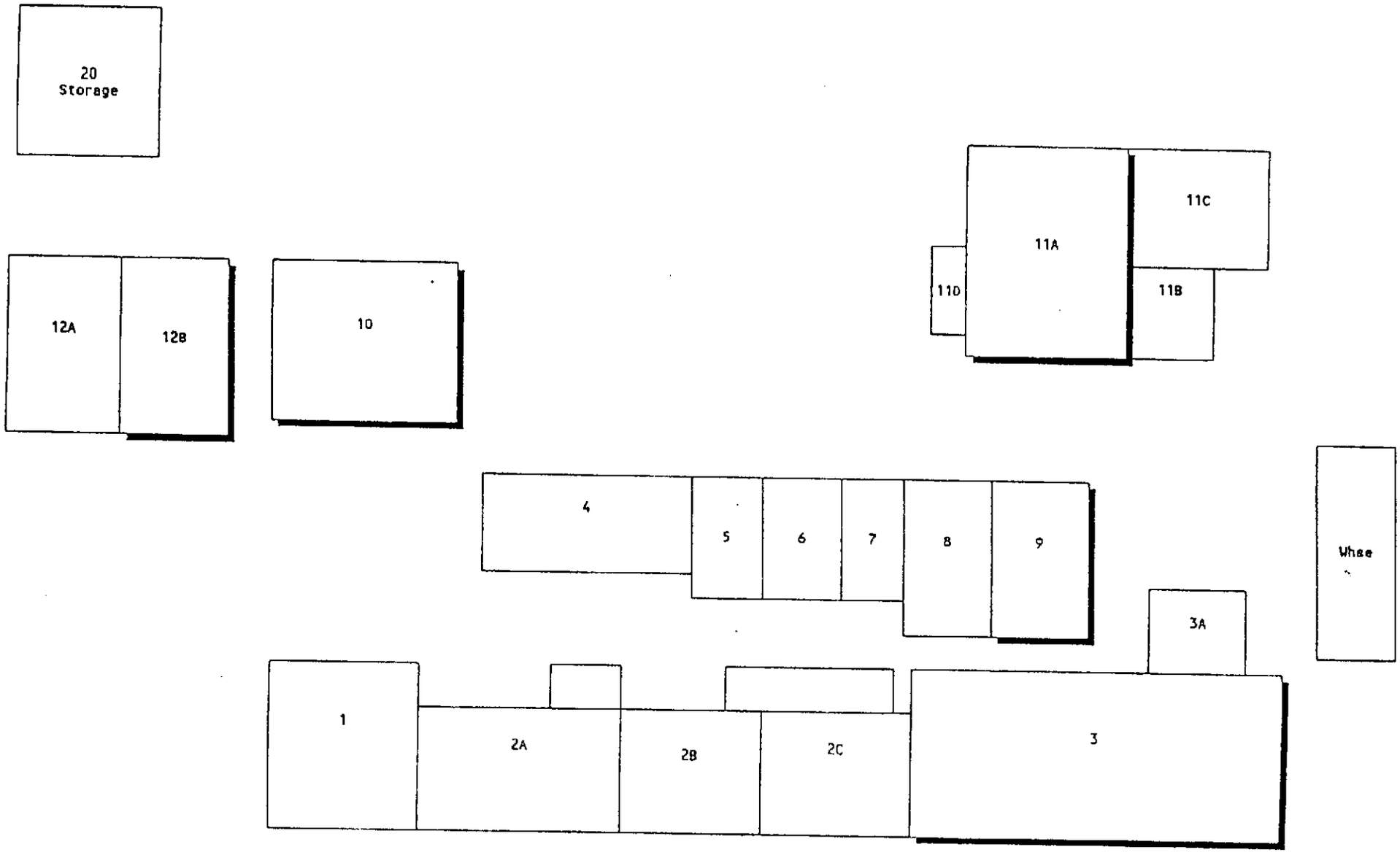
Name of Owner/Sublessor	Recorded Date of Ownership	Portion of Facility Owned as Described on Exhibit:
Alice R. Stites	12/27/12	10
S. W. Cooper	08/07/13	11
S. W. Cooper	08/26/15	12
J. N. Haymaker & wife	08/27/15	13
Standard Oil Company	08/14/15	14
H. C. Wear	09/07/15	15
J. N. Haymaker	10/08/15	16
Standard Oil Company	11/10/15	17
Alice R. and Carrie E. Stites	12/01/15	18
Standard Oil Company	12/17/15	19
Standard Oil Company	01/11/16	20
City of Wichita	03/22/16	21
Standard Oil Company	09/23/18	22
Atchison, Topeka & Santa Fe Railway Company	09/25/18	23
Atchison, Topeka & Santa Fe Railway Company	01/18/19	24
American Oil Company	02/24/61	25
Dwight Krehbiel and Wilma L. Krehbiel	06/27/61	26
City of Wichita	12/22/75	27
Dwight Krehbiel and Wilma L. Krehbiel, Lessees	12/22/75	28
Dale M. Stucky, Willard B. Thompson, Paul Ray Krehbiel and Lynn Marie Krehbiel Oetting, as Trustees/Lessees	12/29/75	29
Dale M. Stucky, Willard B. Thompson, Paul Ray Krehbiel and Lynn Marie Krehbiel Oetting, as Trustees	12/31/75	30

Dale M. Stucky, Willard B. Thompson, Paul Ray Krehbiel and Lynn Marie Krehbiel Oetting, as Trustees	12/29/76	31
Dale M. Stucky, Willard B. Thompson, Paul Ray Krehbiel and Lynn Marie Krehbiel Oetting, as Trustees/Lessees	12/31/76	32
Dwight Krehbiel and the Estate of Wilma L. Krehbiel	12/26/79	33
Dale M. Stucky, Willard B. Thompson, Paul Ray Krehbiel and Lynn Marie Krehbiel Oetting, as Trustees/Lessees	12/31/79	34
Dale M. Stucky, Willard B. Thompson, Paul Ray Krehbiel, Lynn Marie Krehbiel Oetting, as Trustees	02/14/80	35
Donna Clawson, Lessee	06/25/87	36
Krehbiel Properties, Lessee	06/26/87	37
Dale M. Stucky, Willard B. Thompson, Paul Ray Krehbiel and Lynn Marie Krehbiel Oetting, as Trustees, and Krehbiel Properties	06/29/87	38
Facilities Limited Company	03/04/91	39

Please refer to the above table for the specific dates on which the various owners and sublessors acquired their interests in the Facility and for references to attached Exhibits which describe the portions of the Facility which were owned or leased by these individuals and entities. Kreonite notes for the information of the reader that the legal descriptions appearing on the referenced Exhibits may include more, or less, real property than would constitute the Facility. As the above information demonstrates, the ownership history of the Facility has been very complex. As a result, it would be extremely difficult, if not impossible, for Kreonite to determine the date(s) on which each of the above-named owners/sublessors ceased to hold an interest in at least a portion of the Facility, and Kreonite has not attempted to include this information as a part of this Response.

Kreonite, Inc.

BLDGS.ABC\TopChart



As of November 1998, Kreonite's various operations and processes are being performed in the respective buildings, as follows:

Operation	Building No.
Administration	1
Electronics	2
Fiberglass	11
Fiberglass Spray Booth	11
Final Assembly	2
Machine Shop	12
Maintenance	5,6
Molding	12
Painting	11
Plastics	12
Printer Assembly	2
Router Shop	10
Saw Shop	4
Sheet Metal	11
Shipping	2
Sink Assembly	2
Top Shop	10
Welding	11
Wood Shop	10

DISTRIBUTION CODES

1979

I Personal Use Dispensers
II Spray Painted
III Brush Painted
IV Drums to Process Tank
V Added To Paint

Product	Manufacturer	Vendor	How Distributed	Approx. Amt. Used	Building # Used	Amount Purchased 1979
Nitric Acid	El Dorado Chemical Co.	Reid Supply Co.	IV	210 Gal	9	14 (15 Gal Dr)
111, Tricholorethane Solvent	Vulcan Chemicals	"	IV	1155 Gal	9	21 (55 Gal Dr)
Alcohol, Denatured	Union Chemical	"	I	5 Gal	2	1 (5 Gal Pail)
Sprazee Solvent	Novamax Technologies	"	III	55 Gal	6	1 (55 Gal Dr)
Recycled Lacquer Thinner	Reid Supply Co.	"	I, II, V	330 Gal	6	6 (55 Gal Dr)
Toluene	Texaco Chemical Co.	"	I, II	110 Gal	6	2 (55 Gal Dr)
F63B12 Polane Carbide Black	Sherwin Williams	Sherwin Williams	II	14 Gal	6	14 (1 Gal Pails)
V66V27 Polane Catalyst B	"	"	II, V	20 Gal	6	20 (1 Gal Pails)
140-0167 Flat Black Spray	"	"	II	51 Aerosols	1-9	51 (16 oz Aerosols)
140-0183 Gloss Black Spray	"	"	II	6 Aerosols	1-9	6 (16 oz Aerosols)
L61W34 Opex Production Lacquer Gloss White	"	"	II	9 Gal	6	9 (1 Gal Pails)
B62W101 Tile Clad Pure White	"	"	II	10 Gal	6	10 (1 Gal Pails)
B60V70 Activator	"	"	II, V	26 Gal	6	26 (1 Gal Pails)
M69W1 Strippable Coating, White	"	"	II	55 Gal	6	1 (55 Gal Dr)
R7K69 Polane Reducer	"	"	II	95 Cal	6	1 (55 Gal Dr) 8 (5 Gal Pails)
R7K54 Reducer	"	"	II	10 Gal	6	2 (5 Gal Pails)
E61W12 Kem-Flash White Primer	"	"	II	30 Gal	6	10 (1 Gal Pail) 4 (5 Gal Pails)

DISTRIBUTION CODES

1985

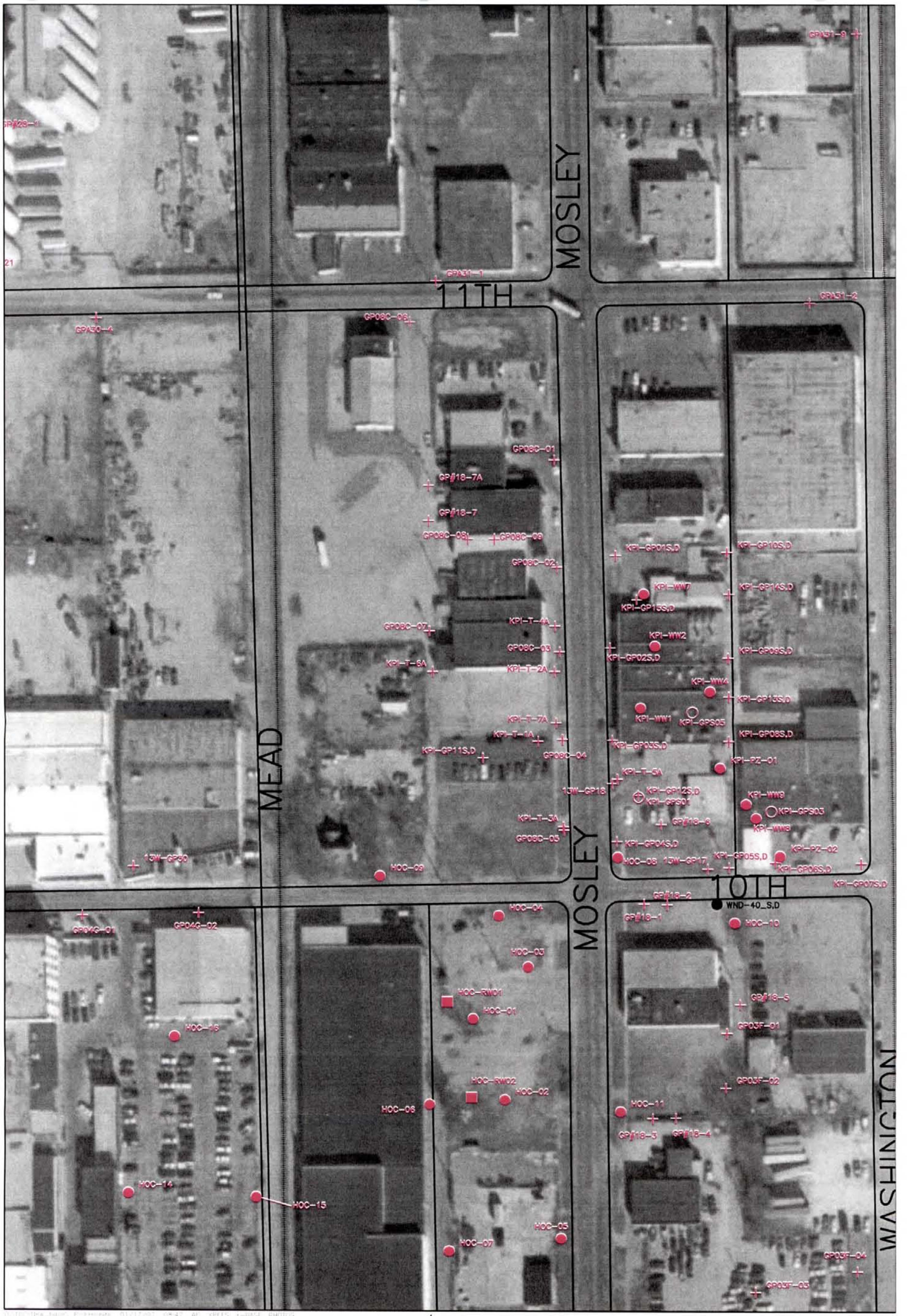
I Personal Use Dispensers
II Spray Painted
III Brush Painted
IV Drums to Process Tank
V Added To Paint

Product	Manufacturer	Vendor	How Distributed	Approx. Amt. Used	Building # Used	Amount Purchased 1985
5067 Ultra-Hide Alkyd Spray Flat Dry Fog Paint	Glidden Paints	Glidden Paints	II	25 Gal	2,3,5,6,7, 8,9	5 (5 Gal Pails)
Woodmaster Polyurethane Clear Finish	"	"	III	4 Gal	1	4 (1 Gal Pails)
140-0027 Spray Enamel Flat Black	Sherwin Williams	Sherwin Williams	II	35 Aerosols*	2,3,6	66 (Aerosols)
111, Trichloroethane Solvent	Vulcan Chemicals	Reid Supply Co.	IV	1375 Gal	9	25 (55 Gal Dr)
Alcohol, Denatured	Union Chemical	"	I	5 Gal	2	1 (5 Gal Dr)
01T71 Kaepox Thinner	Kansas Paint & Color	Kansas Paint & Color	II, V	0	N/A	1 (55 Gal Dr)
83X1 Gray OMU Enamel	"	"	III	18 Gal	2,3,4,5,6, 7,8,9	18 (1 Gal Pails)
15B4-A Matte Black Spray Enamel	"	"	II	4 Aerosols	3,6	4 (Aerosols)

* Additional quantities of this substance were used at an off-site location.

G:\SDJVKREONITE\TABLE.85

Figure(s)
Aerial Photographs and Sample Location Map(s)



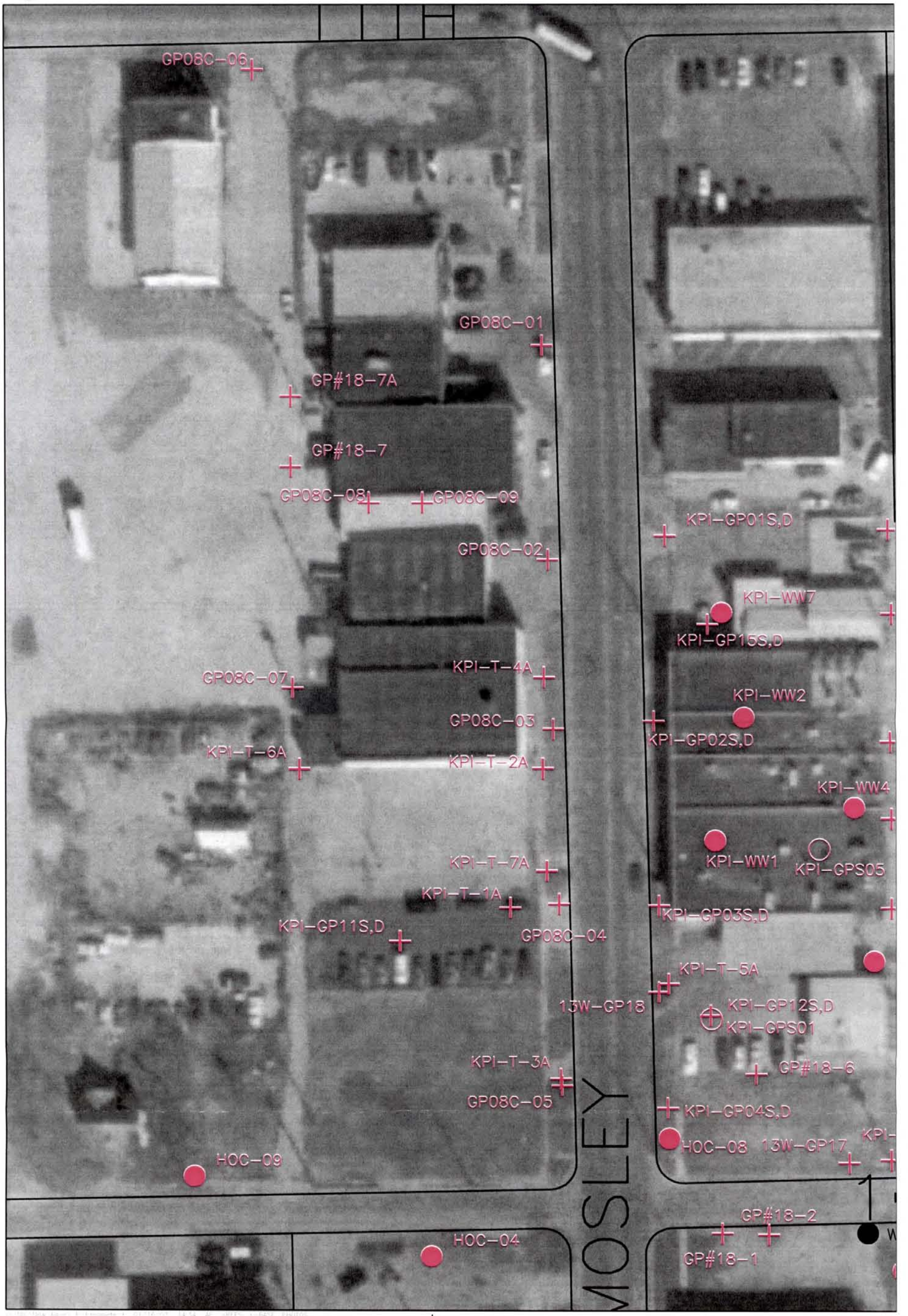
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Kreonite East



CDM

1" = 50'

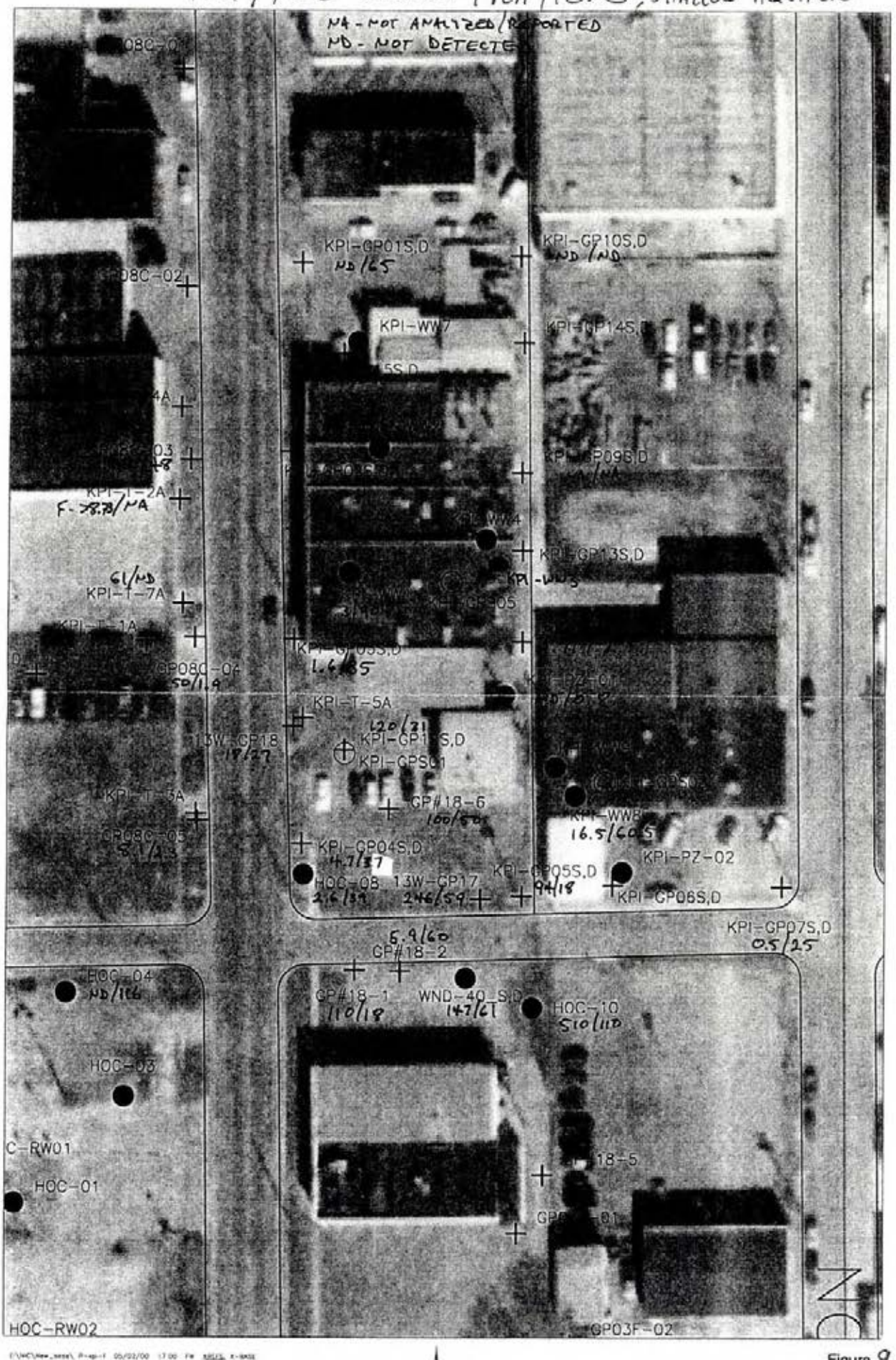
25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Kreonite East

TCA / TCE CONCENTRATIONS, SHALLOW AQUIFER

NA - NOT ANALYZED/REPORTED
ND - NOT DETECTED



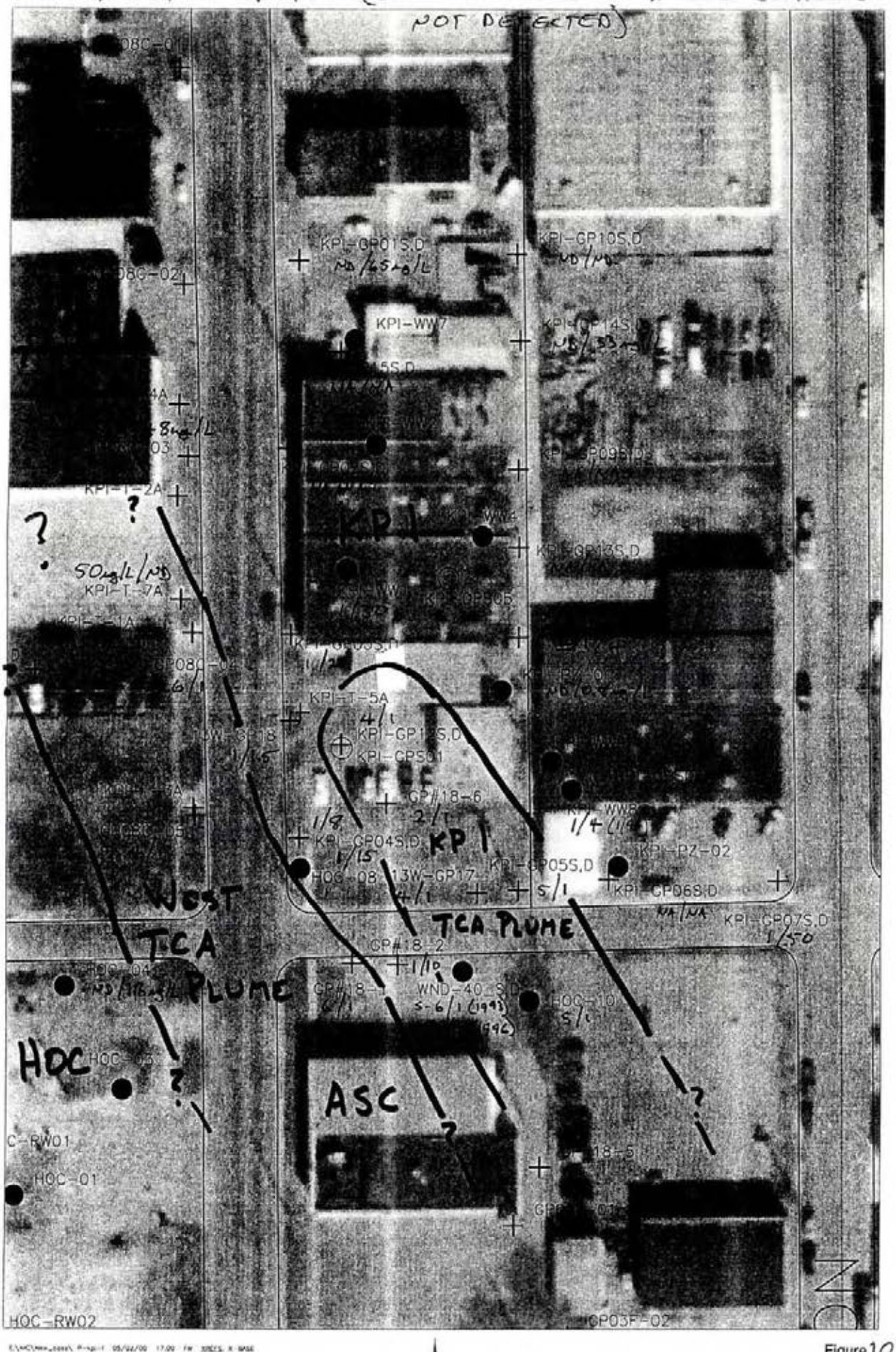
CDM Camp Dresser & McKee

1" = 50'
25 0 50

N

Figure 9
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Mosley & 10th

SHALLOW AQUIFER
TCA/TCE RATIO (NOTE: CONCENTRATIONS GIVEN IF ONE COMPOUND NOT DETECTED)



CDM Camp Dresser & McKee

1" = 50'
25 0 50

Figure 10
North Industrial Corridor (NIC) Site
DELINEATION OF TWO TCA PLUMES AT KPI BASED ON TCA\TCE RATIOS

Table(s)
Analytical Data Table(s)

Kreonite East
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#18-07A	S/17	08/29/00		µg/L	<1	**78**	**57**	**1.1**	<1	**1.2**	<1	<1	<1	<1	<5.4
GP#18-07A	D/35	08/29/00		µg/L	<1	**110**	**110**	**3.8**	<1	**1.5**	<1	<1	<1	<1	<5.4
GP#18-7	S/18	06/04/98		µg/L	<1	**2.9**	**1.2**	<1	**2.6**	<1	<1	<1	<1	<1	<5.4
GP#18-7	S/18	10/15/99		µg/L	<1	**170**	**86**	**4.1**	<1	**1.4**	**2**	<1	<1	<1	<5.4
GP#18-7	D/30	06/04/98		µg/L	**1.7**	**170**	**71**	**6.5**	<1	**2.3**	**2.7**	<1	<1	<1	<5.4
GP08C-01	S/17	12/17/99		µg/L	**2.6**	**150**	**63**	**3**	<1	**3.1**	**1.1**	<1	<1	<1	<5.4
GP08C-01	D/29	12/17/99		µg/L	**2.9**	**130 JH**	**61 JH**	**3.7**	<1	**3.8**	**1.6**	<1	<1	<1	<5.4
GP08C-01	D/29	12/17/99	DUP	µg/L	**2.1**	**130 JH**	**61 JH**	**3.7**	<1	**3.6**	**1.5**	<1	<1	<1	<5.4
GP08C-02	S/17	12/17/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08C-02	D/29	12/17/99		µg/L	**5.7**	**230 JH**	**81 JH**	**6.3**	<1	**5**	**2.3**	<1	<1	<1	<5.4
GP08C-03	S/17	12/17/99		µg/L	**1.3**	**48**	**22**	<1	<1	**1.1**	<1	<1	<1	<1	<5.4
GP08C-03	D/29	12/17/99		µg/L	**6.7**	**210 JH**	**77 JH**	**9.6**	<1	**4.5**	**2.1**	<1	<1	<1	<5.4
GP08C-04	S/17	12/17/99		µg/L	<1	**1.9**	<1	<1	**50**	<1	**2.9**	<1	<1	<1	<5.4
GP08C-04	D/29	12/17/99		µg/L	**6.9**	**190 JH**	**66 JH**	**7.1**	**1.9**	**4.2**	**2.1**	<1	<1	<1	<5.4
GP08C-05	S/17	12/17/99		µg/L	<1	**2.3**	**1.1**	<1	**8.1**	<1	<1	<1	<1	<1	<5.4
GP08C-05	D/26	12/17/99		µg/L	**5.2**	**140 JH**	**57 JH**	**3.4**	<1	**3.5**	**1.2**	<1	<1	<1	<5.4
GP08C-07	S/17	08/30/00		µg/L	<1	**1.9**	<1	<1	**1.5**	<1	<1	<1	<1	<1	<5.4
GP08C-07	D/35	08/30/00		µg/L	<1	**140**	**130**	**4.3**	<1	**1.8**	**1.8**	<1	<1	<1	<5.4
GP08C-08	S/16	08/30/00		µg/L	<1	**2.2**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP08C-09	S/16	08/30/00		µg/L	<1	**4.1**	**1.3**	<1	<1	<1	<1	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethe
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-18
Love Box Facility

PRP Evaluation Summary

Love Box Facility

700 East 37th Street North (Northwest of 37th and Mead)

Potential Source Area PRP and Work Plan Addendum Map ID - 08A

Contaminants of Concern – PCE, TCA, and associated degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Application for Certification and Release
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Love Box Facility

Data indicate that the Love Box facility (LBC) is a potential source of chlorinated VOC contamination. Groundwater sampling data collected along the groundwater flow path across the facility have shown an increase in the concentrations of tetrachloroethene (PCE), and its degradation byproducts trichloroethene (TCE) and *cis*-1,2-dichloroethene (*cis*-1,2-DCE). Additionally, 1,1,1-TCA (TCA) and its degradation products, 1,1-dichloroethane (1,1-DCA), and 1,1-dichloroethane (1,1-DCE) have been observed to increase along the groundwater flow path through the area indicating that a release of TCA has occurred. The Love Box Company's NIC Liability Release Application submitted to the City of Wichita (City) on August 14, 1996 contains a chemical inventory analysis that documents the presence of both PCE and TCA at the facility.

During LBC's environmental investigation conducted during late May 1999, groundwater samples were collected and analyzed for the presence of VOCs. Both field and offsite laboratory analytical data were collected (TerraTech, 1999). Only offsite laboratory data will be discussed here.

To integrate data collected at the LBC facility into the NIC database, the identity of groundwater sampling locations referred to in the LBC investigation has been modified to provide the facility identifier and to correlate the sample location as noted in the facility's investigation. In the case of LBC, this nomenclature is implemented as such: the LBC investigation's sample location GW-1, collected by Geoprobe methods, is referred to as LBC-GP01. Sample locations GW-1 through -11 are renamed LBC-GP01 through GP11. Samples collected during the NIC investigation conducted by the City of Wichita are identified by the prefix "GPA".

PCE Contamination

Samples collected from the shallow aquifer upgradient of the LBC facility contained no detectable concentrations of PCE or its degradation products. Downgradient of the facility, groundwater samples indicate concentrations of PCE of 190 and 7.9 μg/L at depths of 19 and 29 feet bgs, respectively, at sample location LBC-GP-09. Groundwater

samples from this location also revealed concentrations of TCE and *cis*-1,2-DCE at concentrations of 36 and 140 μg/L in the shallow aquifer and 1.3 and 5.9 μg/L in the deep aquifer, respectively. The presence of PCE at this concentration indicates that a release to the environment has occurred.

TCA Contamination

Samples collected from the shallow aquifer upgradient of the LBC facility contained no detectable concentrations of TCA or its degradation products. Downgradient of the facility groundwater samples indicate concentrations of TCA of 6 and 19 μg/L at depths of 20 and 36 feet bgs, respectively, at sample location GPA01-2. Groundwater samples from this location also revealed concentrations of 1,1-DCA and 1,1-DCE at concentrations of 4.5 and 2.1 μg/L in the shallow aquifer and 6.8 and 6.0 μg/L in the deep aquifer, respectively. The presence of TCA and its degradation products at these concentrations indicate that a release to the environment has occurred.

Groundwater Flow

Localized groundwater flow direction is not well defined at the part of the LBC facility where releases are indicated. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southeast but facility-specific groundwater flow is not well defined.

References

City of Wichita North Industrial Corridor Application for Certificate and Release for Environmental Conditions, Love Box Company, Inc., 700 E. 37th Street North, Wichita, Kansas 67219.

TerraTech, 1999, *Final Report, Phase II Sampling Investigation-Love Box Company Inc., June 1999*, Prepared for Love Box Company, Inc., 700 E 37th Street North, Wichita, Kansas.

CDM 2000, Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas. Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Name of Company: Love Box Co.

Name and/or Contact Person: Newell Hill

Street Address of Company: 700 E. 37th St. N.

City, State, and Zip Code: Wichita, KS 67219

Regarding the Following Property:

Phone Number of Contact:

History:

1995	Love Box Co Inc
1990	Same
1984-5	Same
1980	Same
1975	Same
1970	Same
1965	Same
1962	Same

RCRA Info:

KDHE RCRA file shows the following:

D001-Ignitable hazardous waste
D006-Cadmium
D008-Lead
D018-Benzene
D035-Methyl Ethyl Ketone
D039-Tetrachloroethylene
D040-Trichloroethylene
D027-1,4-Dichlorobenzene

WSCHD air file shows:

Arsenic, MEK, Toluene, Methanol, 1,4 Dichlorobenzene, Tetrachloroetylene, phenol, 1,1,1-trichloroethane

Geoprobe data shows TCA (tentative)

Application for Certification and Release

AUG 1 6 1996

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Love Box Company, Inc.

(insert legal name(s) of party seeking certificate)

P.O. Box 546
Wichita, KS 67201

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:

410 E. 37th Street North
Wichita, KS 67219

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: owner of described property.

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: _____

(if different than Applicant)

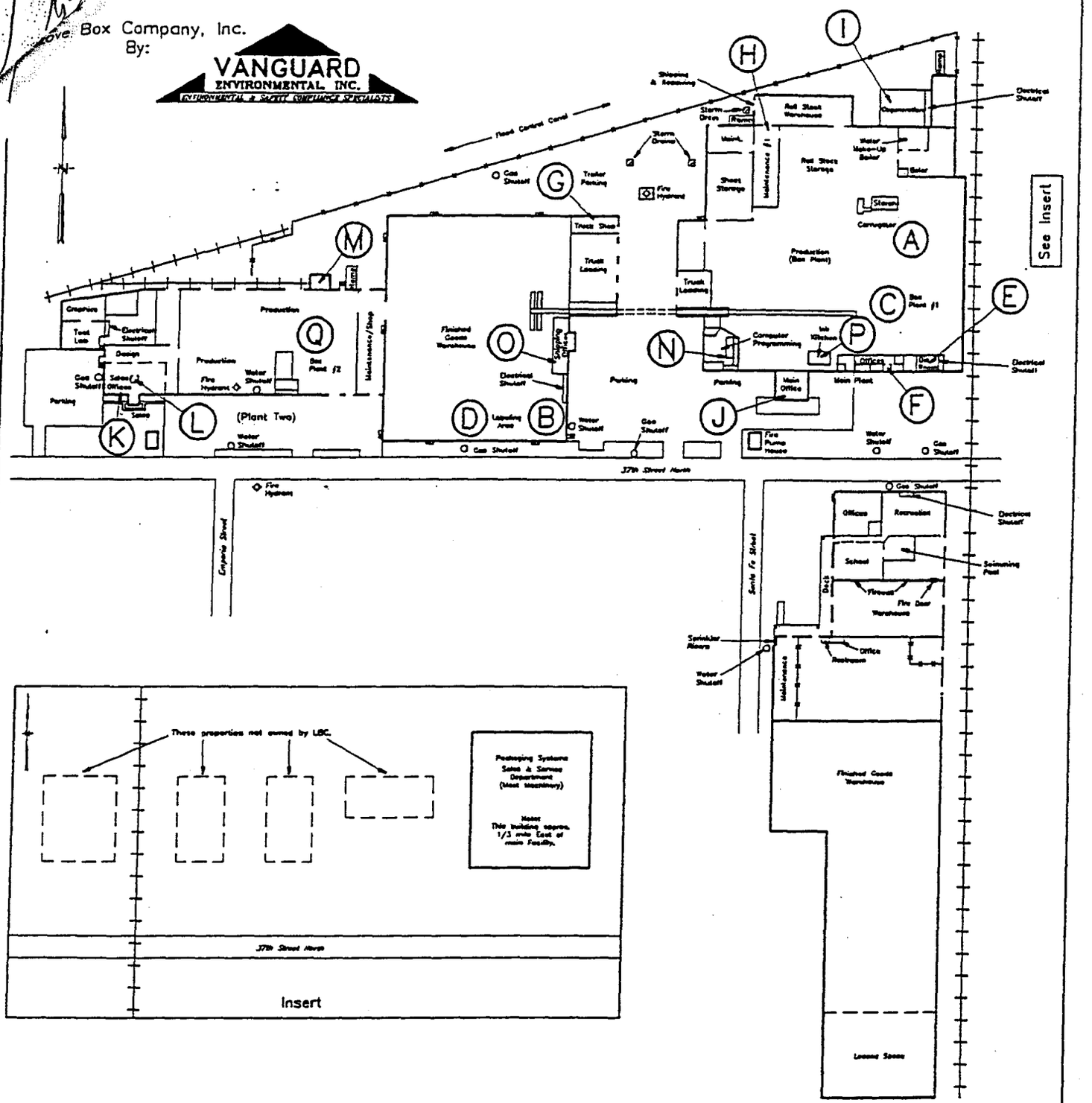
4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

numerous

Box Company, Inc.
By:

VANGUARD
ENVIRONMENTAL, INC.
ENVIRONMENTAL & SAFETY COMPLIANCE SPECIALISTS



Key

- Ⓐ Corrugator
- Ⓑ Computer Offices
- Ⓒ Box Plant 1
- Ⓓ Labeling Area
- Ⓔ Die Room
- Ⓕ Production Office
- Ⓖ Truck Shop
- Ⓗ Maintenance 1
- Ⓘ Cogeneration
- Ⓙ Main Office
- Ⓚ Offices
- Ⓛ Office Break Room
- Ⓜ Maintenance 2
- Ⓝ Special Services Room
- Ⓞ Shipping Offices
- Ⓟ Ink Kitchen
- Ⓠ Box Plant 2

Note

1. Sprinkler Systems throughout Plant #1, #2 and Warehouse
2. There are approximately 300 fire extinguishers total. (Approx. 10 in each room.)

FACILITY LAYOUT			
Company	Love Box Company, Inc.		
Address	700 E. 37th St. North		
City	Wichita	State	Kansas
County	Sedgwick	Scale	Not to Scale
Date	11/95		

166	109	BARTON SOLVENTS, INC.	BARSOL C-711	48.00	91-20-3	NAPHTHALENE	10	4.80	CAN	
167	109	BARTON SOLVENTS, INC.	BARSOL C-711	50.00	64741-41-9	HEAVY NAPHTHA	20	10.00	CAN	F
168	109	BARTON SOLVENTS, INC.	BARSOL C-711	48.00	127-18-4	TETRACHLOROETHYLENE	50	24.00	CAN	F
169	109	BARTON SOLVENTS, INC.	BARSOL C-711	50.00	127-18-4	TETRACHLOROETHYLENE	50	25.00	CAN	F
170	110	HILLYARD INDUSTRIES	SEAL 341	80.00		PROPRIETARY MIXTURE	10	8.00	CAN	F
171	110	HILLYARD INDUSTRIES	SEAL 341	80.00	765-34-4	GLYCIDALDEHYDE	2	1.60	CAN	F
172	110	HILLYARD INDUSTRIES	SEAL 341	80.00	78-51-3	TRIBUTOXYETHYL PHOSPHATE	1	0.80	CAN	F
173	110	HILLYARD INDUSTRIES	SEAL 341	80.00	765-34-4	GLYCIDALDEHYDE	2	1.60	CAN	F
174	110	HILLYARD INDUSTRIES	SEAL 341	80.00	1314-13-2	ZINC OXIDE	0.5	0.40	CAN	F
175	110	HILLYARD INDUSTRIES	SEAL 341	80.00	100-42-5	STYRENE	5	4.00	CAN	F
176	111	THE BUTCHER COMPANY	OVER DIRVE SPRAY BUFF	48.00	64742-48-9	HYDROTREATED HEAVY NAPHTHA	25	12.00	CAN	F
177	111	THE BUTCHER COMPANY	OVER DRIVE SPRAY BUFF	48.00	765-34-4	GLYCIDALDEHYDE	3	1.44	CAN	F
178	112	THE BUTCHER POLISH CO.	SPEEDBALL POWER CLEANER	48.00	141-43-5	ETHANOLAMINE	2	0.96	CAN	F
179	112	THE BUTCHER POLISH CO.	SPEEDBALL POWER CLEANER	48.00	111-76-2	2-BUTOXYETHANOL	6	2.88	CAN	F
180	113	HILLYARD INDUSTRIES	EXTRA STRENGTH CSP CLEANER	55.00	7664-38-2	PHOSPHORIC ACID	20	11.00	CAN	F
181	113	HILLYARD INDUSTRIES	EXTRA STRENGTH CSP CLEANER	55.00	111-76-2	2-BUTOXYETHANOL	3	1.65	CAN	F
182	115	CALGON VESTAL LABORATORIES	PAX-LANO-SAV	80.00	1303-96-4	BORAX	15	12.00	BOX	F
183	115	CALGON VESTAL LABORATORIES	PAX-LANO-SAV	80.00	9004-34-6	CELLULOSE	15	12.00	BOX	F
184	116	WAVE CORP.	WAVE DISINFECTANT CLEANER	48.00	26027-38-3	POLYOXYETHYLATED-P-NONYL PHENOL	5	2.40	CAN	F
185	116	WAVE CORP.	WAVE DISINFECTANT CLEANER	48.00	67-63-0	ISOPROPYL ALCOHOL	5	2.40	CAN	F

186	116	WAVE CORP.	WAVE DISINFECTANT CLEANER	48.00	12125-02-9	AMMONIUM CHLORIDE	2	0.96	CAN	
187	119	PENNZOIL PRODUCTS CO.	HD MOTOR OIL SAE 30	48.00		PROPRIETARY MIXTURE	95	45.60	CAN	G
188	119	PENNZOIL PRODUCTS CO.	HD MOTOR OIL SAE 30	48.00		PROPRIETARY MIXTURE	1	0.48	CAN	G
189	119	PENNZOIL PRODUCTS CO.	HD MOTOR OIL SAE 30	48.00		PROPRIETARY MIXTURE	4	1.92	CAN	G
190	121	UNIVERSAL MOTOROILS COMPANY, INC.	DYNA-PLEX 21C SIRIUS 608	440.00		PROPRIETARY MIXTURE	100	440.00	STEEL DRUM	G
191	122	UNIVERSAL MOTOR OILS COMPANY, INC.	CLEAR-VUE WINDSHIELD WASHER SOLVENT	267.00	67-56-1	METHYL ALCOHOL	100	267.00	POLY DRUM	G
192	123	QUAKER STATE OIL REFINING CORP.	QUAKER STATE HD MOTOR OIL MULTI-VISCOSITY	48.00		PROPRIETARY MIXTURE	10	4.80	CAN	G
193	123	QUAKER STATE OIL REFINING CORP.	QUAKER STATE HD MOTOR OIL MULTI-VISCOSITY	48.00	64742-44-5	MINERAL OIL	90	43.20	CAN	G
194	124	UNIVERSAL MOTOR OILS CO. INC.	UNIVERSAL MULTI-PRUPOSE COOLANT	18.00	107-21-1	ETHYLENE GLYCOL	90	16.20	CAN	G
196	125	NU-LIFE LABORTORIES	NO FLASH	597.00	71-55-6	1,1,1-TRICHLOROETHANE	100	597.00	STEEL DRUM	G
197	126	TREMCO	TREMFIX	5.00	1327-36-2	ALUMINATESILCATE	10	0.50	CAN	G
198	126	TREMCO	TREMFIX	5.00	8011-48-1	PINE TAR	5	0.25	CAN	G
199	126	TREMCO	TREMFIX	5.00		PROPRIETARY MIXTURE	80	4.00	CAN	G
200	126	TREMCO	TREMFIX	5.00	8001-58-9	CRESOTE	5	0.25	CAN	G
201	126	TREMCO	TREMFIX	5.00	1317-65-3	CALCIUM CARBONATE	10	0.50	CAN	G
202	126	TREMCO	TREMFIX	5.00	14808-60-7	CRYSTALLINE SILICA	0.2	0.01	CAN	G
203	127	TREMCO	ELS	300.00	546-93-0	MAGNESITE	5	15.00	CAN	H
204	127	TREMCO	ELS	300.00	8052-41-3	STODDARD SOLVENT	20	60.00	CAN	H
205	127	TREMCO	ELS	300.00	8031-18-1	MAGNESIUM ALUMINUM SILICATE	10	30.00	CAN	H
206	127	TREMCO	ELS	300.00	8011-48-1	PINE TAR	5	15.00	CAN	H

247	133	LOCTITE	REMOVABLE THREADLOCKER 242	10.00	13463-67-7	TITANIUM DIOXIDE	0.1	0.01	CAN	H
248	133	LOCTITE	REMOVABLE THREADLOCKER 242	10.00	81-07-2	SACCHARIN	5	0.50	CAN	H
249	134	LOCTITE	SUPERBONDER(R) 414 PLASTIC AND VINYL	10.00	123-31-9	HYDROQUINONE	0.5	0.05	CAN	H
250	134	LOCTITE	SUPERBONDER(R) 414 PLASTIC AND VINYL	10.00	9011-14-7	POLYMETHYLMETHACRYLATE	5	0.50	CAN	H
251	134	LOCTITE	SUPERBONDER(R) 414 PLASTIC AND VINYL	10.00	7085-85-0	ETHYL CYANOACRYLATE	95	9.50	CAN	H
252	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	110-16-7	MALEIC ACID	1	0.10	CAN	H
253	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	81-07-2	SACCHARIN	1	0.10	CAN	H
254	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	27813-02-1	HYDROXYALKYL METHACRYLATE	35	3.50	CAN	H
255	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	613-48-9	N,N-DIALKYLTOLUIDINES	1	0.10	CAN	H
256	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	39382-25-7	BISPHENOL A FUMERATE RESIN	20	2.00	CAN	H
257	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	24448-20-2	AROMATIC DIMETHACRYLATE ESTER	45	4.50	CAN	H
258	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	114-83-0	1-ACETYL-2-PHENYLHYDRAZINE	1	0.10	CAN	H
259	135	LOCTITE	RC(TM) RETAINING COMPD -- HI STRENGTH	10.00	80-15-9	CUMENE HYDROPEROXIDE	3	0.30	CAN	H
260	136	LOCTITE	LOCQUIC(R) PRIMER W(AEROSOL)	10.00	71-55-6	1,1,1-TRICHLOROETHANE	95	9.50	CAN	H
261	136	LOCTITE	LOCQUIC(R) PRIMER W(AEROSOL)	10.00	22221-10-9	ORGANO-COPPER COMPOUND	1	0.10	CAN	H
262	136	LOCTITE	LOCQUIC(R) PRIMER W(AEROSOL)	10.00	109-87-5	DIMETHOXYMETHANE	1	0.10	CAN	H
263	136	LOCTITE	LOCQUIC(R) PRIMER W(AEROSOL)	10.00	75-65-0	2-METHYLPROPANOL	1	0.10	CAN	H
264	136	LOCTITE	LOCQUIC(R) PRIMER W(AEROSOL)	10.00	124-38-9	CARBON DIOXIDE	3	0.30	CAN	H
265	136	LOCTITE	LOCQUIC(R) PRIMER W(AEROSOL)	10.00	58823-74-8	TRIALKYLAMMONIUM CARBOXYLATE	0.1	0.01	CAN	H
266	136	LOCTITE	LOCQUIC(R) PRIMER W(AEROSOL)	10.00	149-57-5	ETHYL HEXANOIC ACID	0.1	0.01	CAN	H

418	187	CERTIFIED LABS, DIV. OF NCH CORP.	HOLD-FAST PLUS AEROSOL	24.00	71-55-6	1,1,1-TRICHLOROETHANE	80	19.20	CAN	MAINT.
419	187	CERTIFIED LABS, DIV. OF NCH CORP.	HOLD-FAST PLUS AEROSOL	24.00	124-38-9	CARBON DIOXIDE	10	2.40	CAN	MAINT.
420	187	CERTIFIED LABS, DIV. OF NCH CORP.	HOLD-FAST PLUS AEROSOL	24.00	646-06-0	GLYCOL METHYLENE ETHER	10	2.40	CAN	MAINT.
421	188	CERTIFIED LABS, DIV. OF NCH CORP.	X-433 AEROSOL	24.00	74-98-6	PROPANE	13.3	3.19	CAN	MAINT.
422	188	CERTIFIED LABS, DIV. OF NCH CORP.	X-433 AEROSOL	24.00	8030-30-6	V M & P NAPHTHA	60	14.40	CAN	MAINT.
423	188	CERTIFIED LABS, DIV. OF NCH CORP.	X-433 AEROSOL	24.00	107-41-5	2-METHYL-2,4-PENTANEDIOL	13.3	3.19	CAN	MAINT.
424	188	CERTIFIED LABS, DIV. OF NCH CORP.	X-433 AEROSOL	24.00	75-28-5	ISOBUTANE	13.3	3.19	CAN	MAINT.
425	189	CERTIFIED LABS, DIV. OF NCH CORP.	COMMEND PLUS AEROSOL	24.00	75-28-5	ISOBUTANE	16.7	4.01	CAN	MAINTE NANCE
427	189	CERTIFIED LABS, DIV. OF NCH CORP.	COMMEND PLUS AEROSOL	24.00	8032-32-4	NAPHTHA	16.7	4.01	CAN	MAINTE NANCE
428	189	CERTIFIED LABS, DIV. OF NCH CORP.	COMMEND PLUS AEROSOL	24.00	71-55-6	1,1,1-TRICHLOROETHANE	50	12.00	CAN	MAINTE NANCE
429	189	CERTIFIED LABS, DIV. OF NCH CORP.	COMMEND PLUS AEROSOL	24.00	74-98-6	PROPANE	16.7	4.01	CAN	MAINTE NANCE
430	190	CERTIFIED LABS, DIV. OF NCH CORP.	LUBE-TRAC PLUS AEROSOL	24.00	8030-30-6	V M & P NAPHTHA	26.7	6.41	CAN	MAINTE NANCE
431	190	CERTIFIED LABS, DIV. OF NCH CORP.	LUBE-TRAC PLUS AEROSOL	24.00	74-98-6	PROPANE	26.7	6.41	CAN	MAINTE NANCE
433	190	CERTIFIED LABS, DIV. OF NCH CORP.	LUBE-TRAC PLUS AEROSOL	24.00	75-28-5	ISOBUTANE	26.7	6.41	CAN	MAINTE NANCE
434	190	CERTIFIED LABS, DIV. OF NCH CORP.	LUBE-TRAC PLUS AEROSOL	24.00	71-55-6	1,1,1-TRICHLOROETHANE	20	4.80	CAN	MAINTE NANCE
435	191	CERTIFIED LABS, DIV. OF NCH CORP.	CERTI-ETCH A PHOSPHORIC ACID CLEANER	24.00	7664-38-2	PHOSPHORIC ACID	30	7.20	POLY JUG	MAINTE NANCE
436	191	CERTIFIED LABS, DIV. OF NCH CORP.	CERTI-ETCH A PHOSPHORIC ACID CLEANER	24.00	9016-45-9	ETHOXYLATED NONYLPHENOL	50	12.00	POLY JUG	MAINTE NANCE
437	191	CERTIFIED LABS, DIV. OF NCH CORP.	CERTI-ETCH A PHOSPHORIC ACID CLEANER	24.00	111-76-2	2-BUTOXYETHANOL	20	4.80	POLY JUG	MAINTI NANCE
[illegible]	192	CERTIFIED LABS, DIV. OF NCH CORP.	TASK-- A DETERGENT SKIN CLEANER	24.00	9016-45-9	ETHOXYLATED NONYLPHENOL	100	24.00	CAN	MAINT NANCE
[illegible]	193	CERTIFIED LABS, DIV. OF NCH CORP.	M/M QUICK CURE--AS AN EPOXY STICK	24.00	90-72-2	2,4,6-TRIS[DIMETHYLAMINO)METHYL] PHENOL	50	12.00	CAN	MAINT NANC

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
440	193	CERTIFIED LABS, DIV. OF NCH CORP.	M/M QUICK CURE--AS AN EPOXY STICK	24.00	25085-99-8	2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BIS	50	12.00	CAN	MAINTI NANCI
441	194	CERTIFIED LABS, DIV. OF NCH CORP.	MICRO-PEL AEROSOL	24.00	67-63-0	ISOPROPYL ALCOHOL	50	12.00	CAN	MAINTI NANCI
442	194	CERTIFIED LABS, DIV. OF NCH CORP.	MICRO-PEL AEROSOL	24.00	74-28-5	ISOBUTANE / PROPANE BLEND	50	12.00	CAN	MAINTI NANCE
443	195	CERTIFIED LABS, DIV. OF NCH CORP.	QUROX	14.80	54140-78-2	VINYLIDENE CHLORIDE METHYL METHYLACRYL	25	3.70	JUG	RUST CLEAR
444	195	CERTIFIED LABS, DIV. OF NCH CORP.	QUROX	10.00	95-50-1	1,2-DICHLOROBENZENE	2	0.20	JUG	RUST CLEAR
445	195	CERTIFIED LABS, DIV. OF NCH CORP.	QUROX	14.80	1401-55-4	TANNIC ACID	25	3.70	JUG	RUST CLEAR
446	195	CERTIFIED LABS, DIV. OF NCH CORP.	QUROX	14.80	144-62-7	OXALIC ACID	25	3.70	JUG	RUST CLEAR
447	195	CERTIFIED LABS, DIV. OF NCH CORP.	QUROX	14.80	1569-01-3	1-PROPOXY-2-PROPANOL	25	3.70	JUG	RUST CLEAR
448	196	CERTIFIED LABS, DIV. OF NCH CORP.	SUPER REAM II/ SAFETY KIT AS A SOLVENT ACID DRAIN	42.00	106-46-7	1,4-DICHLOROBENZENE	25	10.50	POLY JUG	MAINTI NANCE
449	196	CERTIFIED LABS, DIV. OF NCH CORP.	SUPER REAM II/ SAFETY KIT AS A SOLVENT ACID DRAIN	42.00	7664-93-9	SULFURIC ACID	25	10.50	POLY JUG	MAINTI NANCE
450	196	CERTIFIED LABS, DIV. OF NCH CORP.	SUPER REAM II/ SAFETY KIT AS A SOLVENT ACID DRAIN	42.00	64742-47-8	ALIPHATIC PETROLEUM DISTILLATES	25	10.50	POLY JUG	MAINTI NANCE
451	196	CERTIFIED LABS, DIV. OF NCH CORP.	SUPER REAM II / SAFETY KIT	42.00	95-50-1	1,2-DICHLOROBENZENE	25	10.50	POLY JUG	MAINTI NANCE
452	197	EXXON	ISOPROPYL ALCOHOL	165.00	67-63-0	ISOPROPYL ALCOHOL	100	165.00	POLY JUG	INK KITCH.
453	197	CERTIFIED LABS, DIV. OF NCH CORP.	LOK-CEASE BRUSH TOP	18.70	64742-53-6	DISTILLATES, PETROLEUM, HYDROTREATED LIGHT NAPHTHENIC	33	6.17	POLY JUG	MAINTI NANCE
454	197	CERTIFIED LABS, DIV. OF NCH CORP.	LOK-CEASE BRUSH TOP	18.70	64742-52-5	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC	33	6.17	CAN	MAINTI NANCE
455	197	CERTIFIED LABS, DIV. OF NCH CORP.	LOK-CEASE BRUSH TOP	18.70	57-55-6	PROPYLENE GLYCOL	33	6.17	CAN	MAINTI NANCE
456	198	CERTIFIED LABS, DIV. OF NCH CORP.	PREMALUBE	120.00		PROPRIETARY MIXTURE	100	120.00	CAN	MAINTI NANCE
457	198	PROGRESSIVE INK CO	TRANSPARENT EXTENDER	1,654.00	1336-21-6	AMMONIUM HYDROXIDE	1	16.54	STEEL DRUM	INK KITCH.
458	199	CERTIFIED LABS, DIV. OF NCH CORP	SAF-SOL 20/20 AEROSOL	480.00	71-55-6	1,1,1-TRICHLOROETHANE	80	384.00	CAN	MAINTI NANCE
[illegible]	198	PROGRESSIVE INK CO	TRANSFER VARNISH	459.00	1336-21-6	AMMONIUM HYDROXIDE	2	9.18	STEEL DRUM	INK KITCH.

461	199	CERTIFIED LABS, DIV. OF NCH CORP.	SAF-SOL 20/20 AEROSOL	480.00	646-06-0	GLYCOL METHYLENE ETHER	6.7	32.16	CAN	MAIN NANC
462	199	CERTIFIED LABS, DIV. OF NCH CORP.	SAF-SOL 20/20 AEROSOL	480.00	78-92-2	SEC-BUTYL ALCOHOL	6.7	32.16	CAN	MAIN NANC
463	199	CERTIFIED LABS, DIV. OF NCH CORP	SAF-SOL 20/20 AEROSOL	480.00	124-38-9	CARBON DIOXIDE	6.7	32.16	CAN	MAIN NANC
464	200	CERTIFIED LABS, DIV. OF NCH CORP.	HI-TOP	145.00	19210-06-1	ZINC DITHIOPHOSPHATE	95	137.75	STEEL TANK	MAINT NANCI
465	200	CERTIFIED LABS, DIV. OF NCH CORP.	HI-TOP	145.00		PROPRIETARY MIXTURE	5	7.25	STEEL TANK	MAINT NANCI
466	201	CERTIFIED LABS, DIV. OF NCH CORP.	VOLTZ AEROSOL	51.00	75-28-5	ISOBUTANE	25	12.75	CAN	MAINTI NANCE
467	201	CERTIFIED LABS, DIV. OF NCH CORP.	VOLTZ AEROSOL	51.00	74-98-6	PROPANE	25	12.75	CAN	MAINTE NANCE
468	201	CERTIFIED LABS, DIV. OF NCH CORP.	VOLTZ AEROSOL	51.00	68647-72-3	TERPENES AND TERPENOIDS, SWEET ORANGE-OIL	25	12.75	CAN	MAINTE NANCE
469	201	CERTIFIED LABS, DIV. OF NCH CORP.	VOLTZ AEROSOL	51.00	64742-48-9	HYDROTREATED HEAVY NAPHTHA	25	12.75	CAN	MAINTE NANCE
470	202	CERTIFIED LABS, DIV. OF NCH CORP.	ODERINE-10	36.70	9036-19-5	OCTYLPHENOXYPOLYETHOXYETHANOL	20	7.34	CAN	HOUSEK EEPING
471	202	CERTIFIED LABS, DIV. OF NCH CORP.	ODERINE-10	36.70	628-63-7	ACETIC ACID, PENTYL ESTER	20	7.34	CAN	HOUSEK EEPING
472	202	CERTIFIED LABS, DIV. OF NCH CORP.	ODERINE-10	36.70	8008-20-6	KEROSENE	20	7.34	CAN	HOUSEK EEPING
473	202	CERTIFIED LABS, DIV. OF NCH CORP.	ODERINE-10	36.70	110-19-0	ISOBUTYL ACETATE	20	7.34	CAN	HOUSEK EEPING
474	202	CERTIFIED LABS, DIV. OF NCH CORP.	ODERINE-10	36.70	119-36-8	METHYL SALICYLATE	20	7.34	CAN	HOUSEK EEPING
475	203	CERTIFIED LABS, DIV. OF NCH CORP.	LUBRA-LIFT	800.00	64742-94-5	AROMATIC PETROLEUM SOLVENT	32	256.00	STEEL DRUM	MAINTE NANCE
476	203	CERTIFIED LABS, DIV. OF NCH CORP.	LUBRA-LIFT	800.00		PROPRIETARY MIXTURE	32	256.00	STEEL DRUM	MAINTE NANCE
477	203	CERTIFIED LABS, DIV. OF NCH CORP.	LUBRA-LIFT	800.00	19210-06-1	ZINC DITHIOPHOSPHATE	4	32.00	STEEL DRUM	MAINTE NANCE
478	203	CERTIFIED LABS, DIV. OF NCH CORP.	LUBRA-LIFT	800.00	64742-54-7	HYDROTREATED HEAVY PARAFFINIC DISTILLATE	32	256.00	STEEL DRUM	MAINTE NANCE
479	204	NATIONAL STARCH AND CHEMICAL	CALCIUM CHLORIDE AS AN INORGANIC SALT	1,600.00	10043-52-4	CALCIUM CHLORIDE	100	1,600.00	BAG	H
480	205	PPG INDUSTRIES, INC	METHYLENE CHLORIDE	11.00	75-09-2	DICHLOROMETHANE	100	11.00	CAN	H

482	206	CERTIFIED LABS, DIV. OF NCH CORP.	ORBIT AS A DETERGENT CLEANER	526.00	6834-92-0	SODIUM METASILICATE	80	420.80	POLY DRUM	H
485	206	CERTIFIED LABS, DIV. OF NCH CORP.	ORBIT AS A DETERGENT CLEANER	526.00	34590-94-8	DIPROPYLENE GLYCOL METHYL ETHER	10	52.60	POLY DRUM	H
486	207	SAFETY-KLEEN CORP.	SAFETY-KLEEN 105 SOLVENT-MS	440.00		PROPRIETARY MIXTURE	100	440.00	STEEL DRUM	H
487	208	CERTIFIED LABS, DIV. OF NCH CORP.	CERTOP GEAR OIL-80W90	880.00		PROPRIETARY MIXTURE	100	880.00	STEEL DRUM	H
488	209	NU-LIFE	SAF-T-SOLV	690.00	64741-84-0	PETROLEUM NAPHTHA	100	690.00	STEEL DRUM	H
489	210	SUNSHINE MAKERS, INC.,	SIMPLE GREEN OIL DISPERSANT	16.00	111-76-2	2-BUTOXYETHANOL	2	0.32	CAN	H
490	211	MARVEL OIL CO. INC.	MARVEL MYSTERY OIL	32.00	64741-65-7	MINERAL SPIRITS	30	9.60	CAN	H
491	211	MARVEL OIL CO. INC.	MARVEL MYSTERY OIL	32.00	64742-52-5	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC	67	21.44	CAN	H
492	212	UNION CARBIDE CHEMICALS AND	UCON LUBRICANT LB-65	1.00	75-56-9	PROPYLENE OXIDE	0.001	0.00	CAN	H
493	212	UNION CARBIDE CHEMICALS AND	UCON LUBRICANT LB-65	1.00	115-07-1	PROPYLENE	100	1.00	CAN	H
494	213	AIRCO , DIV. OF THE BOC GROUP, INC.	NITROGEN REFRIGERATED LIZUID	60.00	7727-37-9	NITROGEN	100	60.00	CYLINDER	MAINTE NANCE
495	214	AMREP, INC.	MISTY GELLED PARTS CLEANER	18.00	127-18-4	TETRACHLOROETHYLENE	5	0.90	AEROSOL CANS	H
496	214	AMREP, INC.	MISTY GELLED PARTS CLEANER	18.00	67-56-1	METHYL ALCOHOL	3	0.54	AEROSOL CANS	H
497	214	AMREP, INC.	MISTY GELLED PARTS CLEANER	18.00	75-28-5	ISOBUTANE	15	2.70	AEROSOL CANS	H
498	214	AMREP, INC.	MISTY GELLED PARTS CLEANER	18.00	8030-30-6	V M & P NAPHTHA	63	11.34	AEROSOL CANS	H
499	215	AMREP, INC.	MISTY GEAR AND CHAIN LUBRICANT	18.00	75-28-5	ISOBUTANE	12	2.16	AEROSOL CANS	H
500	215	AMREP, INC.	MISTY GEAR AND CHAIN LUBRICANT	18.00		PROPRIETARY MIXTURE	70	12.60	AEROSOL CANS	H
501	215	AMREP, INC.	MISTY GEAR AND CHAIN LUBRICANT	18.00	75-09-2	DICHLOROMETHANE	10	1.80	AEROSOL CANS	H
502	216	AMREP, INC.	MISTY SLIP SHOT	18.00	71-55-6	1,1,1-TRICHLOROETHANE	60	10.80	AEROSOL CANS	H
503	216	AMREP, INC.	MISTY SLIP SHOT	18.00	75-28-5	ISOBUTANE	25	4.50	AEROSOL CANS	H

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
504	216	AMREP, INC.	MISTY SLIP SHOT	18.00	8052-41-3	STODDARD SOLVENT	15	2.70	AEROSOL CANS	H
505	217	AMREP, INC.	MISTY DRY MOLY LUBRICANT	18.00	110-80-5	2-ETHOXYETHANOL	0.13	0.02	AEROSOL CANS	H
506	217	AMREP, INC.	MISTY DRY MOLY LUBRICANT	18.00	64-17-5	ETHYL ALCOHOL	2	0.36	AEROSOL CANS	H
507	217	AMREP, INC.	MISTY DRY MOLY LUBRICANT	18.00	1317-33-5	MOLYBDENUM(IV) SULFIDE	1	0.18	AEROSOL CANS	H
508	217	AMREP, INC.	MISTY DRY MOLY LUBRICANT	18.00	71-55-6	1,1,1-TRICHLOROETHANE	3	0.54	AEROSOL CANS	H
509	217	AMREP, INC.	MISTY DRY MOLY LUBRICANT	18.00	1330-20-7	XYLENE	2	0.36	AEROSOL CANS	H
510	217	AMREP, INC.	MISTY DRY MOLY LUBRICANT	18.00	74-28-5	ISOBUTANE / PROPANE BLEND	15	2.70	AEROSOL CANS	H
511	217	AMREP, INC.	MISTY DRY MOLY LUBRICANT	18.00	75-09-2	DICHLOROMETHANE	70	12.60	AEROSOL CANS	H
512	218	AMREP, INC.	MISTY MOISTURE GUARD	18.00	124-38-9	CARBON DIOXIDE	5	0.90	AEROSOL CANS	H
513	218	AMREP, INC.	MISTY MOISTURE GUARD	18.00	61790-48-5	BARIUM SULFONATE	0.15	0.03	AEROSOL CANS	H
514	218	AMREP, INC.	MISTY MOISTURE GUARD	18.00	64742-54-7	HYDROTREATED HEAVY PARAFFINIC DISTILLATE	7	1.26	AEROSOL CANS	H
515	218	AMREP, INC.	MISTY MOISTURE GUARD	18.00	71-55-6	1,1,1-TRICHLOROETHANE	82	14.76	AEROSOL CANS	H
516	219	AMREP, INC.	MISTY CONTACT AND CIRCUIT BOARD CLEANER	18.00	124-38-9	CARBON DIOXIDE	5	0.90	AEROSOL CANS	H
517	219	AMREP, INC.	MISTY CONTACT AND CIRCUIT BOARD CLEANER	18.00	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	95	17.10	AEROSOL CANS	H
518	220	AMREP, INC.	MISTY BELT DRESSING	18.00	9003-29-6	POLYBUTENE	5	0.90	AEROSOL CANS	H
519	220	AMREP, INC.	MISTY BELT DRESSING	18.00	75-09-2	DICHLOROMETHANE	80	14.40	AEROSOL CANS	H
520	220	AMREP, INC.	MISTY BELT DRESSING	18.00	74-98-6	PROPANE	15	2.70	AEROSOL CANS	H
521	221	QUEST CHEMICAL CORP.	DDS-PIERCE AS A SOLVENT	29.00	127-18-4	TETRACHLOROETHYLENE	95	27.55	AEROSOL CANS	H
522	221	QUEST CHEMICAL CORP.	DDS-PIERCE AS A SOLVENT	29.00	124-38-9	CARBON DIOXIDE	5	1.45	AEROSOL CANS	H
523	222	DWIGHT D SMITH CO INC	SMITH GLASS CLEANER	18.00	68476-85-7	LIQUIFIED PETROLEUM GAS	5	0.90	AEROSOL CANS	H

Excerpts from Report(s) Prepared by Others

FINAL REPORT
PHASE-II GROUNDWATER SAMPLING INVESTIGATION-
Love Box Company, Inc.

June, 1999

Prepared for:

Love Box Company, Inc.
700 E 37th Street North
Wichita, Kansas

Prepared by:

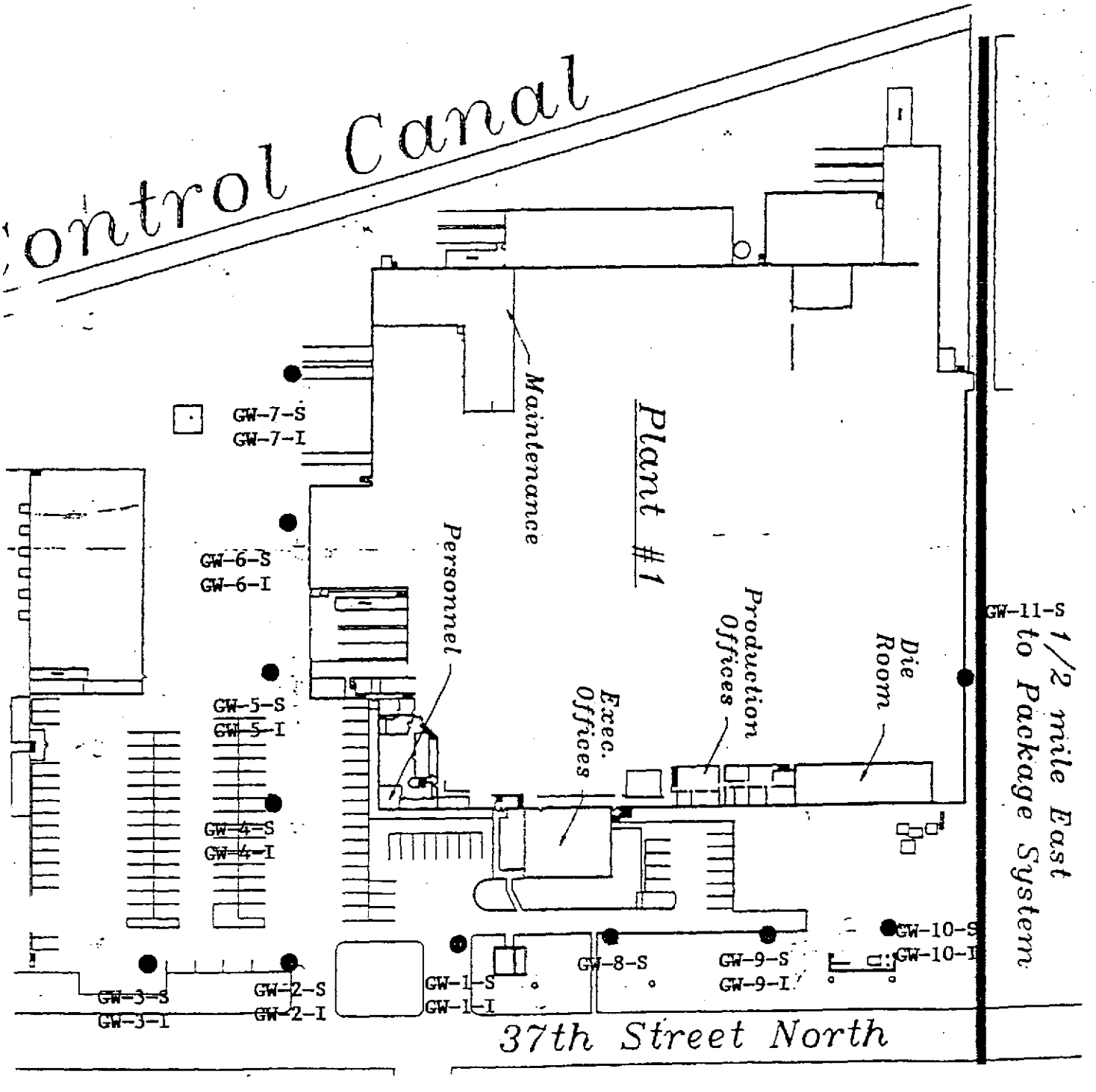
TerraTech Environmental Service, Inc.
1305 East Waterman Suite A
Wichita, Kansas 67211

FIGURE-1.

APPROXIMATE SCALE:

0' 100'

● - GEOPROBE LOCATION



Headspace procedures firstly involves the placement of five (5) milliliters of the groundwater sample into a 10 ml. laboratory sampling vial by disposable pipette. The vial is then sealed by pressure crimping an aluminum and teflon cap to the top of the vial. Once the vial is sealed, it is placed into a laboratory heating block where it is heated at approximately 100 degrees celsius for approximately eight minutes. At the conclusion of the heating process, a 0.5 cc sample of headspace gas is withdrawn from the vial by disposable syringes and immediately injected into the GC-14A. For this investigation, the average analytical run time for each sample was approximately six (6) minutes.

IV. FIELD ANALYTICAL FINDINGS

The field analytical data is summarized in the following table.
All findings are reported in uG/L (PPB).

Location/depth	1,1,1-TCA	TCE	PCE	Other
GW-1, 17'	<1.0	<1.0	7.3	?
GW-1, 29'	ND	1.7	9.9	?
GW-2, 19'	5.1	<1.0	2.5	?
GW-2, 29'	1.4	<1.0	1.7	?
GW-3, 19'	4	<1.0	2	?
GW-3, 29'	<1.0	<1.0	<1.0	?
GW-4 19'	1.9	ND	4.7	?
GW-4 29'	<1.0	ND	<1.0	?
GW-5 19'	1.5	<1.0	6.8	?
GW-5 29'	<1.0	<1.0	<1.0	?
GW-6 19'	1.1	<1.0	8.9	?
GW-6 29'	<1.0	ND	1.8	?
GW-7 19'	<1.0	<1.0	6.3	?
GW-7 29'	<1.0	<1.0	2.2	?
GW-8, 19'	<1.0	<1.0	8.2	?
GW-9, 19'	1.1	38.3	84	?
GW-9, 29'	3.1	17	46	?
GW-10, 19'	<1.0	9	37	?
GW-10, 29'	ND	1.3	3.7	?
GW-11, 19'	<1.0	<1.0	9	?

V. LABORATORY FINDINGS

Method SW8260A Findings

All findings are reported in uG/L (PPB).

Location	1,1-DCE	1,1-DCA	cisDCE	111TCA	TCE	PCE
GW-1, 19'	ND	ND	ND	ND	ND	ND
GW-1, 29'	ND	ND	ND	ND	ND	ND
GW-2, 19'	ND	ND	ND	1.4	ND	ND
GW-3, 19'	ND	ND	ND	1.6	ND	ND
GW-4, 19'	ND	ND	ND	ND	ND	ND
GW-5, 19'	ND	ND	ND	ND	ND	ND
GW-5, 29'	ND	ND	ND	ND	ND	ND
GW-6, 19'	ND	ND	ND	ND	ND	ND
GW-7, 19'	ND	ND	ND	ND	ND	ND
GW-8, 19'	ND	ND	ND	ND	ND	ND
GW-9, 19'	ND	ND	140	ND	36	190
GW-9, 29'	ND	ND	5.9	ND	1.3	7.1
GW-10,19'	ND	ND	ND	ND	ND	3.5
GW-11,19'	ND	ND	ND	ND	ND	ND

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ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#: Newell Hill/Love Box Co.
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99060202-10A
Client I.D. Number: GW-10-S, 17-19 Feet

Sampled: 5/28/99
Received: 6/2/99
Analyzed: 6/4/99

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration µg/L	Reporting Limit
1	Dichlorodifluoromethane	ND	1.0 µg/L
2	Chloromethane	ND	2.0 µg/L
3	Vinyl chloride	ND	1.0 µg/L
4	Chloroethane	ND	1.0 µg/L
5	Bromomethane	ND	1.0 µg/L
6	Trichlorofluoromethane	ND	1.0 µg/L
7	1,1-Dichloroethene	ND	1.0 µg/L
8	Dichloromethane	ND	2.0 µg/L
9	trans-1,2-Dichloroethene	ND	1.0 µg/L
10	1,1-Dichloroethane	ND	1.0 µg/L
11	cis-1,2-Dichloroethene	ND	1.0 µg/L
12	Bromochloromethane	ND	1.0 µg/L
13	Chloroform	ND	1.0 µg/L
14	2,2-Dichloropropane	ND	1.0 µg/L
15	1,2-Dichloroethane	ND	1.0 µg/L
16	1,1,1-Trichloroethane	ND	1.0 µg/L
17	1,1-Dichloropropene	ND	1.0 µg/L
18	Carbon tetrachloride	ND	1.0 µg/L
19	Benzene	ND	1.0 µg/L
20	Dibromomethane	ND	1.0 µg/L
21	1,2-Dichloropropane	ND	1.0 µg/L
22	Trichloroethene	ND	1.0 µg/L
23	Bromodichloromethane	ND	1.0 µg/L
24	cis-1,3-Dichloropropene	ND	1.0 µg/L
25	trans-1,3-Dichloropropene	ND	1.0 µg/L
26	1,1,2-Trichloroethane	ND	1.0 µg/L
27	Toluene	ND	1.0 µg/L
28	1,3-Dichloropropane	ND	1.0 µg/L
29	Dibromochloromethane	ND	1.0 µg/L
30	1,2-Dibromoethane	ND	2.0 µg/L
31	Tetrachloroethene	3.5	1.0 µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0 µg/L
33	Chlorobenzene	ND	1.0 µg/L
34	Ethylbenzene	ND	1.0 µg/L
35	m,p-Xylene	ND	1.0 µg/L
36	Bromoform	ND	1.0 µg/L
37	Styrene	ND	1.0 µg/L
38	o-Xylene	ND	1.0 µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
40	1,2,3-Trichloropropane	ND	2.0 µg/L
41	Isopropylbenzene	ND	1.0 µg/L
42	Bromobenzene	ND	1.0 µg/L
43	n-Propylbenzene	ND	1.0 µg/L
44	4-Chlorotoluene	ND	1.0 µg/L
45	2-Chlorotoluene	ND	1.0 µg/L
46	1,3,5-Trimethylbenzene	ND	1.0 µg/L
47	tert-Butylbenzene	ND	1.0 µg/L
48	1,2,4-Trimethylbenzene	ND	1.0 µg/L
49	sec-Butylbenzene	ND	1.0 µg/L
50	1,3-Dichlorobenzene	ND	1.0 µg/L
51	1,4-Dichlorobenzene	ND	1.0 µg/L
52	4-Isopropyltoluene	ND	1.0 µg/L
53	1,2-Dichlorobenzene	ND	1.0 µg/L
54	n-Butylbenzene	ND	1.0 µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0 µg/L
56	1,2,4-Trichlorobenzene	ND	2.0 µg/L
57	Naphthalene	ND	2.0 µg/L
58	Hexachlorobutadiene	ND	2.0 µg/L
59	1,2,3-Trichlorobenzene	ND	2.0 µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/10/99

Roger L. Scholl, Ph.D.
Laboratory Director

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#: Love
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99060203-02A
Client I.D. Number: GW-9-I

Sampled: 5/28/99
Received: 6/2/99
Analyzed: 6/4/99

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration µg/L	Reporting Limit	
1	Dichlorodifluoromethane	ND	1.0	µg/L
2	Chloromethane	ND	2.0	µg/L
3	Vinyl chloride	ND	1.0	µg/L
4	Chloroethane	ND	1.0	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	1.0	µg/L
7	1,1-Dichloroethene	ND	1.0	µg/L
8	Dichloromethane	ND	2.0	µg/L
9	trans-1,2-Dichloroethene	ND	1.0	µg/L
10	1,1-Dichloroethane	ND	1.0	µg/L
11	cis-1,2-Dichloroethene	5.9	1.0	µg/L
12	Bromochloromethane	ND	1.0	µg/L
13	Chloroform	ND	1.0	µg/L
14	2,2-Dichloropropane	ND	1.0	µg/L
15	1,2-Dichloroethane	ND	1.0	µg/L
16	1,1,1-Trichloroethane	ND	1.0	µg/L
17	1,1-Dichloropropene	ND	1.0	µg/L
18	Carbon tetrachloride	ND	1.0	µg/L
19	Benzene	ND	1.0	µg/L
20	Dibromomethane	ND	1.0	µg/L
21	1,2-Dichloropropane	ND	1.0	µg/L
22	Trichloroethene	1.3	1.0	µg/L
23	Bromodichloromethane	ND	1.0	µg/L
24	cis-1,3-Dichloropropene	ND	1.0	µg/L
25	trans-1,3-Dichloropropene	ND	1.0	µg/L
26	1,1,2-Trichloroethane	ND	1.0	µg/L
27	Toluene	ND	1.0	µg/L
28	1,3-Dichloropropane	ND	1.0	µg/L
29	Dibromochloromethane	ND	1.0	µg/L
30	1,2-Dibromoethane	ND	2.0	µg/L
31	Tetrachloroethene	7.1	1.0	µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0	µg/L
33	Chlorobenzene	ND	1.0	µg/L
34	Ethylbenzene	ND	1.0	µg/L
35	m,p-Xylene	ND	1.0	µg/L
36	Bromoform	ND	1.0	µg/L
37	Styrene	ND	1.0	µg/L
38	o-Xylene	ND	1.0	µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0	µg/L
40	1,2,3-Trichloropropane	ND	2.0	µg/L
41	Isopropylbenzene	ND	1.0	µg/L
42	Bromobenzene	ND	1.0	µg/L
43	n-Propylbenzene	ND	1.0	µg/L
44	4-Chlorotoluene	ND	1.0	µg/L
45	2-Chlorotoluene	ND	1.0	µg/L
46	1,3,5-Trimethylbenzene	ND	1.0	µg/L
47	tert-Butylbenzene	ND	1.0	µg/L
48	1,2,4-Trimethylbenzene	ND	1.0	µg/L
49	sec-Butylbenzene	ND	1.0	µg/L
50	1,3-Dichlorobenzene	ND	1.0	µg/L
51	1,4-Dichlorobenzene	ND	1.0	µg/L
52	4-Isopropyltoluene	ND	1.0	µg/L
53	1,2-Dichlorobenzene	ND	1.0	µg/L
54	n-Butylbenzene	ND	1.0	µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L
56	1,2,4-Trichlorobenzene	ND	2.0	µg/L
57	Naphthalene	ND	2.0	µg/L
58	Hexachlorobutadiene	ND	2.0	µg/L
59	1,2,3-Trichlorobenzene	ND	2.0	µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/10/99

Roger L. Scholl, Ph.D.
Laboratory Director

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ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#: Newell Hill/Love Box Co.
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99060202-09A
Client I.D. Number: GW-9-S, 17-19 Feet

Sampled: 5/28/99
Received: 6/2/99
Analyzed: 6/4/99

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration µg/L	Reporting Limit
1	Dichlorodifluoromethane	ND	5.0 µg/L
2	Chloromethane	ND	10 µg/L
3	Vinyl chloride	ND	5.0 µg/L
4	Chloroethane	ND	5.0 µg/L
5	Bromomethane	ND	5.0 µg/L
6	Trichlorofluoromethane	ND	5.0 µg/L
7	1,1-Dichloroethene	ND	5.0 µg/L
8	Dichloromethane	ND	10 µg/L
9	trans-1,2-Dichloroethene	ND	5.0 µg/L
10	1,1-Dichloroethane	ND	5.0 µg/L
11	cis-1,2-Dichloroethene	140	5.0 µg/L
12	Bromochloromethane	ND	5.0 µg/L
13	Chloroform	ND	5.0 µg/L
14	2,2-Dichloropropane	ND	5.0 µg/L
15	1,2-Dichloroethane	ND	5.0 µg/L
16	1,1,1-Trichloroethane	ND	5.0 µg/L
17	1,1-Dichloropropene	ND	5.0 µg/L
18	Carbon tetrachloride	ND	5.0 µg/L
19	Benzene	ND	5.0 µg/L
20	Dibromomethane	ND	5.0 µg/L
21	1,2-Dichloropropane	ND	5.0 µg/L
22	Trichloroethene	36	5.0 µg/L
23	Bromodichloromethane	ND	5.0 µg/L
24	cis-1,3-Dichloropropene	ND	5.0 µg/L
25	trans-1,3-Dichloropropene	ND	5.0 µg/L
26	1,1,2-Trichloroethane	ND	5.0 µg/L
27	Toluene	ND	5.0 µg/L
28	1,3-Dichloropropane	ND	5.0 µg/L
29	Dibromochloromethane	ND	5.0 µg/L
30	1,2-Dibromoethane	ND	10 µg/L
31	Tetrachloroethene	190	5.0 µg/L
32	1,1,1,2-Tetrachloroethane	ND	5.0 µg/L
33	Chlorobenzene	ND	5.0 µg/L
34	Ethylbenzene	ND	5.0 µg/L
35	m,p-Xylene	ND	5.0 µg/L
36	Bromoform	ND	5.0 µg/L
37	Styrene	ND	5.0 µg/L
38	o-Xylene	ND	5.0 µg/L
39	1,1,2,2-Tetrachloroethane	ND	5.0 µg/L
40	1,2,3-Trichloropropane	ND	10 µg/L
41	Isopropylbenzene	ND	5.0 µg/L
42	Bromobenzene	ND	5.0 µg/L
43	n-Propylbenzene	ND	5.0 µg/L
44	4-Chlorotoluene	ND	5.0 µg/L
45	2-Chlorotoluene	ND	5.0 µg/L
46	1,3,5-Trimethylbenzene	ND	5.0 µg/L
47	tert-Butylbenzene	ND	5.0 µg/L
48	1,2,4-Trimethylbenzene	ND	5.0 µg/L
49	sec-Butylbenzene	ND	5.0 µg/L
50	1,3-Dichlorobenzene	ND	5.0 µg/L
51	1,4-Dichlorobenzene	ND	5.0 µg/L
52	4-Isopropyltoluene	ND	5.0 µg/L
53	1,2-Dichlorobenzene	ND	5.0 µg/L
54	n-Butylbenzene	ND	5.0 µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	10 µg/L
56	1,2,4-Trichlorobenzene	ND	10 µg/L
57	Naphthalene	ND	10 µg/L
58	Hexachlorobutadiene	ND	10 µg/L
59	1,2,3-Trichlorobenzene	ND	10 µg/L

Detection limits were raised due to high concentrations of target analytes.

ND = Not Detected

Approved By: R Scholl Date: 6/10/99

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Laboratory Director

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ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#: Newell Hill/Love Box Co.
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99060202-03A
Client I.D. Number: GW-3-S, 17-19 Feet

Sampled: 5/27/99
Received: 6/2/99
Analyzed: 6/4/99

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration µg/L	Reporting Limit
1	Dichlorodifluoromethane	ND	1.0 µg/L
2	Chloromethane	ND	2.0 µg/L
3	Vinyl chloride	ND	1.0 µg/L
4	Chloroethane	ND	1.0 µg/L
5	Bromomethane	ND	1.0 µg/L
6	Trichlorofluoromethane	ND	1.0 µg/L
7	1,1-Dichloroethene	ND	1.0 µg/L
8	Dichloromethane	ND	2.0 µg/L
9	trans-1,2-Dichloroethene	ND	1.0 µg/L
10	1,1-Dichloroethane	ND	1.0 µg/L
11	cis-1,2-Dichloroethene	ND	1.0 µg/L
12	Bromochloromethane	ND	1.0 µg/L
13	Chloroform	ND	1.0 µg/L
14	2,2-Dichloropropane	ND	1.0 µg/L
15	1,2-Dichloroethane	ND	1.0 µg/L
16	1,1,1-Trichloroethane	1.6	1.0 µg/L
17	1,1-Dichloropropene	ND	1.0 µg/L
18	Carbon tetrachloride	ND	1.0 µg/L
19	Benzene	ND	1.0 µg/L
20	Dibromomethane	ND	1.0 µg/L
21	1,2-Dichloropropane	ND	1.0 µg/L
22	Trichloroethene	ND	1.0 µg/L
23	Bromodichloromethane	ND	1.0 µg/L
24	cis-1,3-Dichloropropene	ND	1.0 µg/L
25	trans-1,3-Dichloropropene	ND	1.0 µg/L
26	1,1,2-Trichloroethane	ND	1.0 µg/L
27	Toluene	ND	1.0 µg/L
28	1,3-Dichloropropane	ND	1.0 µg/L
29	Dibromochloromethane	ND	1.0 µg/L
30	1,2-Dibromoethane	ND	2.0 µg/L
31	Tetrachloroethene	ND	1.0 µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0 µg/L
33	Chlorobenzene	ND	1.0 µg/L
34	Ethylbenzene	ND	1.0 µg/L
35	m,p-Xylene	ND	1.0 µg/L
36	Bromoform	ND	1.0 µg/L
37	Styrene	ND	1.0 µg/L
38	o-Xylene	ND	1.0 µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
40	1,2,3-Trichloropropane	ND	2.0 µg/L
41	Isopropylbenzene	ND	1.0 µg/L
42	Bromobenzene	ND	1.0 µg/L
43	n-Propylbenzene	ND	1.0 µg/L
44	4-Chlorotoluene	ND	1.0 µg/L
45	2-Chlorotoluene	ND	1.0 µg/L
46	1,3,5-Trimethylbenzene	ND	1.0 µg/L
47	tert-Butylbenzene	ND	1.0 µg/L
48	1,2,4-Trimethylbenzene	ND	1.0 µg/L
49	sec-Butylbenzene	ND	1.0 µg/L
50	1,3-Dichlorobenzene	ND	1.0 µg/L
51	1,4-Dichlorobenzene	ND	1.0 µg/L
52	4-Isopropyltoluene	ND	1.0 µg/L
53	1,2-Dichlorobenzene	ND	1.0 µg/L
54	n-Butylbenzene	ND	1.0 µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0 µg/L
56	1,2,4-Trichlorobenzene	ND	2.0 µg/L
57	Naphthalene	ND	2.0 µg/L
58	Hexachlorobutadiene	ND	2.0 µg/L
59	1,2,3-Trichlorobenzene	ND	2.0 µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/10/99

Roger L. Scholl, Ph.D.
Laboratory Director

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
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(316) 722-5890
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Las Vegas, Nevada
(702) 498-3312
FAX: (702) 736-7523
Sacramento, California
(916) 366-9089
FAX: (916) 366-9138

ANALYTICAL REPORT

Terra Tech Environmental Service, Inc.
1305 E. Waterman Suite A
Wichita, KS 67211

Job#: Newell Hill/Love Box Co.
Phone: (316) 264-6066
Attn: Rick Stone

Alpha Analytical Number: TET99060202-02A
Client I.D. Number: GW-2-S, 17-19 Feet

Sampled: 5/27/99
Received: 6/2/99
Analyzed: 6/4/99

Volatile Organics by GC/MS
EPA Method SW8260B

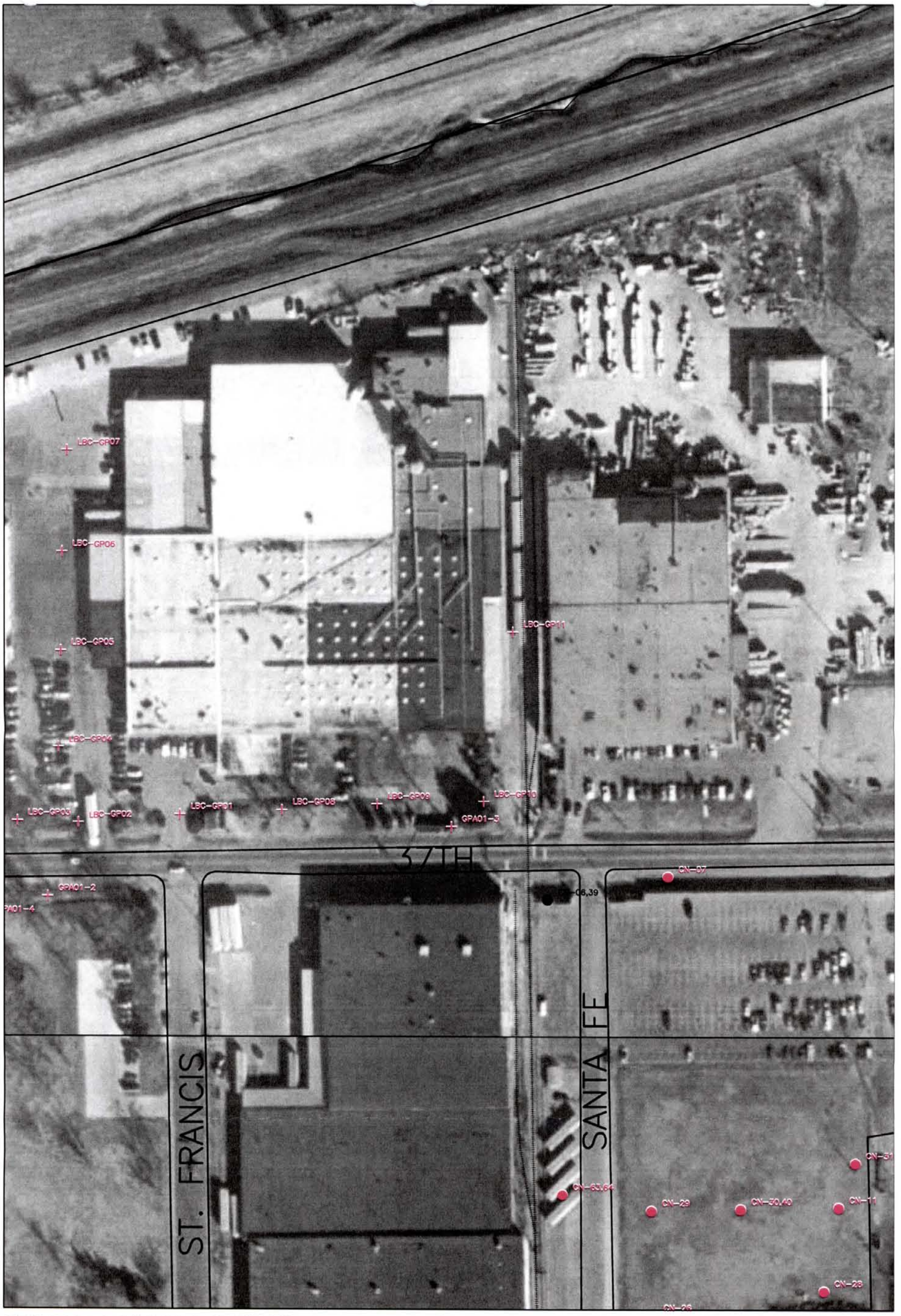
	Compound	Concentration µg/L	Reporting Limit
1	Dichlorodifluoromethane	ND	1.0 µg/L
2	Chloromethane	ND	2.0 µg/L
3	Vinyl chloride	ND	1.0 µg/L
4	Chloroethane	ND	1.0 µg/L
5	Bromomethane	ND	1.0 µg/L
6	Trichlorofluoromethane	ND	1.0 µg/L
7	1,1-Dichloroethene	ND	1.0 µg/L
8	Dichloromethane	ND	2.0 µg/L
9	trans-1,2-Dichloroethene	ND	1.0 µg/L
10	1,1-Dichloroethane	ND	1.0 µg/L
11	cis-1,2-Dichloroethene	ND	1.0 µg/L
12	Bromochloromethane	ND	1.0 µg/L
13	Chloroform	ND	1.0 µg/L
14	2,2-Dichloropropane	ND	1.0 µg/L
15	1,2-Dichloroethane	ND	1.0 µg/L
16	1,1,1-Trichloroethane	1.4	1.0 µg/L
17	1,1-Dichloropropene	ND	1.0 µg/L
18	Carbon tetrachloride	ND	1.0 µg/L
19	Benzene	ND	1.0 µg/L
20	Dibromomethane	ND	1.0 µg/L
21	1,2-Dichloropropane	ND	1.0 µg/L
22	Trichloroethene	ND	1.0 µg/L
23	Bromodichloromethane	ND	1.0 µg/L
24	cis-1,3-Dichloropropene	ND	1.0 µg/L
25	trans-1,3-Dichloropropene	ND	1.0 µg/L
26	1,1,2-Trichloroethane	ND	1.0 µg/L
27	Toluene	ND	1.0 µg/L
28	1,3-Dichloropropane	ND	1.0 µg/L
29	Dibromochloromethane	ND	1.0 µg/L
30	1,2-Dibromoethane	ND	2.0 µg/L
31	Tetrachloroethene	ND	1.0 µg/L
32	1,1,1,2-Tetrachloroethane	ND	1.0 µg/L
33	Chlorobenzene	ND	1.0 µg/L
34	Ethylbenzene	ND	1.0 µg/L
35	m,p-Xylene	ND	1.0 µg/L
36	Bromoform	ND	1.0 µg/L
37	Styrene	ND	1.0 µg/L
38	o-Xylene	ND	1.0 µg/L
39	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
40	1,2,3-Trichloropropane	ND	2.0 µg/L
41	Isopropylbenzene	ND	1.0 µg/L
42	Bromobenzene	ND	1.0 µg/L
43	n-Propylbenzene	ND	1.0 µg/L
44	4-Chlorotoluene	ND	1.0 µg/L
45	2-Chlorotoluene	ND	1.0 µg/L
46	1,3,5-Trimethylbenzene	ND	1.0 µg/L
47	tert-Butylbenzene	ND	1.0 µg/L
48	1,2,4-Trimethylbenzene	ND	1.0 µg/L
49	sec-Butylbenzene	ND	1.0 µg/L
50	1,3-Dichlorobenzene	ND	1.0 µg/L
51	1,4-Dichlorobenzene	ND	1.0 µg/L
52	4-Isopropyltoluene	ND	1.0 µg/L
53	1,2-Dichlorobenzene	ND	1.0 µg/L
54	n-Butylbenzene	ND	1.0 µg/L
55	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0 µg/L
56	1,2,4-Trichlorobenzene	ND	2.0 µg/L
57	Naphthalene	ND	2.0 µg/L
58	Hexachlorobutadiene	ND	2.0 µg/L
59	1,2,3-Trichlorobenzene	ND	2.0 µg/L

ND = Not Detected

Approved By: R Scholl Date: 6/10/99

Roger L. Scholl, Ph.D.
Laboratory Director

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Love Box Facility

Table(s)
Analytical Data Table(s)

Love Box
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GPA01-2	S/20	12/12/97		µg/L	<1	**1.5**	<1	<1	**6**	**4.5**	**2.1**	<1	<1	<1	<5.4
GPA01-2	D/36	12/12/97		µg/L	<1	<1	<1	<1	**19**	**6.8**	**6**	<1	<1	<1	<5.4

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroether
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-19
National By-Products North Facility

PRP Evaluation Summary

National By-Products North Facility

721 East 21st St. North and

2050 North Mosley (Southwest and Southeast of 21st and Mosley)

Potential Source Area PRP and Work Plan Addendum Map ID – 06F

Contaminants of Concern – TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of National By-Products North Facility

TCE Contamination

Data indicate that the TCE concentration increases along the groundwater flow path across the northern National By-Products facility (NBPN). The groundwater sample collected from shallow (17 feet to no more than 22 feet bgs) aquifer at upgradient locations GP02C-06, -07, -09, GPA12-1 and WND-21 contained TCE concentration of less than 15 µg/L. Downgradient shallow groundwater samples collected from GP02C-08, -10, -11, GP#35-04, GPA12-09, GP06F-04, -05, and -07 contained TCE concentrations between 74 and 490 µg/L. Shallow groundwater at downgradient location GP#35-5 contained only 19 µg/L. These data indicate that the most significant area of a release exists in the southwest portion of the site, on the western side of Mosley in the vicinity of the NBPN maintenance facility.

A refined analysis of the groundwater analytical data analysis indicates that there may actually be two sources of TCE contamination in the southwest part of Area 02C. This is shown by samples GP02C-08 and GP#35-04 revealing TCE concentrations 240 and 350 µg/L, respectively, separated by GP02C-11 where the groundwater TCE concentration was 90 µg/L. Further work is required in this area to determine the extent of TCE impacted groundwater and contribution of TCE likely to be originating from this facility.

In addition to Geoprobe groundwater sampling data, a report is on file with the City of Wichita indicating that empty drums were reportedly buried on the southern portion of the NBPN property. The report did not indicate which side of the street the drums may be buried.

Groundwater Flow

Localized groundwater flow direction is complicated by the West Fork of Chisholm Creek, which flows to the east along the southern border of the facility. The site-wide

water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southeast.

It should be noted that water levels collected by Geotechnical Services Inc. as part of the UST investigation show a groundwater flow of slightly west of south.

Reference

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Name of Company: National By-Products

Name and/or Contact Person: Dan Kilkennyh

Street Address of Company: 721 E. 21st St. N.

City, State, and Zip Code: Wichita, Ks 67214

Regarding the Following Property:

Phone Number of Contact:

History:	1995	National By-Products Inc
	1990	Same
	1984/5	Trailer Supply Inc
	1980	Friend Wool Inc
	1975	Same
	1970	Wise Warehouse
	1965	Stockyards Supply Co
	1961	Same

RCRA info: RCRA file shows salt water & blood in creek

Name of Company: National By-Products

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, KS

Regarding Property at Address: 2050 N. Mosley

History: 1951 – Wichita Desiccating Co. Inc.

1959 to current National By-Products

RCRA Info:

Name of Company: Novick Iron & Metal (side entrance)

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, KS

Regarding Property at Address: 2048 N. Mosley

History: 1959 to 1965

RCRA Info:

Name of Company: Rolfe Polishing Service (car wash)

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, KS

Regarding Property at Address: 2048 N. Mosley

History: 1970

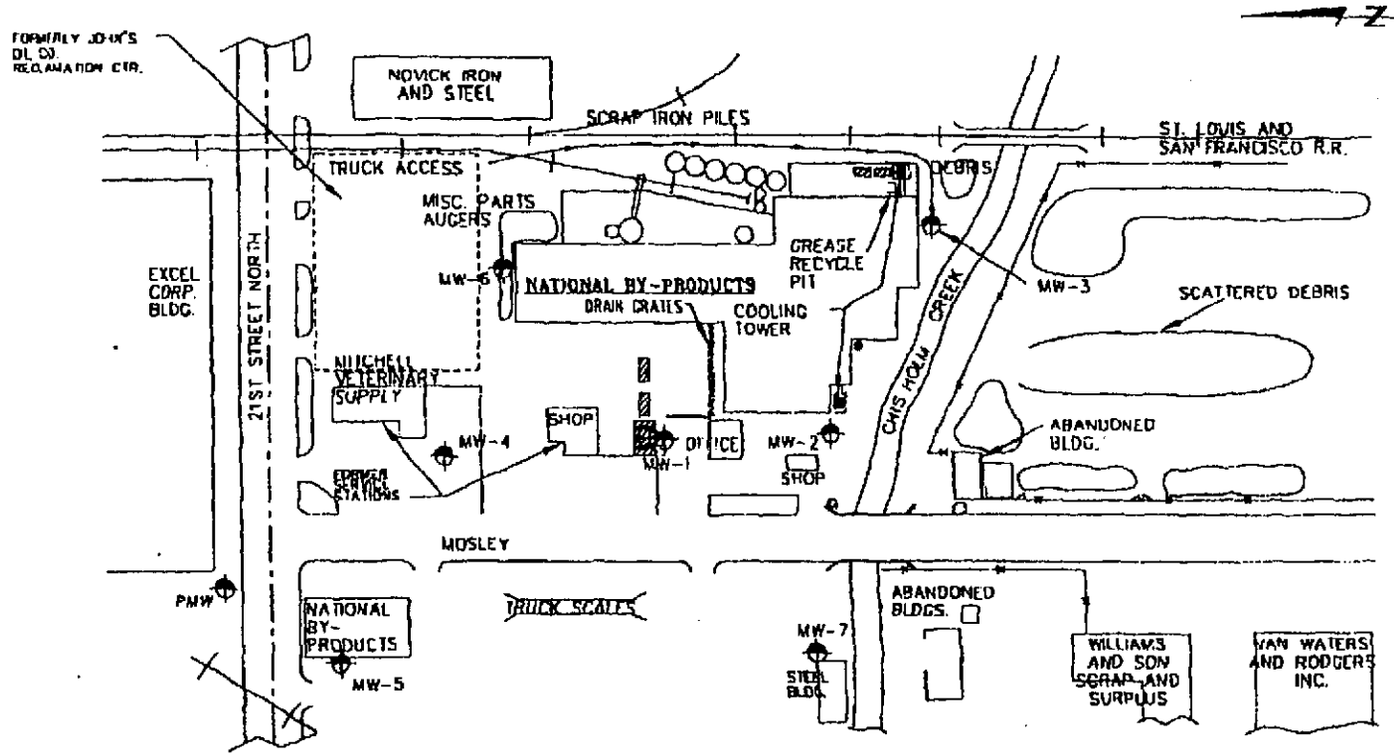
RCRA Info:

Excerpts from Report(s) Prepared by Others

North Industrial Corridor Remedial Investigation Technical Memorandum

Previous Investigation

Facility Name: National By-Products
Address: 2050 N. Mosley and 18th and Santa Fe
NIC Site Prefix: NPBS
Report Referenced: Work Plan for National By-Products KDHE #02087296
Report Prepared by: Geotechnical Services, Inc.
Date of Investigation: August 1991
Summary Data Table Provided?: No
Site Map Provided?: Yes



LEGEND

- MONITOR WELL
- KAWEN WELL
- PREVIOUS MONITOR WELL
- COOLING WELL

0 100
SCALE IN FEET

Geotechnical Services Inc.

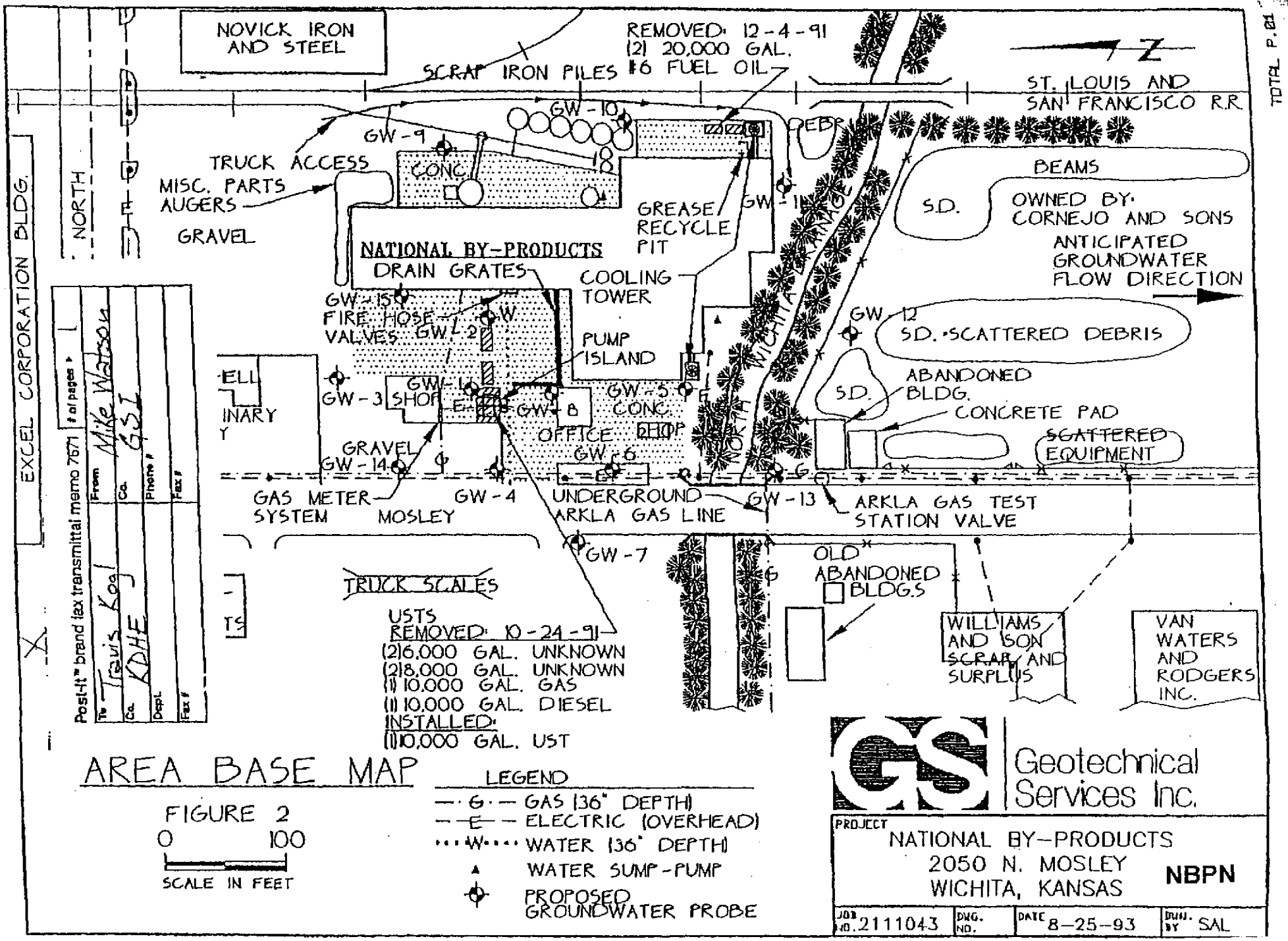
PROJECT
NATIONAL BY-PRODUCTS
2050 N. MOSLEY
WICHITA, KANSAS

JOB NO. 2111043 | DWG NO. G | DATE 7-30-98 | DWN BY SF

Appendix Table
National By-Products, North Facility (NBPN) Investigation
VOC Analytical Results in Groundwater
North Industrial Corridor - Wichita, Kansas

Map ID Station ID Depth Interval/Depth Date Parameter	Units	NBPN-05 NBPN-05 /' 3/8/94	NBPN-07 NBPN-07 /' 3/8/94	NBPN-GP1 NBPN-NP-1 /' 3/11/94
1,1,1-Trichloroethane	ug/L	<0.7	<0.7	3.1
1,1,2,2-Tetrachloroethane	ug/L	<0.6	<0.6	<0.6
1,1,2-Trichloroethane	ug/L	<0.6	<0.6	<0.6
1,1-Dichloroethane	ug/L	<0.5	<0.5	1.5
1,1-Dichloroethene	ug/L	<0.6	<0.6	3.4
1,2-Dichlorobenzene	ug/L	<1	<1	<1
1,2-Dichloroethane	ug/L	<0.6	<0.6	<0.6
1,2-Dichloropropane	ug/L	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	ug/L	<1	<1	<1
1,4-Dichlorobenzene	ug/L	<1	<1	<1
Benzene	ug/L	<0.5	<0.5	<0.5
Bromodichloromethane	ug/L	<0.5	<0.5	<0.5
Bromoform	ug/L	<1.5	<1.5	<1.5
Bromomethane	ug/L	<1.2	<1.2	<1.2
Carbon Tetrachloride	ug/L	<0.7	<0.7	<0.7
Chlorobenzene	ug/L	<0.5	<0.5	<0.5
Chloroethane	ug/L	<3.7	<3.7	<3.7
Chloroform	ug/L	32.6	<0.5	<0.5
Chloromethane	ug/L	<5	<5	<5
cis-1,3-Dichloropropene	ug/L	<0.9	<0.9	<0.9
Dibromochloromethane	ug/L	<0.7	<0.7	<0.7
Ethylbenzene	ug/L	<0.7	<0.7	<0.7
Methylene chloride	ug/L	<0.9	<0.9	<0.9
Tetrachloroethene	ug/L	<1.1	<1.1	<1.1
Toluene	ug/L	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	ug/L	<0.8	<0.8	<0.8
Trichloroethene	ug/L	10.8	21	108
Vinyl chloride	ug/L	<0.8	<0.8	<0.8

< = Not detected at this value
Blank = This chemical not analyzed in this sample
B = Chemical detected in associated blank
J = Estimated value
E = Estimated value



AREA BASE MAP

FIGURE 2

0 100

SCALE IN FEET

LEGEND

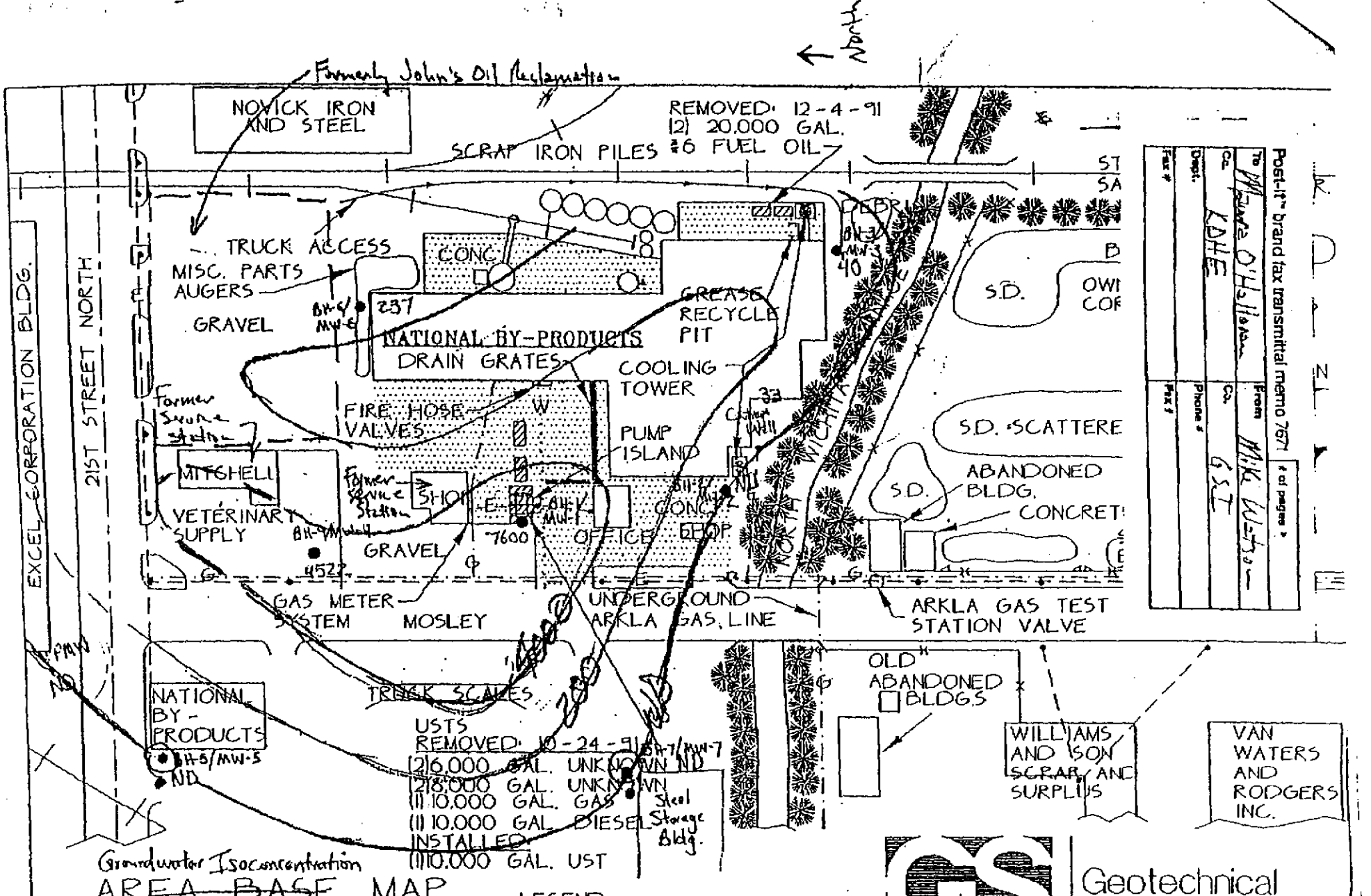
- G — GAS (36" DEPTH)
- E — ELECTRIC (OVERHEAD)
- W — WATER (36" DEPTH)
- ▲ WATER SUMP-PUMP
- ⊕ PROPOSED GROUNDWATER PROBE

Geotechnical Services Inc.

PROJECT
NATIONAL BY-PRODUCTS
2050 N. MOSLEY
WICHITA, KANSAS

NBPN

JOB NO.	DWG. NO.	DATE	DWN. BY
2111043		8-25-93	SAL



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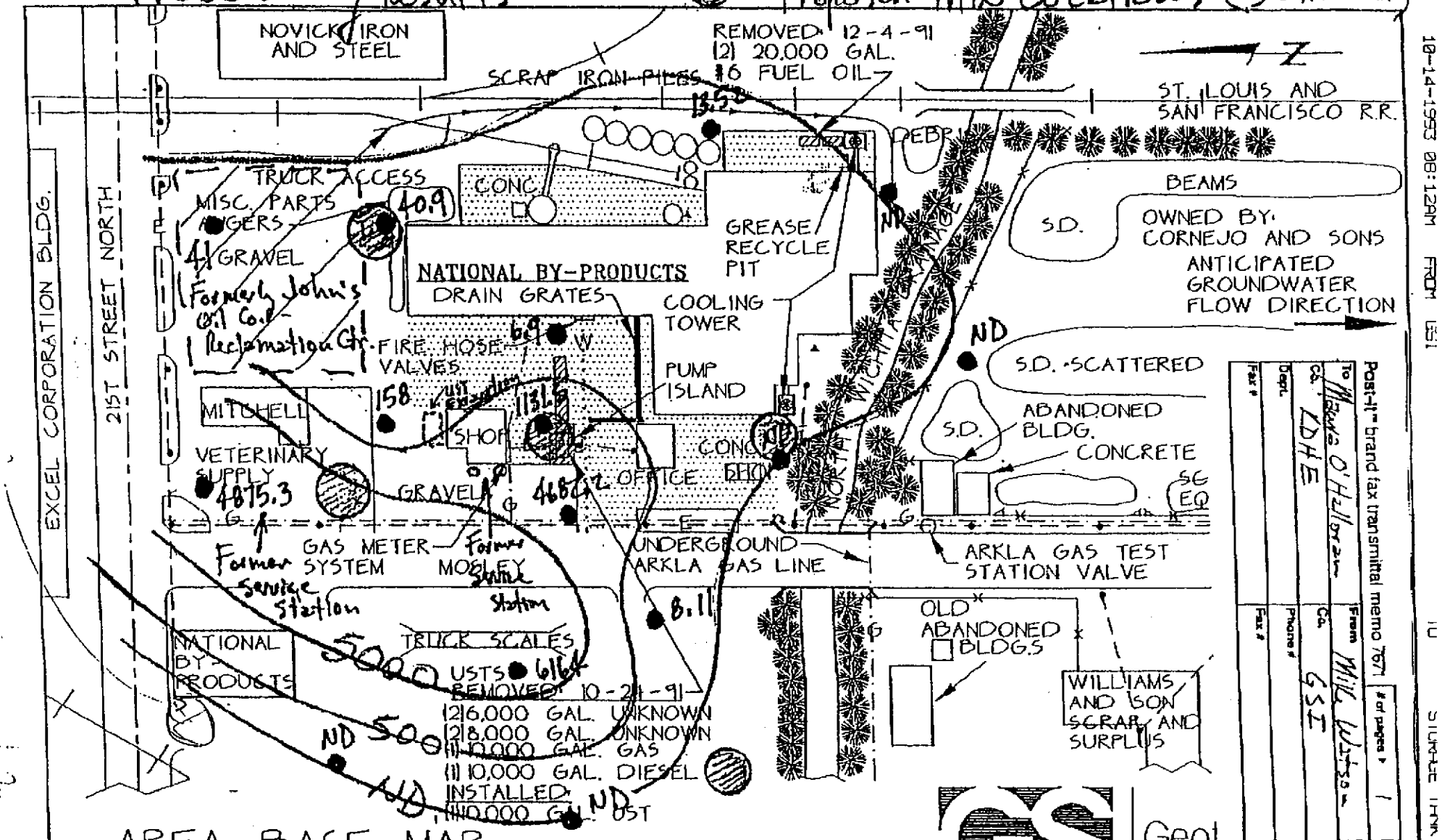
To: Phil Ferguson | From: Mike Wilson
Co.: KDHE | Co.: GST
Dept.: | Phone #:
Fax #: | Fax #:

TOTAL P.01

Probe Survey Results

● = Proposed MW Locations (5 allowed)



AREA BASE MAP

FIGURE 2

0 100

SCALE IN FEET

LEGEND

- —·G·— GAS (36" DEPTH)
- — E — ELECTRIC (OVERHEAD)
- ···W··· WATER (36" DEPTH)
- ▲ WATER SUMP-PUMP

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 1

To: Marvin O'Hallorn | Dept. | Fax #

Co. KDHE

From: Mike Wilson | Phone #

Co. GSI | Fax #

Geo Services Inc.

PROJECT
NATIONAL BY-PRODUCTS
2050 N. MOSLEY
WICHITA, KANSAS

NBPN

JOB NO.	DWG. NO.	DATE	DWN. BY
2111043		8-25-93	SAL

Figure(s)
Aerial Photographs and Sample Location Map(s)

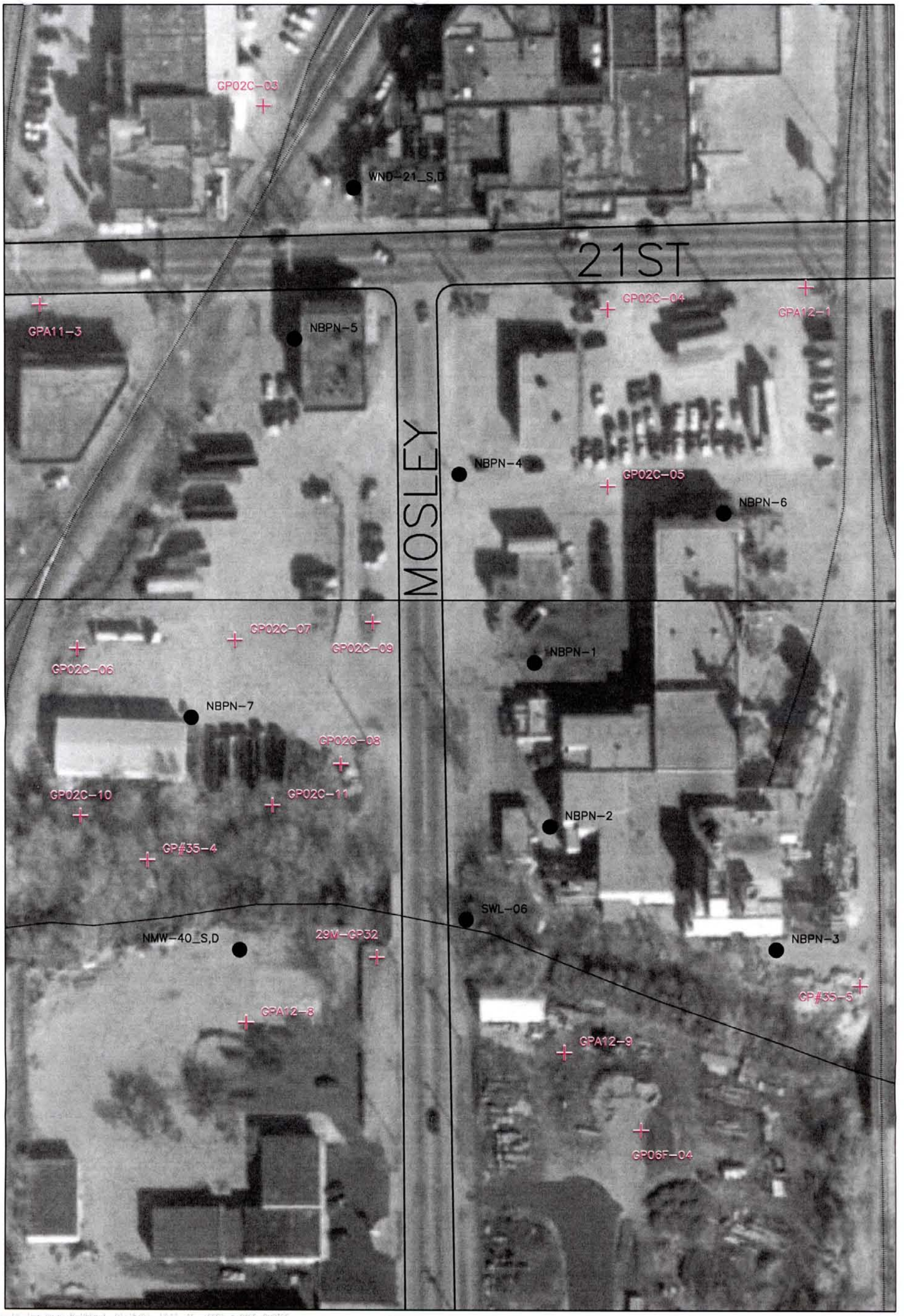
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, National By-Products North Facility



CDM

1" = 70'

35 0 70

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, National By-Products North Facility

Table(s)
Analytical Data Table(s)

National By-Products North Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#35-4	S/20	06/08/98		µg/L	**1.7**	**490**	**170**	**25**	**6.4**	**14**	**48**	<1	<1	<1	<5.4
GP#35-4	S/20	10/19/99		µg/L	<1	**220**	**78**	**12**	**2.7**	**5.3**	**15**	<1	<1	<1	<5.4
GP#35-4	D/36	06/08/98		µg/L	<1	**890**	**310**	**54**	**10**	**21**	**77**	<1	<1	**4.1**	**8.5**
GP02C-03	S/17	11/10/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02C-03	D/38	11/10/99		µg/L	**1.1**	**710 JH**	**250 JH**	**24**	**11**	**10**	**40**	**1.5**	**1.9**	**3.1**	**7.5**
GP02C-03	D/38	11/10/99	DUP	µg/L	<1	**760 JH**	**290 JH**	**24**	**10**	**10**	**39**	**1.2**	**1.9**	**3**	**7.4**
GP02C-06	S/17	10/29/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02C-06	D/29	10/29/99		µg/L	<1	**370**	**120**	**39**	**1.3**	**11**	**22**	<1	<1	**2.3**	**6.7**
GP02C-07	S/17	11/01/99		µg/L	<1	**6.1**	**39**	**78**	<1	**4.2**	**1.5**	<1	<1	<1	<5.4
GP02C-07	D/32	11/01/99		µg/L	<1	**470**	**170**	**37**	**5.8**	**12**	**33**	<1	<1	**2.1**	**6.5**
GP02C-08	S/17	11/01/99		µg/L	<1	**240**	**94**	**7.9**	**2.6**	**5.1**	**11**	<1	<1	<1	<5.4
GP02C-08	D/35	11/01/99		µg/L	<1	**660**	**220**	**37**	**8.4**	**13**	**40**	<1	<1	**2.8**	**7.2**
GP02C-09	M/23	11/01/99		µg/L	<1	<1	**150**	**12**	<1	**2.9**	**3.6**	<1	<1	**9.2**	**457**
GP02C-09	D/32	11/01/99		µg/L	<1	**570**	**190**	**32**	**7.6**	**11**	**34**	<1	<1	**1**	<5.4
GP02C-10	S/17	10/29/99		µg/L	<1	**79**	**36**	**3.2**	<1	**2.5**	**3.9**	<1	<1	<1	<5.4
GP02C-10	D/28	10/29/99		µg/L	<1	**460**	**170**	**41**	**4.6**	**13**	**34**	<1	<1	**1.6**	**6**
GP02C-11	S/17	11/01/99		µg/L	<1	**90**	**41**	**1.6**	<1	**2.2**	**4**	<1	<1	<1	<5.4
GP02C-11	D/32	11/01/99		µg/L	<1	**400**	**140**	**36**	**3.9**	**11**	**30**	<1	<1	**1.5**	**5.9**
GPA11-3	S/20	12/30/97		µg/L	<1	**96**	**66**	**4.2**	<1	**3.5**	**10**	<1	<1	<1	<5.4
GPA11-3	D/36	12/30/97		µg/L	<1	**690**	**240**	**10**	**15**	**13**	**55**	<1	**2.1**	**3.3**	**7.7**
GPA12-8	S/20	01/22/98		µg/L	<1	**350**	**86**	**21**	**4.7**	**8.6**	**24**	<1	<1	<1	<5.4
GPA12-8	D/34	01/22/98		µg/L	<1	**520**	**150**	**120**	**5.9**	**15**	**38**	<1	<1	**5.7**	**10.1**
GPA12-9	S/20	01/22/98		µg/L	<1	**94**	**57**	**8.8**	<1	**4.5**	**8.9**	<1	<1	<1	<5.4
GPA12-9	D/36	01/22/98		µg/L	<1	**790**	**230**	**70**	**11**	**17**	**60**	<1	**1.2**	**1.6**	**6**
NMW-40D	D	05/08/01		µg/L	<1.0	**150**	**56**	**22**	<1.0	**5.2**	**7.7**	<1.0	<1.0	**2.6**	**7**
NMW-40S	S	05/08/01		µg/L	<1.0	**190**	**77**	**25**	<1.0	**7.2**	**14**	<1.0	<1.0	<1.0	**5.4**
WND-21D	D	12/02/97		µg/L	<1	**400**	**77 JDB**	**1.2**	**12**	**5.4**	**32**	**2.9**	**1.8**	<1	**6.1**
WND-21D	D	05/04/01		µg/L	<1.0	**230**	**86**	**22**	**2.9**	**7.5**	**21**	**1.5**	**1.6**	**5.2**	**9.6**
WND-21S	S	12/02/97		µg/L	<1	**14 JDB**	**92 JDB**	<1	<1	**2.5**	**5.5**	<1	<1	<1	**6.3**
WND-21S	S	05/04/01		µg/L	<1.0	**2.9**	**55**	**1.4**	<1.0	**1.2**	**3.1**	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-20
Novick Facility

PRP Evaluation Summary

Novick Facility
1007 East 21st Street (Southeast of 21st and Mosley)

Identified Source Area PRP and Work Plan Addendum Map ID - 11A

Contaminants of Concern – Chromium, copper, lead, mercury, PCBs and potentially TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Novick Facility

Metals and PCB Contamination

Soil sampling data collected by the US EPA during 1988 indicate that the Novick (NOV) facility poses a "strong potential for human exposure to heavy metals and PCBs." Mercury, lead, copper and chromium were detected in shallow soils at concentrations of up to 3.65, 18,000, 430,000, and 1,400 mg/kg, respectively. PCBs were detected in shallow soils at concentrations of up to 13,000 mg/kg (USEPA 1988). The City is not aware of any subsequent regulatory driven remedial activity that has occurred to address human exposures to these compounds. The files indicate that installation of monitoring wells was requested by the KDHE BER in 1989, but a search of KDHE and EPA files has yielded no additional information providing characterization of either soil or groundwater impacts by these contaminants associated with the NOV facility.

TCE Contamination

Groundwater data indicate that the TCE concentration increases along the groundwater flow path across this area. TCE was not detected in shallow groundwater samples collected from (20 feet bgs) upgradient locations north of NOV (GPA12-1, GPA12-2, and GPA12-3) during Phase 1/1A nor upgradient locations east of NOV (GP02C-04 and GP02C-05) during Phase 2. Downgradient samples collected during the NIC RI from locations GP06F-02, -07, and GPA-14-3 contained TCE concentrations of 250, 180, and 270 µg/L respectively. These data suggest the possible existence of a TCE source area in the area. However, the source may be attributable to facilities located along Mosley and not the NOV facility. Enhanced degradation due to petroleum hydrocarbon contamination in the area may also be affecting the observed distribution of VOC contaminants in the shallow groundwater. Attempts to collected groundwater samples from and near the NOV facility in order to clarify its status the with respect to VOC groundwater contamination have been unsuccessful due to the presence of subsurface debris.

Groundwater Flow

Site-wide water table maps presented in the Phase 1/1a Technical Memorandum indicate a groundwater flow in the area of the NOV facility is southeasterly, but poorly defined. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southeast. Facility-specific groundwater flow is not well defined, but groundwater data indicate localized variations between east-southeast and south-southeast exist in the area. This is likely because the NOV facility is situated at the confluence of the Middle Fork of Chisholm Creek, which is its eastern boundary, and the West Fork of Chisholm Creek, which is the southern boundary of the facility.

Reference

USEPA 1988, *Final Report, Novick Iron and Metal Salvage Company, Wichita, Kansas,* Prepared by United States Environmental Protection Agency, Region VII/FIT for Region VII, RPO, November 3, 1988.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 1007 E. 21st N.

Current Owner/Business: Novick Iron & Metal

Contact Person:

Mailing Address: 1007 E. 21st N.
Wichita, KS 67214-1439

Phone Number: (316) 265-6661

Other information:

Name of Company:		Novick Iron
Name and/or Contact Person:		
Street Address of Company:		**1007 E. 21st Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		1007 E. 21st Street North
Phone Number of Contact:		
History:	1951	No Listing
	1961	No Listing
	1965	Novick Iron & Metal Co (junk dealer)
	1970	Novick Iron & Metal Co.
	1975	Novick Iron & Metal Co.
	1980	Novick Iron & Metal Co.
	1984/5	Novick Iron & Metal Inc. (junk dealer)
	1990	Novick Iron & Metal Inc. (junk dealer)
	1995/6	Novick Iron & Metal Inc. (junk dealer)
	2000	Novick Iron & Metal Inc (scrap waste materials)
RCRA Info:		

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -04032 Pin: 122090120200100B
Page: 1

Name NOVICK, BERNARD & BETTY LIV TRUSTS Use PF23 to see notes
Situs 1007 E 21ST
WICHITA KS 67214

Tax	3,409.20
Specials	6.30
Total	3,415.50

Phone
Mail 1007 E 21ST ST
To WICHITA KS 67214-1439

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 123030
USD-259-TD-NIC

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -04032
Page: 2

Pin: 122090120200100B
Name: NOVICK, BERNARD & BETTY LIV TRUSTS

Legal Description
RES A EXC RY WASHINGTON AVE.
HARVEY'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

FEB 8 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Bernard Novick
President
Novick Iron and Metal Inc.
1007 E. 21st Street
Wichita, Kansas 67214

Dear Mr. Novick:

NOTICE OF NONCOMPLIANCE

TSCA Docket No. VII-89-T-309

This letter is formal notification of the results of the October 5, 1988, inspection of Novick Iron and Metal Inc. conducted by an authorized representative of the Environmental Protection Agency (EPA) pursuant to Section 11 of the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 et seq. The purpose of the inspection was to assess the company's efforts to comply with the Polychlorinated Biphenyls (PCB) Final Rule, 40 C.F.R. Part 761.

The inspection revealed one violation of the PCB Final Rule. The inspector's report indicates that your facility received transformer cans within the past year. During the inspection, the inspector collected three soil samples which have been analyzed for PCB concentration. One of these was found to contain PCBs at a concentration of 127 parts per million (ppm).

The failure to clean up and dispose of this contaminated soil in accordance with the PCB Spill Cleanup Policy constitutes improper disposal of PCBs, a violation of 40 C.F.R. Section 761.60(d).

It appears that the above facility was not in compliance with 40 C.F.R. Section 761. Within thirty (30) days of receipt of this notice, please advise EPA what steps you will take or have taken to remedy this apparent violation. You should provide this office with specific documentation of the compliance steps.

This documentation should include a spill cleanup report documenting the cleanup of the spot sampled by the inspector and found to contain 127 ppm PCBs. I am enclosing a copy of the sample results, a map and a copy of a photograph indicating where the sample was taken, and the PCB Spill Cleanup Policy for your use.

Receipt of this notice does not preclude EPA from taking further action. Any such action depends upon the steps taken or to be taken by you in response to this notice.

If you have any questions regarding this notice or your obligations under 40 C.F.R. Part 761, please contact me at (913) 236-2835. All correspondence should be addressed to me at U.S. Environmental Protection Agency, ARTX/TOPE, 726 Minnesota Avenue, Kansas City, Kansas 66101. Please reference Docket No. VII-89-T-309 on all such correspondence.

Sincerely,

Suzanne Leistner

Suzanne Leistner
Environmental Engineer
Toxics and Pesticides Branch

Enclosure

Copy - Ralph C

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

MAR 20 1989

RECEIVED

MAR 2 2 1989

BUREAU OF
ENVIRONMENTAL
REMEDIATION

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Bernard Novick
Novick Iron and Metal Salvage
1007 East 21st Street
Wichita, Kansas 67214

Dear Mr. Novick:

Enclosed is a copy or the analytical data, Data Qualification Codes sheet and field sheet for the soil/sediment samples collected from your property. The sample was collected at the time of the inspection of the Novick Iron and Metal Salvage site in June 1988 by Ecology and Environment, Inc., a contractor for the U.S. Environmental Protection Agency (EPA).

PCBs were found significantly above background levels in the samples collected on the site. PCB 1248, PCB 1254 and PCB 1260 were detected at levels up to 13,000,000 micrograms per kilogram (ug/kg), which was the amount of PCB 1260 in sample #003. A sample location map is enclosed.

Lead, cadmium, chromium, copper and arsenic were found at levels significantly above background levels in the total metals analysis. Lead was measured at 18,000 mg/kg in sample #005, and copper at 430,000 mg/kg in sample #006.

Many semi-volatile compounds were detected in the samples at levels up to 30,000 ug/kg (3,3' dichlorobenzidine in #003).

PCBs and lead at the levels detected in the soil can cause chronic health effects to exposed workers. This information was given to the Kansas Department of Health and Environment (KDHE). The KDHE will be the lead agency on further sampling and other efforts.

This information is forwarded to you in accordance with the provisions of Section 3007(a) of the Resource Conservation and Recovery Act of 1976 (RCRA), and Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation and Liability

Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986. If you have any questions regarding this analytical data, please contact Ken Rapplean of my staff at (913) 236-2856.

Sincerely yours,

Michael Kosakowski

for Michael Sanderson
Chief, Superfund Branch
Waste Management Division

Enclosures

cc: Phil Koontz, KDHE
Tom Gross, KDHE

COBURN, CROFT & PUTZELL
ATTORNEYS AND COUNSELORS AT LAW
ONE MERCANTILE CENTER-SUITE 2900
ST. LOUIS, MISSOURI 63101
(314) 621-8575
TELECOPY (314) 621-2989

AFFILIATED WITH
FORSYTH, SWALM & BRUGGER, PA.
600 FIFTH AVENUE, SUITE 210
NAPLES, FLORIDA 33940

312 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220-2183
(618) 277-1020

JOSEPH G. NASSIF

REPLY TO ST. LOUIS

RECEIVED
JAN 31 1991

January 29, 1991

Mr. Ralph O'Connor
District Geologist
Bureau of Environmental Remediation
Kansas Department of Health and Environment
1919 North Amidon, Suite 130
Wichita, KS 67203

Re: Phase II Results - Additional Sampling
Novick Iron & Metal Site

Dear Mr. O'Connor:

As you can see from the enclosed report, we have just recently received the results of the second sampling and testing of the above-referenced site. The lead contamination of significance appears to be isolated to two or three areas of the site where different operations or storage of materials took place. We have asked Terracon to prepare a composite of all of the data by location, which they have promised to do within the next two weeks. After we get the composite prepared, we will forward it to you along with a recommendation.

The results of the groundwater sampling are gratifying to say the least. Without question, it is our belief that this site has contributed no meaningful contamination to that already being addressed as part of the 29th & Mead investigation. We can discuss this further following your receipt of our composite and proposal.

Finally, the PCB results are consistent with the information and data that we have previously supplied to you. Clearly, there is a slightly elevated spot limited to soil in the 0 to 6 inch range in one isolated area, indicative of a fairly isolated incident. Enclosed with this report is a survey map and a copy of a TSCA Notice of Compliance following an inspection that occurred on November 14, 1990. As you can see from the attached notice, Mr. Novick's site was investigated as a result of an "anonymous" complaint and found to be in compliance. We do not believe the mediation of the PCBs to be significant and can discuss that with you as well.

Once we have completed an overview of all of the lead analyses, we will get back to you with a proposal. We have asked Terracon to accomplish the lead analysis in a way which will expedite your review of our proposal. In the interim, you can review the enclosed information.

If I can assist you further in the meantime, please feel free to give me a call.

Very truly yours,

Joseph G. Nassif

JGN/cn/6544n-36
cc: Mr. Bernard Novick
Mr. Steve Dalluge

State of Kansas
Mike Hayden, Governor

Department of Health and Environment
South Central District Office

Stanley C. Grant, Ph.D., Secretary
1919 Amidon, Suite 130, Wichita, Kansas 67203-2118
(316) 838-1071

May 23, 1990

Mr. Joseph G. Nassif
Coburn, Croft & Putzell
One Mercantile Center - Suite 2900
St. Louis, Missouri 63101

Dear Mr. Nassif:

The plan as submitted by Terracon under date of March 23, 1990 has been reviewed and approved subject to the following comments:

1. Page 5, 2nd Paragraph. The location of the monitor well must be surveyed in from a good reference point that can be scaled on a topographic map from the reference point to the SE corner of section 9-27-1E; the true or assumed elevation using standard leveling techniques is suitable.

My schedule at present is clear June 12 thru 15, June 25 thru 29.

With conclusion of this round of sampling I would like a map prepared which shows the 70' X 70' grids and their number, and the subdivisions within each grid and the numbering or reference assigned each subdivision so that I can plot the sampling locations.

Sincerely,

Ralph E. O'Connor
Environmental Geologist
Bureau of Environmental Remediation

REO:cw

cc: File

Charles Konigsberg, Jr., M.D., M.P.H., Director of Health (913) 296-1343
James Power, P.E., Director of Environment (913) 296-1535
Lorne Phillips, Ph.D., Director of Information Systems (913) 296-1415
Roger Carlson, Ph.D., Director of the Kansas Health and Environmental Laboratory (913) 296-1619

Excerpts from Report(s) Prepared by Others

Final Report
Novick Iron & Metal Salvage Company
Wichita, Kansas
TDD #F-07-8801-006 PAN #FKS0163SA
Site #Y92 Project #002
Prepared by: Region VII/FIT for Region VII, RPO
Task Leader: Anne Melia, E & E/FIT
EPA Superfund Contact: Ken Rapplean
Date: November 3, 1988

RECEIVED
MAR 15 1989
ENVIRONMENTAL
REMEDIATION

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SECTION 1: INTRODUCTION

The Ecology and Environment, Inc., Field Investigation Team (E & E/FIT) was tasked by the Region VII U.S. Environmental Protection Agency (EPA) under Technical Directive Document (TDD) #F-07-8801-06, to conduct a site investigation (SI) of the Novick Iron and Metal Salvage Company (NIMS). This facility is located at 1007 East 21st Street and is situated in an industrial area of north-central Wichita, Sedgwick County, Kansas.

The sampling scheme, performed by E & E/FIT members Anne Melia, Ron Wood, and Mark Brown on June 8, 1988, was designed to determine whether polychlorinated biphenyl (PCB) contamination is present within the soils on-site as a result of the alleged disposal of PCB-contaminated transformer oil around the property. It was anticipated that this same sampling regime would determine whether salvaged automobile batteries stored on site have caused sulfuric acid and lead contamination of the site soil. Seven surficial soil samples were collected at the Novick site. The soil samples were submitted for pesticides, base/neutral/acids (BNA), total metals, and pH analysis.

All Both Location Descriptions

Table 6-1
Summary of Sampling
Novick Iron and Metal Salvage
Wichita, Kansas
E & E/FIT, June 8, 1988

* All Distances from Centerline of Road

Sample Number		Matrix	Location
001	320' S of 21st, 400' E Washington Road	Soil	150 feet east on dirt road which parallels 21st Street
002	300' S of 21st, 500' E Washington Road	Soil	100 feet east of 001
003	650' S of 21st, 620' E Washington Road	Soil	400 feet south of the NE Corner of the property
004	510' S of 21st, 530' E Washington Road	Soil	150 feet south of 002
Q1 004D	# above	Soil	Same as 004
005	740' S of 21st, 610' E Washington Road	Soil	Along the southeast boundary of the site
006	270' S of 21st, 510' E Washington Road	Ash/soil	50' northwest of 002
007	~~610' W~~ 10' S of 21st, 610' W Washington Road	Soil	Background

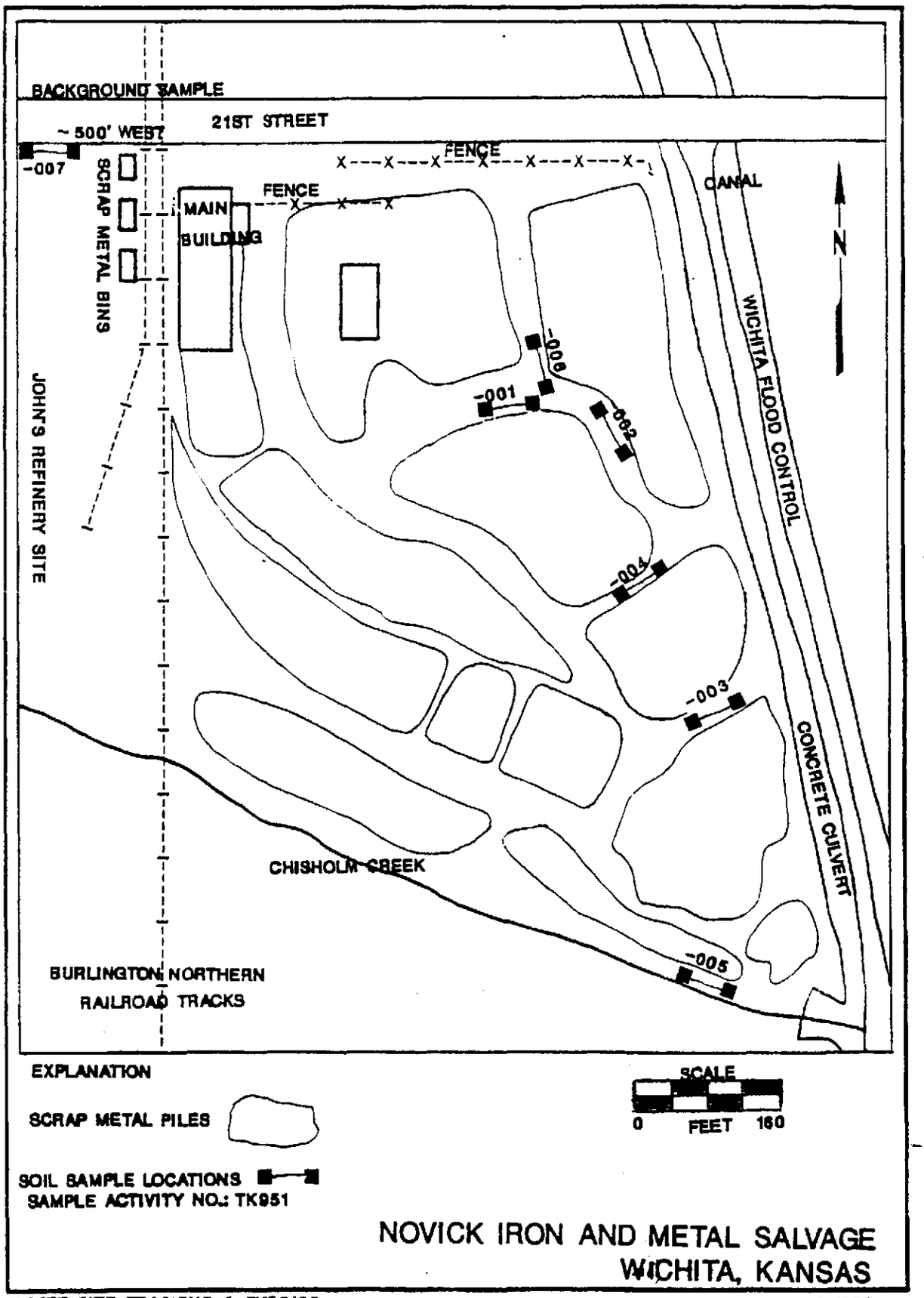
NOTE: Sample series TK951.

All samples were analyzed for BNA, pesticides, metals and pH. All samples were located on-site, except 007 (background) which was collected from 21st Street city right-of-way.

See Figure 2 for sample locations. Each sample consisted of 10 aliquots collected at a depth interval of 0 to 6 inches.

SECTION 9: SUMMARY AND CONCLUSIONS

The Novick Iron and Metal Salvage site is an active salvage yard located in an industrial area of north-central Wichita. Concern over batteries stored on site and alleged transformer oil dumping prompted a site investigation which was conducted by the E & E/FIT on June 8, 1988. Six soil samples were collected at a depth of 0 to 6 inches from the Novick property along with a background sample from the same depth. Subsequent sample analysis indicated that heavy metals, including chromium and lead, and PCB contamination exists at the site. Because NIMS employees and customers frequently walk throughout the site, there is a strong potential for human exposure to heavy metals and PCBs.



WASTE SITE TRACKING #: FKS0163
PREPARED BY: A. MELIA

E&E/FIT JUNE 1988

FIGURE 6-1: SOIL SAMPLE LOCATIONS

SECTION 7: ANALYTICAL DATA

7.1 METALS DATA

Five metals were detected in significant concentrations in all soil samples: chromium, copper, lead, mercury, and zinc. These results are summarized in Table 7-1. In all cases the background sample contained the lowest detected metals concentrations. Chromium was detected on site at a concentration as high as 1,400 ppm (Sample 003), which is approximately 108 times the background concentration of 13 ppm (Sample 007). Copper was detected on site at a concentration as high as 430,000 ppm (Sample 006), nearly 2,700 times the background level. Lead was also detected on site at elevated levels. Sample 005 contained 18,000 ppm of this toxic metal, approximately 62 times the concentration of 280 ppm found in the background sample. The background sample was not analyzed for mercury, but on site concentrations ranged from 0.563 ppm in sample 003 to 3.65 ppm in sample 005. The zinc concentrations ranged from 450 ppm in sample 007 to 5,700 ppm in sample 006.

Table 7-1
Selected Metal Analysis Results
Novick Iron and Metal Salvage
E & E/FIT, June 8, 1988
Sample Series TK951

	Sample No. and Concentration in mg/kg (ppm)							
Contaminant	001	002	003	004	004D	005	006	007
Chromium	130	78	1,400	240	180	620	36	13
Copper	4,300	1,600	1,300	1,700	1,900	2,500	430,000	160
Lead	1,500	5,400	920	2,400	1,900	18,000	7,300	280
Mercury	2.81	1.29	0.563	2.79	2.27	3.65	1.23	No analysis
Zinc	3,800	1,700	1,400	3,500	3,000	3,900	5,700	450

7.2 PESTICIDES/PCBs

PCBs were detected in various concentrations in all the samples collected. The only pesticide detected was chlordane, which was found in the background sample at a concentration of 120 ppb. The background sample also contained 290 ppb PCB 1254. The on-site samples general contained much higher concentrations of PCBs. The Pesticide/PCB results are summarized in Table 7-2.

Table 7-2
Pesticide/PCB Results
Novick Iron and Metal Salvage
E & E/FIT, June 8, 1988
Sample Series TK951

	Sample No. and Concentration in µg/kg (ppb)							
Contaminant	001	002	003	004	004D	005	006	007
Chlordane	---	---	---	---	---	----	---	120
PCB 1248	37,000	---	---	---	---	----	---	---
PCB 1254	41,000	---	---	17,000	16,000	31,000	1,100	290
PCB 1260	15,000	44,000	13,000,000	15,000	10,000	10,000	1,100	---

7.3 OTHER RESULTS

Appendix D presents the pH data, other metals results, and the semi-volatile organic chemical analysis.

29 manager
KSD007241656
116
Jackson

STAN E. WISDOM, P.A.
ATTORNEYS AT LAW
SUITE 100, FARMERS & BANKERS BUILDING
200 EAST FIRST STREET
WICHITA, KANSAS 67202-2106

STAN E. WISDOM
WILLIAM A. VICKERY
KENNETH M. NOHE
DOUGLAS J. KEELING

ROBERT G. BRADEN
OF COUNSEL

TELEPHONE
316/264-1012

March 21, 1989

RECEIVED
MAR 22 1989
PREP SECTION

United States Environmental Protection Agency
Ken Rapplean - Preremedial and State Program Section
Superfund Branch - Waste Management Division
746 Minnesota Avenue
Kansas City, Kansas 66101

Re: Novick Iron and Metal, Inc.
29th and Mead Site
Wichita, Kansas

Dear Mr. Rapplean:

Our firm represents Mr. Bernard Novick of Novick Iron and Metal, Inc. with regard to your letter dated February 28, 1989 pertaining to the above-referenced site.

To give you some general background, I wanted to make you aware of the fact that Mr. Novick has been dealing with the State Department of Health and Environment with regard to a couple of environmental problems involving his salvage yard. Specifically, Mr. Novick has been corresponding with Ralph E. O'Connor. Copies of correspondence from the state to Mr. Novick are enclosed for your information. I would ask that you pay specific attention to a letter dated January 25, 1989 wherein the state acknowledges that Mr. Novick's problems with them are entirely different from the TCE groundwater problem which is being investigated by your organization.

In order to solve the environmental problems that Mr. Novick has encountered, he has retained Mr. David Jewett who is a consultant with HWS Technologies, Inc. here in Wichita. Mr. Jewett is working with the representative of the state to formulate a plan to clean up the surface problems on the Novick property.

I've prepared a separate document pertaining to your information request. We are going to provide all documents that are readily available to us at this time. If you feel that our response is not complete and if you will require additional information, please let me know.

If you have any questions, please feel free to contact me. If I am unable to answer your questions, I will refer you to Mr. Jewett.

Very truly yours,

William A. Vickery
of STAN E. WISDOM, P.A.

WAV:jn

Enclosures

RESPONSE TO INFORMATION REQUEST

1. Bernard Novick, President, Novick Iron & Metal, Inc., 1007 East 21st Street, Wichita, Kansas, and William A. Vickery, Stan E. Wisdom, P.A., 200 East First, Suite #100, Wichita, Kansas 67202.

2. None.

3. The only hazardous material known to us on the Novick property are acids and heavy metals from junk batteries which have been stored on the property and PCB(s) from transformers stored on the property. As stated in the letters from the Kansas Department of Health and Environment, these are both surface problems which are being dealt with.

4. No hazaradous waste is generated or used on the property.

5. The only leaks, spills or releases that would have occurred on the property would be from the batteries or transformers described above. There are no specific occurrences and the only hazardous substances are named above.

6. There is no subsurface disposal system.

7.

8.

9. Information on 7-12 well failure

10.

11.

12.

13. The only hazardous substances known are from the batteries and transformers described above. It is impossible to identify the persons who left these products at the salvage yard. No hazardous substances are generated or disposed of on the property.

14. David G. Jewett, HWS Technologies, Inc., 810 East Murdock, Wichita, Kansas 67214 Ralph E. O'Connor, District Geologist, Bureau of Environmental Remediation, Department of Health and Environment, Forbes Field, Topeka, Kansas 66620.

15.

16. Not applicable.

17. None.

18. None.

19. None.

20. The information from the Kansas Department of Health and Environment makes it clear that the only problem on the property involves the top two feet of the soil. Copies of this state information are enclosed.

Terracon
ENVIRONMENTAL, INC.

August 4, 1989

Coburn, Croft, and Putzell
1 Mercantile Center
Suite 2900
St. Louis, MO 63101-1686

Attn: Mr. Joseph Nassif

Re: Sample Results
Novick Iron and Metal
Wichita, Kansas
Project No. 52895028

Gentlemen:

Terracon Environmental is transmitting the analytical results for the soil samples collected at the above referenced project. A total of 119 soil samples were collected at the site on June 17 and June 18, 1989. Selected soil samples were analyzed for either heavy metals (chromium, cadium, and lead) or PCBs in accordance with your instructions.

As requested, the site was divided into approximate 70 foot grids with samples collected as close to the center of each grid as accessibility would allow. Layout of the grid was performed using cloth taping and pacing procedures. Several grid locations were not sampled due to scrap metal piles preventing access. Soil samples were collected at a depth interval of 0 to 6 inches at all grid locations sampled. Soil samples were collected using a hand auger or other hand tools.

The drawing provided to us specified two locations where samples were to be collected for PCB analysis. Five points were sampled around each of these two locations. These sample locations are indicated herewith on a copy of the drawing provided to us by the

client. Samples were collected at these locations at depth intervals of 0 to 6 inches and 6 to 12 inches with the exception of sample numbers PCB 001-4 and PCB 001-5, where concrete was encountered at the lower depth.

Five additional sample locations designated for heavy metal analysis were specified on the map provided by the client. As instructed, five other sample locations were selected by the field team in areas associated with metal processing. These sample locations are designated as M1 through M10 on the attached map. Samples were collected at these locations from the depth intervals of 0 to 6 inches and 6 to 12 inches with the exception of M3, M5, M9, and M10, where concrete was encountered at the lower depth.

Sampling equipment was cleaned between sample locations using a detergent wash and a clean water rinse. Between sample locations believed to be contaminated with PCBs, an additional methanol rinse was used to clean sampling equipment. Cleaning fluids were collected and left on site in a 30-gallon plastic drum in an area designated by Mr. Novick. Disposable sampling equipment and personal protective clothing were placed in garbage bags and left on site in the same location.

Sample locations and grid locations have been marked on two copies of the drawing provided by the client and are attached to this report. The samples chosen for analysis were specified by the client in a telephone conversation on July 11, 1989. The results of the chemical analyses performed are attached. Soil samples will be held at the analytical laboratory for six months from the sampling date.

If you should desire any additional sample analysis or if you have any questions regarding this report, please do not hesitate to contact us.

Very truly yours,

TERRACON ENVIRONMENTAL, INC.

Steven R. Dalluge
Project Engineer

Douglas A. Aldrich, P.E.
Manager/Sr. Environmental Engineer
Kansas No. 10508

SRD:DAA:gm

Enclosure

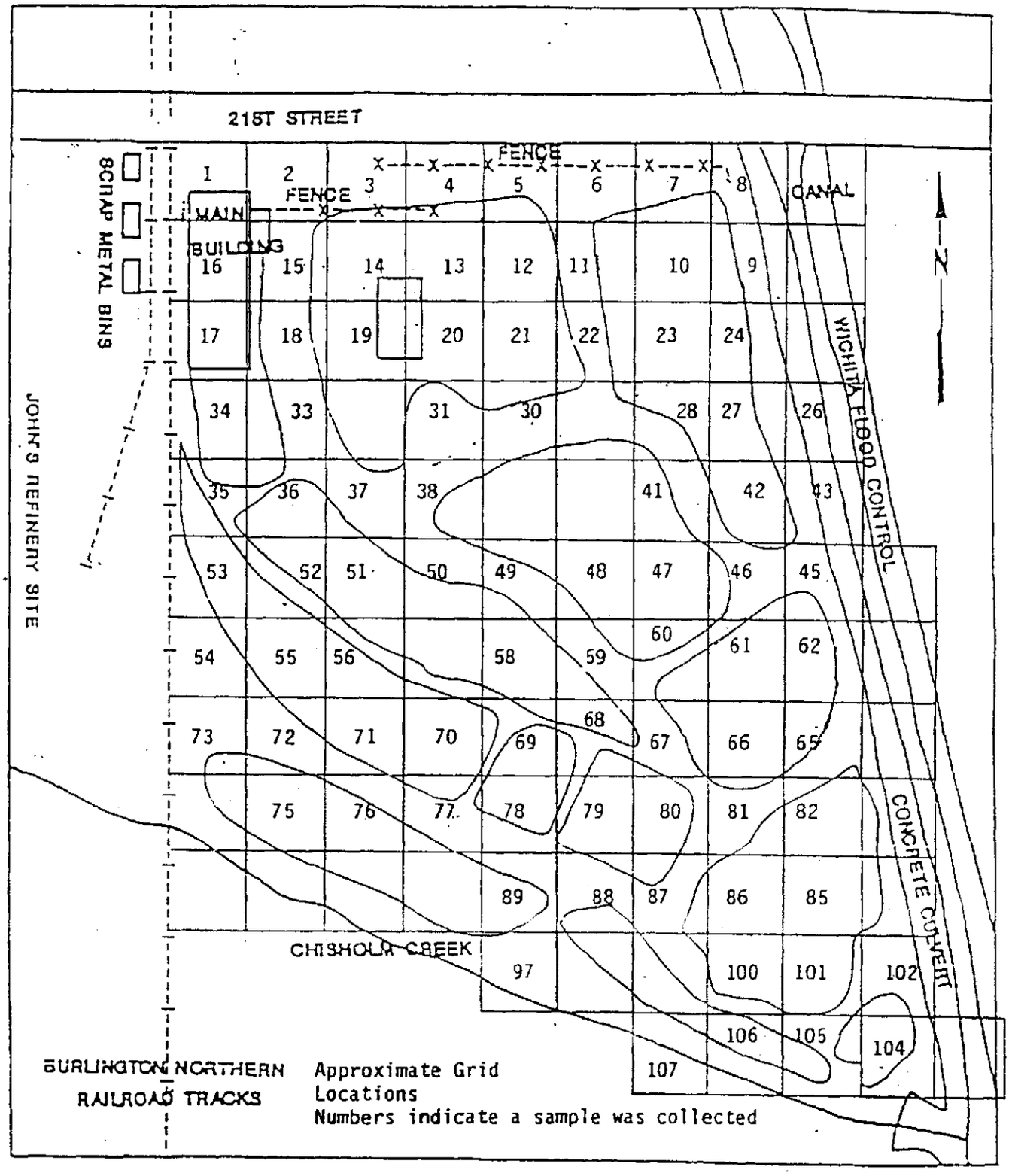
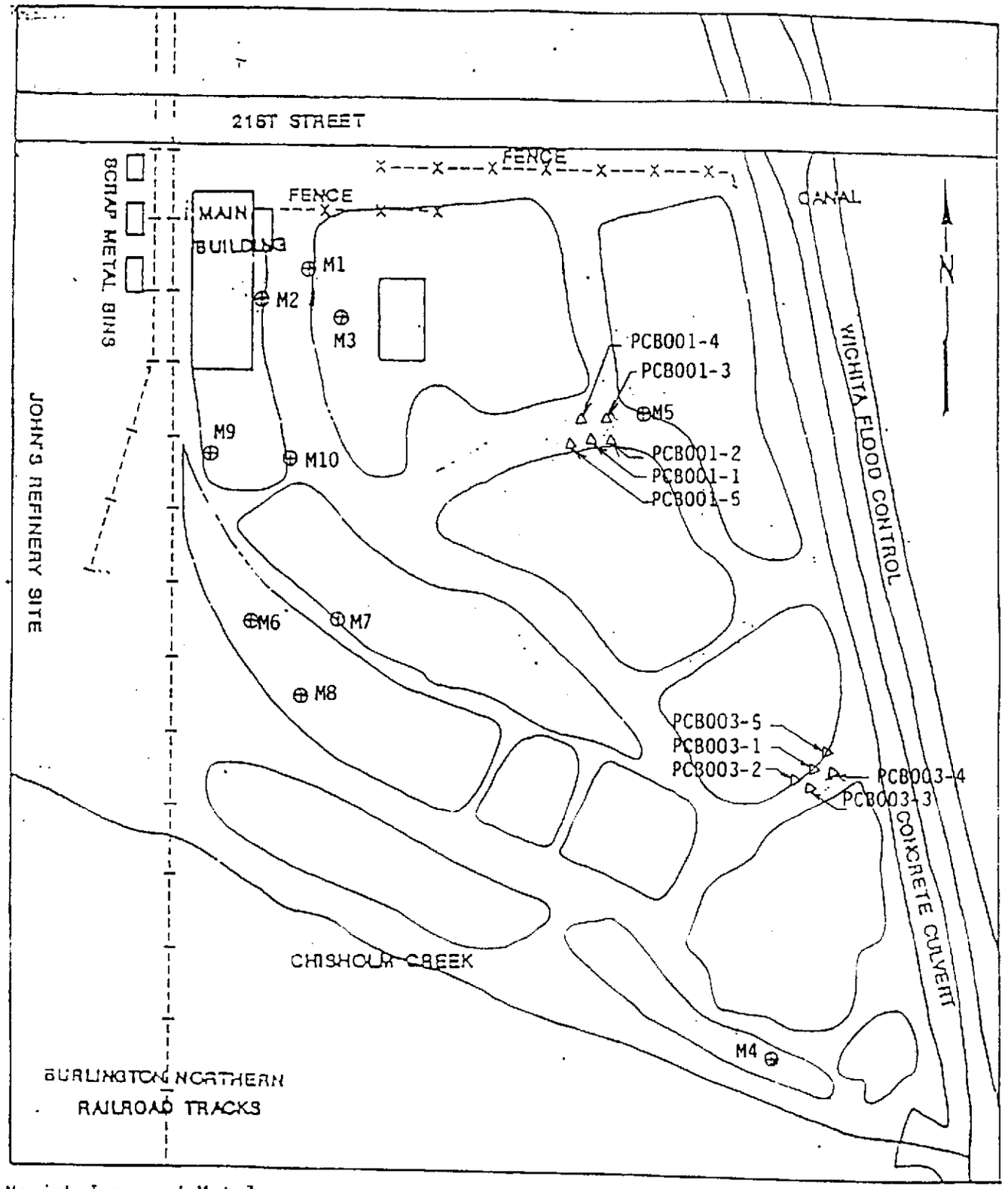


Figure Provided by the Client

Novick Iron and Metal
Project No. 52895028

Terracon



Novick Iron and Metal
Project No. 52895028

Figure Provided by the Client

Approximate Locations

⊕ Metal Samples

△ PCB Samples

Terracon

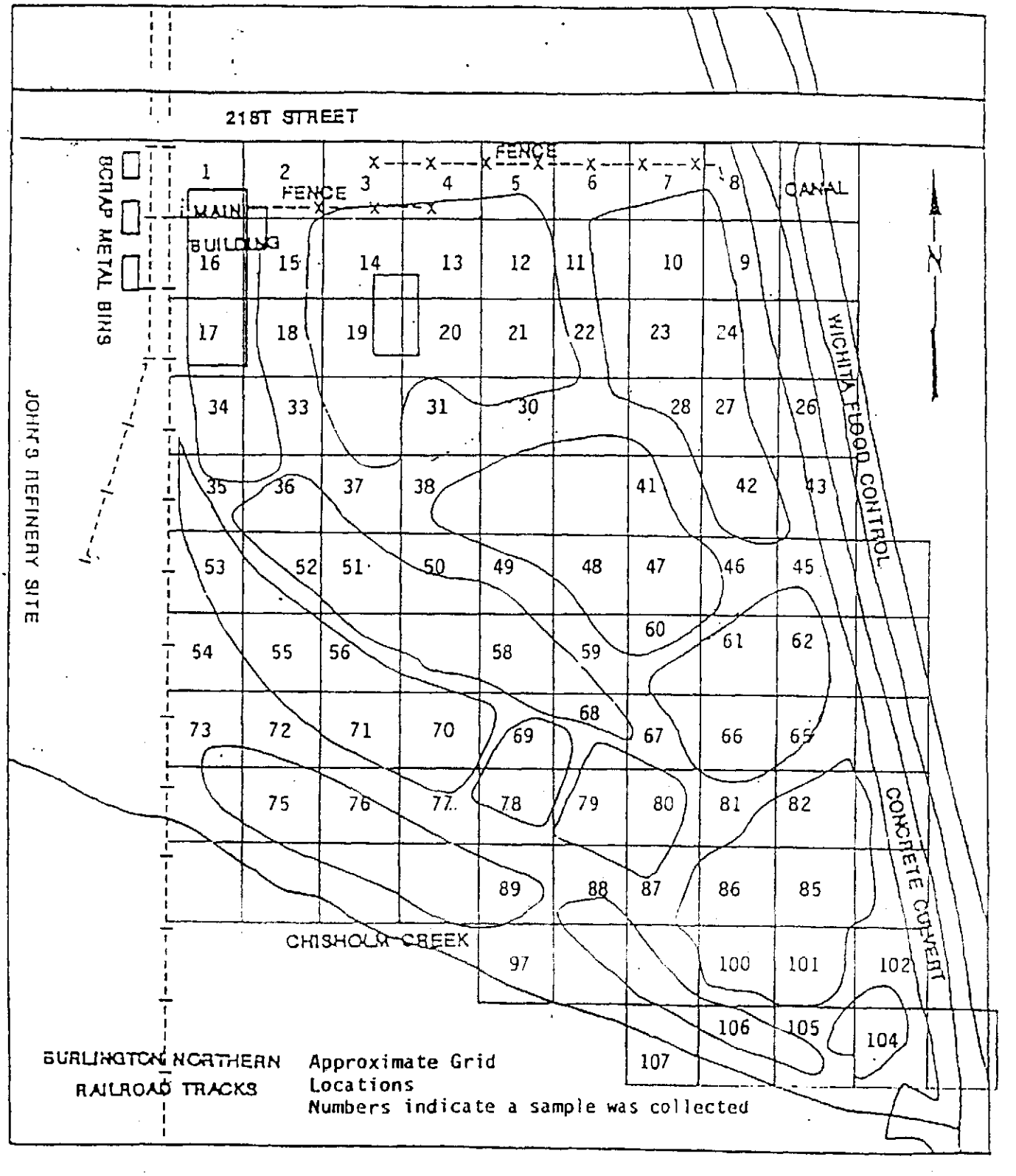
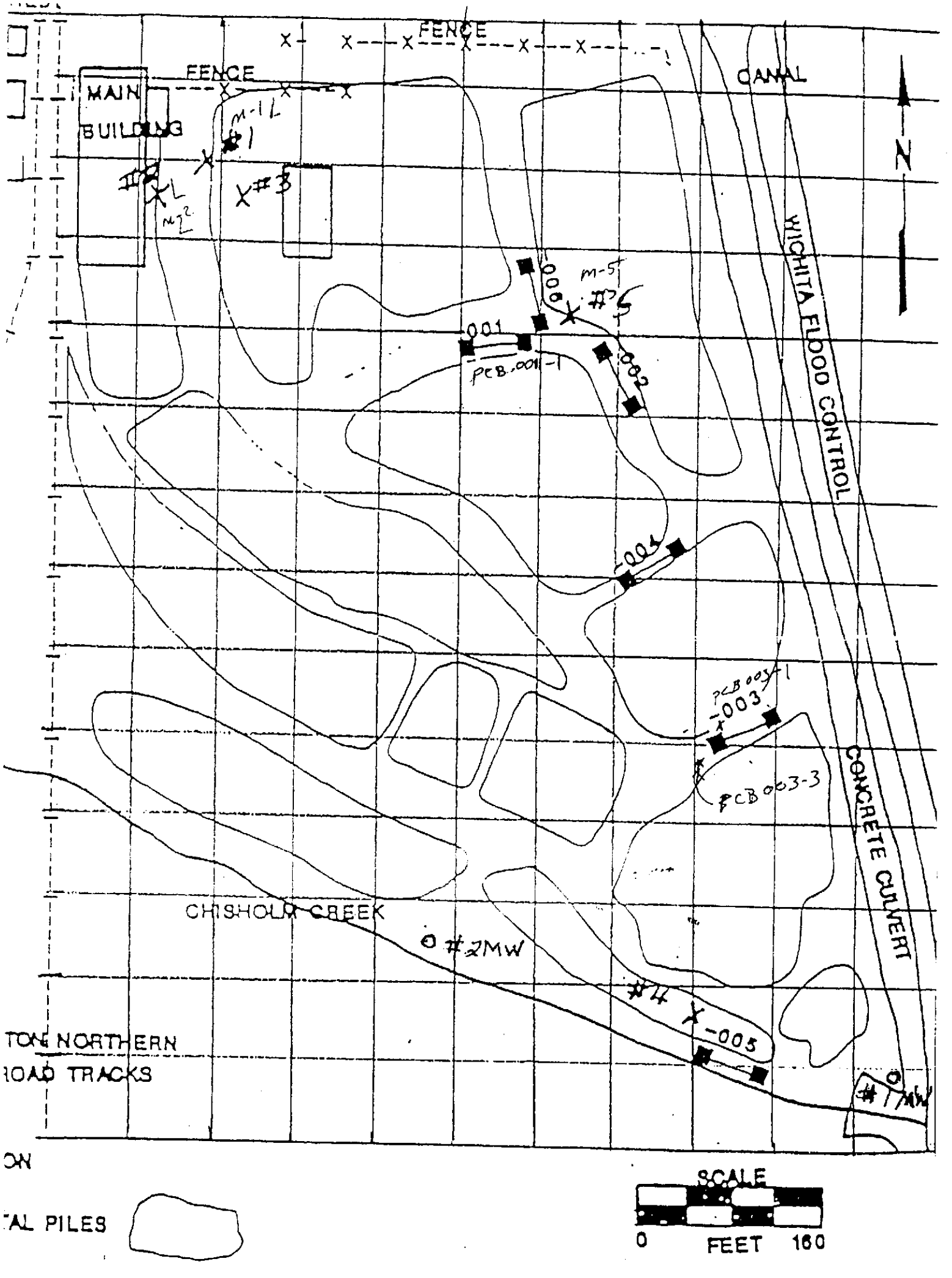


Figure Provided by the Client

Novick Iron and Metal
Project No. 52895028

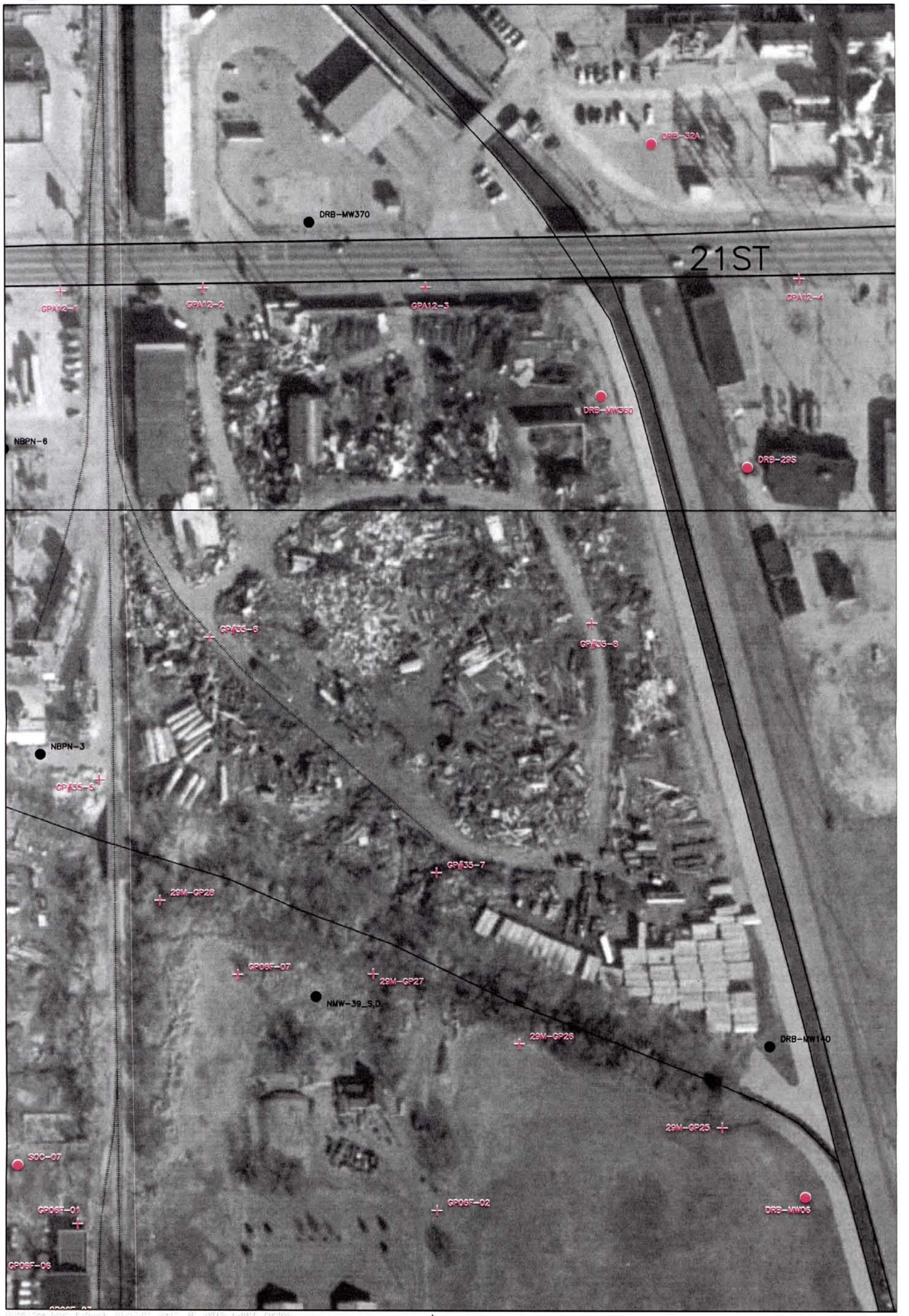
Terracon


FENCE
FENCE
MAIN BUILDING
CANAL
N
WICHITA FLOOD CONTROL
CONCRETE CULVERT
CHISHOLM CREEK
TONE NORTHERN
ROAD TRACKS
TAL PILES
SCALE
0
FEET
160

Analytical Data associated with this Correspondence were not observed in the files.

D L Brown

Figure(s)
Aerial Photographs and
Sample Location Map(s)



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Novick

Table(s)
Analytical Data Table(s)

Novick Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#35-5	S/20	06/08/98		µg/L	<1	**19**	**11**	**48**	<1	**4.4**	<1	<1	<1	**43**	**47.4**
GP#35-5	D/37	06/08/98		µg/L	<1	**460**	**100**	**5.4**	**11**	**5.4**	**30**	<1	**2.6**	**3.9**	**8.3**
GP#35-8	S/20	06/09/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**100**	**153.8**
GP#35-8	D/36	06/09/98		µg/L	<1	**2.3**	**21**	<1	<1	<1	<1	<1	<1	**9.2**	**16.8**
GP06F-02	S/17	10/29/99		µg/L	<1	**250**	**140**	**14**	**1.8**	**10**	**22**	<1	<1	<1	<5.4
GP06F-02	D/32	10/29/99		µg/L	<1	**520**	**190**	**42**	**5.4**	**14**	**35**	<1	<1	**1.5**	**5.9**
GP06F-07	S/20	01/14/00		µg/L	<1	**180**	**160**	**30**	**4.3**	**11**	**46**	<1	<1	<1	<5.4
GP06F-07	D/29	01/14/00		µg/L	<1	**35**	**520**	**23**	**3.7**	**9.9**	**44**	<1	<1	<1	<5.4
GPA12-1	S/20	12/30/97		µg/L	<1	<1	**9.7**	**44**	<1	**2.6**	<1	<1	<1	<1	<5.4
GPA12-1	D/36	12/30/97		µg/L	<1	**240**	**23**	<1	**6.1**	**2**	**8.9**	<1	<1	<1	<5.4
GPA12-2	S/20	01/09/98		µg/L	<1	<1 JS	<1 JS	<1 JS	<1 JS	<1 JS	<1 JS	<1 JS	<1 JS	**2300 JS**	**4181**
GPA12-2	D/36	01/09/98		µg/L	<1	**55**	**6**	<1	**1.3 JS**	<1	**2.5**	<1 JS	<1	**650 JS**	**2044**
GPA12-3	S/20	12/30/97		µg/L	<1	<1 JS	**3.1**	<1	<1 JS	<1	<1	<1 JS	<1	**3200 JS**	**3570.2**
GPA12-3	D/33	12/30/97		µg/L	<1	**5.2**	**22**	**3.6**	<1	**1.2 JS**	<1	<1	<1	**230 JS**	**520.6**
GPA12-3	D/33	12/30/97	DUP	µg/L	<1	**5.4**	**23**	**3.4**	<1	**1.1**	<1	<1	<1	**210 JS**	**500.8**
NMW-39D	D	05/09/01		µg/L	<1.0	**220**	**260**	**18**	**1.5**	**6**	**17**	<1.0	<1.0	**1.6**	**6**
NMW-39S	S	05/09/01		µg/L	<1.0	**34**	**360**	**25**	<1.0	**8.4**	**24**	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-21
Parker Boss Facility

Parker Boss Facility
712 and 780 East 15th Street (North of 15th and Barwise)

Potential Source Area 02G

Contaminants of Concern - TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Parker Boss Facility

The Parker Boss Facility area is comprised of two contiguous facilities, the Parker Boss Clay Traps facility to the east and the Wichita Mirror and Glass facility to the west. The Wichita Mirror and Glass facility burned to the ground in 1995 and is now vacant.

TCE Contamination

Data indicate that this area is a potential source of chlorinated VOC contamination. Groundwater sampling data have shown an increase in concentrations of TCE along the groundwater flow path through this area. The data infer that the eastern (Parker Boss) facility at 780 E. 15th Street is the most likely source of the VOCs, but are insufficient to differentiate between these two contiguous properties. During Phase 1/1A of the NIC RI TCE was reported down gradient from the Wichita Mirror and Glass/Parker Boss Clay Traps facilities (WMG/PB) facilities in a shallow groundwater sample from Geoprobe location GPA-24-2 at 180 µg/L. A second shallow groundwater sample collected from this location during Phase 2 of the NIC RI contained TCE at 15 µg/L. Variability in the direction of groundwater flow and a narrow plume width may account for the discrepancy. During Phase 2 of the NIC RI, TCE was also reported in the shallow groundwater (17 to 20 feet bgs) downgradient of these facilities at locations GP02G-01, GP-02G-08, GP02G-02 and GP-02G-07 at <1 µg/L, 1.3 µg/L, 44 µg/L and 11 µg/L, respectively. Samples collected from the shallow groundwater upgradient of these facilities at locations GP02G-03, GP02G-04, GP-02G-05 and GP02G-06 contained TCE concentrations of <1µg/L, 4.4 µg/L, 9.2 µg/L and 10µg/L, respectively. TCE concentrations in the deep groundwater upgradient of the facilities ranged between 77 µg/L at GP02G-03 to 320 µg/L at GP02G-04, and were 10 µg/L, 170 µg/L, 320 µg/L and 347 µg/L at downgradient locations GP02G-01, GP02G-08, GP02G-02 and GP02G-07, respectively.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southeast but facility-specific groundwater flow is not well defined.

References

CDM 2000. *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Parker Boss Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP02G-01	S/17	10/21/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-01	S/17	10/21/99	DUP	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-01	D/35	10/21/99		µg/L	<1	**10**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-02	S/17	10/26/99		µg/L	<1	**44**	**5.9**	<1	**2.2**	<1	<1	<1	<1	<1	<5.4
GP02G-02	D/35	10/26/99		µg/L	<1	**320**	**46**	**4.6**	**1.6**	**2.8**	**6.5**	<1	<1	<1	<5.4
GP02G-03	S/17	11/02/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-03	D/29	11/02/99		µg/L	<1	**77**	**11**	<1	**1.5**	**1**	<1	<1	<1	<1	<5.4
GP02G-04	S/17	11/02/99		µg/L	<1	**4.4**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-04	D/38	11/02/99		µg/L	<1	**320**	**67**	**3.5**	**1.1**	**2.6**	**5**	<1	<1	<1	<5.4
GP02G-05	S/17	11/02/99		µg/L	<1	**9.2**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-05	D/35	11/02/99		µg/L	<1	**270 JH**	**49 JH**	**2.7**	<1	**2**	**3.3**	<1	<1	<1	<5.4
GP02G-06	S/17	11/02/99		µg/L	<1	**10**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-06	D/35	11/02/99		µg/L	<1	**220 JH**	**44 JH**	**2.7**	<1	**1.9**	**3.5**	<1	<1	<1	<5.4
GP02G-07	S/17	11/05/99		µg/L	<1	**11**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-07	D/26	11/05/99		µg/L	<1	**47**	**7.8**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02G-08	S/17	11/02/99		µg/L	<1	**1.3**	<1	<1	<1	<1	<1	<1	**12**	<1	<5.4
GP02G-08	D/38	11/02/99		µg/L	<1	**170 JH**	**38**	**1.9**	**1.8**	**1.9**	**2.7**	<1	<1	<1	<5.4
GPA24-2	S/20	12/11/97		µg/L	<1	**180**	**23**	**1.3**	<1	<1	**1.1**	<1	<1	<1	<5.4
GPA24-2	S/20	10/15/99		µg/L	<1	**15**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA24-2	D/36	12/11/97		µg/L	<1	**580**	**100**	**11**	<1	**3.7**	**6.4**	<1	<1	<1	<5.4
GPA24-2	D/36	12/11/97	DUP	µg/L	**1.3**	**550**	**98**	**11**	**1.4**	**3.3**	**7.7**	<1	<1	<1	<5.4
WND-49D	D	05/09/01		µg/L	<1.0	**44**	**47**	**2.1**	**8.6**	**2.9**	**3.8**	<1.0	<1.0	**1.9**	**6.3**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 712 E. 15th

Current Owner/Business: Cargill Incorp.

Contact Person: Scott Harter

Mailing Address: P.O. Box 2519
Wichita, KS 67201

Phone Number: (316) 291-2514

Other information

Name of Company:		Midwestern Mirror & Glass
Name and/or Contact Person:		
Street Address of Company:		**712 E 15th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"Parker Boss Facility"
Phone Number of Contact:		
History:	1951	Swallow Airplane Co (factory No 2)
	1961	Vacant
	1965	Midwestern Mirror & Glass Inc.
	1970	Midwestern Mirror & Glass Inc.
	1975	Midwestern Mirror & Glass Inc.
	1980	Midwestern Mirror & Glass Inc
	1984/5	Midwestern Mirror & Glass Inc.
	1990	Vacant
	1995/6	No Listing
	2000	No Listing
RCRA Info:		

SEDGWICK COUNTY PROPERTY DATA LISTING

FAX TO: DORIS
PROPERTY ID: B -01832 PIN #: 122-09-0-31-03-003.00-
CTRL #: 120452

OWNER: CARGILL INCORPORATED
PROPERTY 712 E 15TH
ADDRESS WICHITA KS
MAILING % PROPERTY TAX
ADDRESS P O BOX 5626
MINNEAPOLIS MN 55440-5626

TAX UNIT: 6787 WICHITA LAND USE: 200
LOAN CO: 00778 CARGILL, INC.

2001 MILL LEVY 116.554

2001 TAXES	BASE	SUP 4				(MORE)
GENERAL	569.25	0.00	0.00	0.00	0.00	
SPECIALS	0.00	0.00	0.00	0.00	0.00	
TOTAL	569.25	0.00	0.00	0.00	0.00	

SPECIALS BREAKDOWN

CODE	CERT #	DESCRIPTION	2002 PAYMENT	2002 THRU PAYOUT	BEG YR	END YR
67-31 1 W	45208	WEED CUTTING	123.19	123.19	02	02
W		WEED CUTTING			19	19

TOTAL PAYMENT		PRINCIPAL	INTEREST
123.19	TOTAL SPECIALS DUE FOR 2002	118.00	5.19

2002	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
VU	40,700		40,700	4,884		4,884

2001	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
VU	40,700		40,700	4,884		4,884

2000	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
VU	29,100		29,100	3,492		3,492

CAMA INFORMATION FRONT DEPTH YR BLT SQFT

LEGAL DESCRIPTION
THAT PART LOTS 8 & 10 BEG NW COR S1/2 LOT 10 E 226 FT SLY 264.51 FT TO PT 223.6 FT E & 19.5 FT N SW CORLOT 8 W 223.6 FT N 264.39 FT TO BEG GLAZE'S ADD.

W I C H I T A F I R E D E P A R T M E N T

INCIDENT REPORT NUMBER: 16299

40 RECORD FIRENET INCIDENT REPORTING SYSTEM

INCIDENT NO.:16299 STREET ADDRESS: 712 E 15 N ,WI

TIME CALL RECEIVED (0000 - 2359):0241 INCIDENT TYPE: BLDG

DATE CALL REC.(MM/DD/YY):08/13/95 REPORTED BY: BALDWIN LARRY C

ALARM SOURCE:1 PHONE NO.: 263-4091

(1) TELEPHONE (4) RADIO
(2) BOX (CODED SIG.) (5) VERBAL BLOCK# & MAP# :4 5549
(3) PVT. FIRE ALRM SYSTEM (6) NO ALRM REC.

DISPATCHER(S):TP35

SYSTEM RECEIVED:

FIRST DUE UNIT: SQ10

HIGHEST ALARM LEVEL:4 MUTUAL AID GIVEN: N

INCIDENT UNDER CONTROL - TIME:0634 DATE:08/13/95

LAST UNIT DEPARTED SCENE - TIME:1936 DATE:08/13/95

60 RECORD FIRENET INCIDENT REPORTING SYSTEM

RESPONDING F.D. UNITS	DISPATCHED TIME	DISPATCHED DATE	ARRIVED-AT-SCENE TIME	ARRIVED-AT-SCENE DATE	BACK-IN-SERVICE TIME	BACK-IN-SERVICE DATE
E4	0241	08/13/95		08/13/95	0634	08/13/95
HR4	0241	08/13/95		08/13/95	0644	08/13/95
AP1	0241	08/13/95		08/13/95	0537	08/13/95
SQ10	0241	08/13/95	0245	08/13/95	0720	08/13/95
SQ3	0241	08/13/95		08/13/95	0539	08/13/95
E21	0241	08/13/95		08/13/95	0606	08/13/95
E10	0241	08/13/95		08/13/95	0633	08/13/95
BAT2	0241	08/13/95		08/13/95	0539	08/13/95
BAT1	0246	08/13/95		08/13/95	1043	08/13/95
A5	0249	08/13/95		08/13/95	0519	08/13/95
SQ14	0249	08/13/95		08/13/95	0632	08/13/95
E3	0249	08/13/95		08/13/95	0838	08/13/95
E5	0249	08/13/95		08/13/95	0617	08/13/95
MA2	0249	08/13/95		08/13/95	0500	08/13/95
186	0250	08/13/95		08/13/95	0537	08/13/95
Q14	0255	08/13/95		08/13/95	0739	08/13/95
SQ7	0302	08/13/95		08/13/95	0510	08/13/95
E2	0303	08/13/95		08/13/95	0511	08/13/95
A2	0303	08/13/95		08/13/95	0518	08/13/95
E7	0303	08/13/95		08/13/95	0655	08/13/95
BAT9	0303	08/13/95		08/13/95	0633	08/13/95
E22	0331	08/13/95		08/13/95	0438	08/13/95
SQ8	0331	08/13/95		08/13/95	0515	08/13/95

Q17	0331	08/13/95	08/13/95	0808	08/13/95
SQ12	0241	08/13/95	08/13/95	0415	08/13/95
AP1	0543	08/13/95	08/13/95	0616	08/13/95
BAT2	0631	08/13/95	08/13/95	0824	08/13/95
E1	0707	08/13/95	08/13/95	1040	08/13/95
E21	0707	08/13/95	08/13/95	1034	08/13/95
SQ4	0748	08/13/95	08/13/95	0835	08/13/95
SQ19	1240	08/13/95	08/13/95	1533	08/13/95
SQ13	1030	08/13/95	08/13/95	1309	08/13/95
SQ8	1512	08/13/95	08/13/95	1811	08/13/95
E1	0241	08/13/95	08/13/95	0630	08/13/95
SQ14	1240	08/13/95	08/13/95	1533	08/13/95
SQ12	1800	08/13/95	08/13/95	2030	08/13/95

50 RECORD INCIDENT INFORMATION

INCIDENT NO.:16299 EXPOSURE: 0 DATE: 08/14/95

PROPERTY NAME	STRT# DIR STREET NAME	SD	TYPE OF SITUATION FOUND	
	712 E 15TH		BUILDING FIRE	11

TYPE OF ACTION TAKEN		APT. NO.	CENSUS TRACT	DISTRICT	OUT-OF-CITY
EXTINGUISHMENT	1		4113	1 (1=Y,0=N)	0

PROPERTY MANAGEMENT		COMPLEX		FIXED PROPERTY USE	
PTPP	1	WAREHOUSE	80	WAREHOUSE	891

MOBILE PROPERTY	ZIP CODE	OCCUPANT
TYPE 0	67214	

PROPERTY REPRESENTATIVE	ASSIST BY OTHER PERSONS
LUINSTRA, JOE W.	WPD

50 RECORD COMMENTS:
WFD RESPONDED TO A BUILDING FIRE IN THE AREA OF 15TH AND MOSLEY
E10 AND SQ10 FIRST ON THE SCENE. E10 ASSUMED COMMAND ADVISED FOUR STORY
BRICK BUILDING WITH HEAVY FIRE INVOLEMENT TO THE BACK OF THE STRUCTURE,
A WAREHOUSE WITH HEAVY FIRE INVOLVMENT THROUGH OUT THE STRUCTURE.
E10 ASSIGNED E1 TO ASSIST E10 WITH 5" SUPPLY LINE TO E10 AND E21 TO LAY 5"
ON THE WEST SIDE OF THE TRACKS TO PROTECT EXPOSURES WEST AND NORTH
BAT1 ON SCENE AND ASSUMED COMMAND BAT2 ON SCENE ASSIGNED EAST DIVISION
BAT9 ON SCENE ASSIGNED WEST DIVISION. FIRE PORGRESSED TO FOUR ALARMS
CREWS SET QUINTS AND DECK GUN OPERATIONS AROUND THE BUILDING
FOR EXPOSURE PROTECTION. TWO SQUADS WERE SENT TO THE NORTH FOR BRAND
PROTECTION. KGE CALLED TO THE SCENE TO SHUT OFF THE POWER IN THE AREA
SEVERAL HIGH POWER LINES OVERHEAD CAUSING HAZARDS TO THE FIRE CREWS.
ARSON INVESTIGATOR CALLED TO THE SCENE (LT GRIER). FIRE UNDER INVESTIGATION

51 RECORD FIRE REPORT

LEVEL OF ORIGIN		AREA OF ORIGIN		EQUIP INVOLVED IN IGNIT	
GRADE TO 4TH FLOOR	104	FLOOR AND CEILING	97	NONE	98

FORM OF HEAT OF IGNITION		TYPE OF MATERIAL IGNIT		FORM OF MATERIAL IGNIT	
MATCH	45	GASOLINE	23	ACCELERANT	86

IGNITION FACTOR		CODE VIOLATION?		TERMINATION STAGE	
ARSON	11(1-YES, 0-NO)0		FLAME		3

HOW WAS THE FIRE CONTROLLED?:5

WAS FIRE LOSS GREATER THAN $10,000 OR AN EXPOSURE INVOLVED? (Y/N):Y

TYPE MATERIAL GEN FLAME		FORM MATERIAL GEN FLAME		FACTOR OF FLAME TRAVEL	
SAWN WOOD	63	FRAMING	17	FIRESTOPPING	22

TYPE MATERIAL GEN SMOKE		FORM MATERIAL GEN SMOKE		FACTOR OF SMOKE TRAVEL	
WOOD	63	FRAMING	17	OPENING	5

CODE VIOLATION RELATING TO FLAME? (1-YES,0-NO) 0

CODE VIOLATION RELATING TO SMOKE? (1-YES,0-NO)? 0

TYPE WEATHER		TEMPERATURE		REL. HUMIDITY		WIND DIRECT		WIND SPEED	
CLEAR	1	80-89	3	50-79	2	SOUTH	5	21 25	6

52 RECORD FIRE LOSS REPORT

INCIDENT NO.:16299

	STRUCTURE VALUE	CONTENTS VALUE	STRUCTURE LOSS	CONTENTS LOSS
EST./ACTUAL	125000	25000	125000	25000
INSURED	0	0	0	0

54 RECORD

OCCUPANT NAME	OWNER NAME
LUINSTRA, JOE	LUINSTRA, JOE

	BUILDING	CONTENTS	ADDRESS OR PHONE NO.
INS. NAME			
INS. AGENT			

53 RECORD STRUCTURE FIRE REPORT

STRUCTURE TYPE		YR CONST	HEIGHT	GRND FLOOR AREA	BLDG. CODE OCC. CLASS	
TWO OR MORE	2	1900	4	5000		0

CONSTRUCTION TYPE		CONSTRUCTION METHOD		NUMBER OF OCCUPANTS	
HEAVY TIMBER	2	SITE	1	NONE	8

EXTENT OF FLAME DAMAGE		EXTENT OF SMOKE DAMAGE		EXTENT OF WATER DAMAGE	
BEYOND STRUCTURE	7	BEYOND	7	STRUCTURE	6

EXTENT FIRE CONT. DAMAGE		PERSONS MADE HOMELESS		LOST TIME OF BUSINESS	
STRUCTURE	6	NONE	9	WILL NOT RESUME	7

WATER SUPPLY TYPE		WATER FLOW	TANK CAPACITY
1000 OR MORE	3	7	40

SPRINKLER INSTALLATION & COVERAGE		NO. HEADS OPEN	SPRINKLER EFFECTIVENESS	
NO SPRNKLR PROT.	8	0	NO EQUIP. PRESENT	8

STANDPIPE INSTALLATION & COVERAGE		STANDPIPE EFFECTIVENESS	
NO S.P. SYSTEM	8	NO S.P. SYSTEM	8

PORT. EXTNG. INSTALLATION & COVERAGE
NO PORT. EXTINGUSHR 8

PORTABLE EXTING. EFFECTIVENESS
NO PORT. EXTINGUSHR 8

SPECIAL HAZARD SYSTEM TYPE
NO SPEC HAZ SYSTEM 8

SPECIAL HAZARD SYSTEM COVERAGE
NO SPEC HAZ SYSTEM 8

SPECIAL HAZARD SYSTEM EFFECTIVENESS
NO SPEC HAZ SYSTEM 8

PRIVATE BRIGADE PRESENT?
(1-YES, 0-NO) 0

PRIVATE BRIGADE PERFORMANCE
NO PVT. BRIGADE 8

AUTOMATIC DET. INSTALL. & COVERAGE
COMPLETE 1

AUTOMATIC DETECTION EFFECTIVENESS
OPERATED 1

AUTO. ALARM TRANSMISSION CAPABILITY
NO ALARM XMIT EQUIP 8

AUTO. ALARM TRANSMISSION EFFECTIVENESS
NO ALARM XMIT EQUIP 8

OTHER FIRE PROTECTION FACILITIES? (1-YES, 0-NO):0

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:A2 ADDRESS:715 E FIFTEEN

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 0OVER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 2

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
ACT LT JK TABLER
TW NEWLIN
A2 RESPONDED TO THE ABOVE ADDRESS TO A CODE 3 BUILDING FIRE, THIRD ALARM .A2 CREW WAS ASSIGNED TO SOUTHEAST SECTOR TO ASSIST WITH A MULTIVERSAL ON THE SOUTHEAST CORNER OF THE BUILDING. A2 WAS RELEASED BY COMMAND.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:E2 ADDRESS:715 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):1 MASTER STREAM APPLIANCES:1 MAX. FLOW RATE(GPM): 600

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 60 TOTAL WATER APPLIED (HUND. OF GAL.): 360

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 12OVER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 0

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
E2 CREW: LT. SG GRINER, MR CLEVENGER, NA MCBEE
REPORT COMPLETED BY SG GRINER.
WE RESPONDED TO A BUILDING FIRE AT THE ABOVE ADDRESS. UPON ARRIVAL WE REPORTED TO STAGING. WE WERE ASSIGNED TO WEST DIVISION (CAPT. TIMMONS) WHO ADVISED US TO PUT OUR DECK GUN INTO OPERATION ON THE ONE-STORY STRUCTURE NORTH OF THE MAIN FIRE BUILDING. BAT 9 ARRIVED ON THE WEST SIDE AND TOOK COMMAND AS NORTHWEST DIVISION. HE ADVISED US TO EXTEND TWO THREE INCH LINES FROM APPROXIMATELY ONE BLOCK NORTH OF OUR LOCATION WHERE E7 HAD RUN OUT OF HOSE, TO OUR LOCATION, SUPPLYING E2 WITH WATER. E7 PUMPED THESE LINES TO E2 AND WE MAINTAINED OUR POSITION FOR APPROXIMATELY ONE HOUR. WE WERE THEN ADVISED TO BREAK DOWN OUR SUPPLY LINES AND MOVE E2 NORTH TO ALLOW Q17 INTO OUR LOCATION. E2 THEN PICKED UP 550 FEET OF THREE INCH HOSE (BELONGING TO E7) LOADED IT ONTO E2 AND RETURNED TO SERVICE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:E22 ADDRESS:700 E. 15TH NORTH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPTAIN KP RODGERS
FF LANDSVERK
FF POWELL
E22 REPORTED TO STAGING OFFICER. REMAINED IN STAGING UNTIL RELEASED BY COMMAND AND STAGING OFFICER. E22 BECAME AVAILABLE AND RETURNED TO QUARTERS.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:MA2 ADDRESS:715 E.15TH

OFFICERS (ON DUTY):0 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 0OVER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 2

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
T.W.NESMITH
MA2 RESPONDED TO ABOVE ADDRESS FOR A CODE 3 BUILDING FIRE. MA2 SUPPLIED WATER AND FILLED AIR BOTTLES. FIRE WENT TO A 4 ALARM. FIRE WAS A DIFENSIVE MODE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:BAT2 ADDRESS:15TH & BARWISE

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 0 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
B.C. ROD HUGHES
BAT 2B RELIEVED BAT2A ON THE SCENE. BAT2 ASSISTED COMMAND ON THE SCENE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:SQ3 ADDRESS:701 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW: LT KING, FF WINTER
RESPONDED TO BUILDING FIRE AT ABOVE ADDRESS. ASSISTED CREWS WITH PLACING MULTIVERSALS IN PLACE. STOOD BY ON MULTIVERSAL UNTIL RELEASED BY ONCOMING SHIFT.
LT WJ KING

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:15299 COMPANY NO.:A5 ADDRESS:700 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT. D.HORNBECK, J.D.WILSON
A5 RESPONDED TO A REPORTED BUILDING ON FIRE. ON ARRIVAL OF A CODE-3 FIRE A5 STAGED WEST UNTIL RELEASED BACK IN SERVICE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:15299 COMPANY NO.:E5 ADDRESS:700 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 0OVER 3 : 5

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 0

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT. J.BICKEL, T.NOLAN, C.WEST
E5 RESPONDED TO A SECOND ALARM ON A CODE-3 BUILDING FIRE. ON ARRIVAL COMMAND

HAD E5 SUPPLY WATER TO FIRST ARRIVING APPARATUS. AFTER COMPLETEING THIS ASSIGNMENT E5 ASSISTED WITH FIRE ATTACK AND EXPOSURE PROTECTION. AFTER FIRE WAS CONTROLLED TO THE INVOLVED BUILDINGS E5 ASSISTED WITH EXPOSURE PROTECTION UNTIL RELIEVED AT THE SCENE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/14/95

INCIDENT NO.:16299 COMPANY NO.:E10 ADDRESS:712 E 15TH N

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):1 MASTER STREAM APPLIANCES:1 MAX. FLOW RATE(GPM):1500

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 2 2 TO 3 HAND LINES: 3

DURATION OF FLOW IN MINUTES: 300 TOTAL WATER APPLIED (HUND. OF GAL.): 500

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 32 1/2 TO 3: 100VER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 3

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT HAHN
FF WAPPELHORST
FF HOLMES
ASSUMED COMMAND ADVISED HEAVY FIRE TO THE REAR OF THE BUILDING COMMAND HAD E1 SUPPLY 5" LINE TO E10 ON THE EAST SIDE OF THE BUILDING AND E21 5" TO THE WEST OF THE BUILDING. AREA WAS VERY CONJESTED WITH OVERHEAD POWER LINES AND RAILROAD TRACKS.BAT1 ARRIVED SHORTLY AFTER E10 AND ASSUMED COMMNAD/E10 OFFICER ASSISTED BAT2 WITH EAST DIVISON. SQ10'S CREW AND E10'S CREW SET UP DECK GUN ACROSS THE STREET FOR FIRE] PROTECTION TO THE SOUTH AND EAST.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/14/95

INCIDENT NO.:16299 COMPANY NO.:SQ10 ADDRESS:712 E 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 0OVER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 2

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT FRANKLIN
FF HIGGINS
SQ10 FIRST ON SCENE ADVISED CODE THREE AND PASSED COMMAND.
SQ10 SET UP DECK GUN FOR DEVENSIVE FIRE ATTACK AND ASSISTED WITH
OTHER LINE PLACMENTS. SQ10 LATER ASSIGNED TO SOUTH DIVISION
RECON OFFICER. CREW PROTECTED A EXPOSURE TO THE SOUTH AND EAST.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:E1 ADDRESS:715 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 0OVER 3 : 1

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 3

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
ACT. LT. B.N. SNYDER
FF. D.S. ECKERMAN
FF. D.J. ENGELBRECHT
E1 RESPONDED TO ABOVE ADDRESS ON A BUILDING FIRE. E1 ARRIVED ON SCENE AND STAGED WEST. COMMAND(E10) ADVSIED E1 TO LAY A WATER SUPPLY FOR E10. E1 PULLED 100FT. OF 5INCH AND HAND LAID TO E10. E10ADVISED COMMAND(BAT1) THAT THEY WERE READY FOR REASSIGNMENT. E1 WAS ASSIGNED TO FIRE ATTACK WITH E10 AND SQ10. E1 PULLED PRECONNECT FROM E10. FIRE WAS THEN MADE DEFENSIVE AND CREWS BEGAN TO SET UP MULTIVERSALS. SHORT TIME CREWS WERE TOLD TO MOVE BACK AND ALL CREWS WER MOVED AWAY FROM AREA. WHEN AREA WAS SAFE E1 WENT AND PICKED UP HOSE AND RELOADED. E1 ADVISED COMMAND THAT THEY HAD ALL EQUIPMENT BACK ON AND WERE AVAILABLE. E1 WAS RELEASED AND SENT TO A POSSIBLE HOUSE FIRE ON ROSENTHAL.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:E21 ADDRESS:715 E. 13TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):1 MASTER STREAM APPLIANCES:1 MAX. FLOW RATE(GPM):1400

3/4 TO 1 HAND LINES: 1 1 TO 2 HAND LINES: 2 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 180 TOTAL WATER APPLIED (HUND. OF GAL.):2520

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT. T.L. TIMMONS
J.W. GERMANN
D.J. YOSS
E21 RESPONDED TO A BUILDING FIRE. ON ARRIVAL E21 STAGED WEST AND WAS ASSIGNED BY COMMAND TO WEST DIVISION FIRE ATTACK. E21 LAYED 5" FROM SANTA FE AND 15TH AND USED MOUNTED MULTIVERSAL WITH 2" TIP. E21 WAS LATER ASSIGNED TO NW DIVISION WHEN BATT9 TOOK OVER THAT POSITION. E21 CREW OPERATED THE HEAVY STREAM UNTIL RELEASED BY COMMAND. E21 CREW ALSO PUMPED TWO PRE-CONNECT HANDLINES FOR EXPOSURE PROTECTION ON THE SOUTH SIDE, AND A BOOSTER LINE TO PROTECT E21 FROM RADIATED HEAT. E21 CREW THEN LOADED UP THE HOSE WITH THE HELP OF OTHER FIRE CREWS AND RETURNED TO SERVICE TO CHANGE SHIFTS.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:13295 COMPANY NO.:E1 ADDRESS:712 E 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT LD FEUERBORN DL MCCLINTOCK CA RODRIGUEZ
ENGINE 1 CREW ROLLED HOSE AND STOOD BY FOR 4.5 HOURS TO WATCH FOR REKINDLE.
E-1 WAS THEN RELEASED BY NEXT FIRE CREW.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:13295 COMPANY NO.:E21 ADDRESS:712 E 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT DT KLOPPENBERG SD SIPLE KOEHN
ENGINE 21 CREW ASSISTED WITH LOADING HOSE AND STOOD BY UNTIL RELEASED BY RELIEF CREW.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT **DATE:08/13/95**

INCIDENT NO.:16299 COMPANY NO.:**BAT1** **ADDRESS:712 E 15TH**

OFFICERS (ON DUTY):2 FIREFIGHTERS (ON DUTY): **0** CREW WORKED (1-YES 0-NO):**1**

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:**0** MAX. FLOW RATE(GPM): **0**

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: **0** 2 TO 3 HAND LINES: **0**

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): **0**

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: **0**

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CHIEF DJ ARMSTRONG
BATTALION 1 RELIEVED CHIEF STOVALL ON THE SCENE. BAT-1 COMMANDED OPERATIONS OF WATCH LINE UNTIL 1630 HRS. COMMAND WAS THEN TERMINATED.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT **DATE:08/13/95**

INCIDENT NO.:16299 COMPANY NO.:**BAT2** **ADDRESS:712 E 15TH**

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): **0** CREW WORKED (1-YES 0-NO):**1**

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:**0** MAX. FLOW RATE(GPM): **0**

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: **0** 2 TO 3 HAND LINES: **0**

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): **0**

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: **0**

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
BATTALION CHIEF TED TRASK: RESPONDED TO THIS LOCATION FOR A STRUCTURE FIRE. ON ARRIVAL WAS ASSIGNED AS FIRE CONTROL BY COMMAND. DIRECTED FIRE CONTROL EFFORTS ON THE SOUTH AND EAST SIDES OF THE INVOLVED STRUCTURE. DUE TO MY OWN OBSERVATIONS AND INFORMATION FROM CAPTAIN HAHN, I ADVISED COMMAND TO MAKE THIS A DEFENSIVE FIRE. FROM THAT POINT ON MOST EFFORTS WERE EXTENDED TO PROTECT EXPOSURES TO THE SOUTH AND EAST. FIRE WAS CONTAINED TO THE ORIGINAL STRUCTURES OF ORIGIN.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT **DATE:08/13/95**

INCIDENT NO.:16299 COMPANY NO.:**HR4** **ADDRESS:1715 E 15TH**

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT. D.G. SCHOFIELD, V.P. ROHLMAN
HR4 ASSIGNED TO ASSIST WITH EXPOUSER PROTECTION ON EAST SIDE. CREW ASSISTED E4 IN SETTING DECK GUN. CREW LATER PULLED BACK AND THEN PICKED UP LINES.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16299 COMPANY NO.:SQ4 ADDRESS:1715 E 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT. FE BUCK
JT MCCLERNON
SQ4 RESPONDED TO THE ABOVE ADDRESS TO HELP WITH PICKING UP HOSE AFTER A-SHIFT BURNT THIS BUILDING DOWN.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/15/95

INCIDENT NO.:16255 COMPANY NO.:E4 ADDRESS:715 E. 15TH NORTH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:1 MAX. FLOW RATE(GPM): 500

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 2

DURATION OF FLOW IN MINUTES: 15 TOTAL WATER APPLIED (HUND. OF GAL.): 75

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 4OVER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 3

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:2 SMOKE EJECTORS:0

PORTABLE PUMPS:0 GAS MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT. BAKER
FF. FROOME
FF. DEWEY
E4 ARRIVED ON THE SCENE OF A CODE 3 STRUCTURE FIRE AND WAS ASSIGNED TO ASSIST E10 WITH APPLYING WATER ON THE EAST SIDE OF THE INVOLVED STRUCTURES. E4 SET UP A DECK GUN IN THE AREA TO THE EAST OF THE WAREHOUSE AND SUPPLIED WATER TO IT FROM E10. AFTER THIS WAS ACCOMPLISHED, E5 ASSISTED Q14 IN SETTING UP AT THE NW CORNER OF THE EAST EXPOSURE AND HAD E5 ASSIST IN EXTENDING THE 5" LINE. AFTER THIS WAS ACCOMPLISHED, E4 CREW ASSISTED IN MAINTAINING WATER TO COVER EXPOSURES UNTIL RELEASED BY COMMAND.
*
*
REPORT BY CAPT. BAKER

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61 RECORD EXP 0 COMPANY INCIDENT REPORT **DATE:08/13/95**

INCIDENT NO.:15255 COMPANY NO.:**SQ8** ADDRESS:**715 E. 15TH**

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): **1** CREW WORKED (1-YES 0-NO):**1**

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:**0** MAX. FLOW RATE(GPM): **0**

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: **0** 2 TO 3 HAND LINES: **0**

DURATION OF FLOW IN MINUTES: **0** TOTAL WATER APPLIED (HUND. OF GAL.): **0**

ALARM LOCATION: CITY=0, COUNTY=1 **0** HAZMAT CALL? 1=YES, 0=NO: **0**

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT GM FISHER
TS MERCER
SQ8 RESPONDED TO ASSIST ON A BLDG. FIRE. REPORTED TO STAGING AND ASSISTED WITH MASTER STREAM DEPLOYEMENT ON Q17. RETURNED TO SERVICE WITH NOTHING USED.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT **DATE:08/13/95**

INCIDENT NO.:15255 COMPANY NO.:**SQ8** ADDRESS:**715 E 15TH**

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): **1** CREW WORKED (1-YES 0-NO):**1**

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:**0** MAX. FLOW RATE(GPM): **0**

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: **0** 2 TO 3 HAND LINES: **0**

DURATION OF FLOW IN MINUTES: **0** TOTAL WATER APPLIED (HUND. OF GAL.): **0**

ALARM LOCATION: CITY=0, COUNTY=1 **0** HAZMAT CALL? 1=YES, 0=NO: **0**

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT RW DAVIDSON
AW SCHAEFER
SQ8 STOOD DY AS WATCHLINE FROM 1530 TO 1800

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:15299 COMPANY NO.:SQ12 ADDRESS:15TH & BARWISE

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT. NA SLEGHTA, CM WALKER.
SQ12 WAS ON THE SCENE PERFORMING WATCH LINE DUTIES FROM 1800 TO 2030 HOURS. NOTHING USED.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:15299 COMPANY NO.:SQ12 ADDRESS:800 E. 15TH N.

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT. RS CARTER, MA REYNOLDS
SQ-12 RESPONDED TO THE BUILDING FIRE AND REPORTED TO STAGING. CREW WAS RELEASED TO MAKE A MEDICAL CALL AND THEN RETURNED TO SERVICE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:15299 COMPANY NO.:SQ13 ADDRESS:15TH AND BARWISE

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
C.F. MOHR
LT. M.C. WELLS
SQ13 WAS ON WATCH LINE THIS DATE FROM 1030 HRS UNTIL 1300 HRS.
KEPT PEOPLE AWAY FROM UNSTABLE BUILDING. SQ13 IN SERVICE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/15/95

INCIDENT NO.:[illegible] COMPANY NO.:SQ14 ADDRESS:716 E. 15TH

OFFICERS (ON DUTY): [illegible] FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):1 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 30

3/4 TO 1 HAND LINES: 1 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 20 TOTAL WATER APPLIED (HUND. OF GAL.): 200

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 0OVER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 0

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
SQ14 A.[illegible]
SQ14 R[illegible] ALARM FOR A CODE THREE BUILDING FIRE. UPON ARRIVAL SQ14 CREW WAS [illegible] TO BE FIREBRAND CONTROL NORTH OF THE TWO FULLY INVOLVED STRUCTURES. [illegible] ATTACHED FOR POSSIBLE EXPOSURE PROBLEMS IN A GRAIN ELEVATOR NORTH OF THE STRUCTURES ON FIRE. THERE WAS NUMERUS GRASS FIRES IN A FIELD BETWEEN THE INVOLVED BUILDINGS AND THE GRAIN ELEVATOR. SQ14 CREW USED THE BOOSTER LINE TO CONTROL THESE GRASS FIRES. ALTHOUGH A LARGE AMOUNT OF FIREBRANDS PELTED THE GRAIN ELEVATOR'S ROOF THERE WAS NO IGNITION OF THE GRAIN ELEVATOR. SQ14 WAS LATER RELEASED AND BECAME AVAILABLE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:15293 COMPANY NO.:186 ADDRESS:715 E. 15TH N.

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 0 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
MD CORRS
186 RESPONDED ON THE SECOND ALARM ASSIGMENT OF A FOUR ALARM FIRE. 186 ASSISTED CREWS ON SCENE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:13299 COMPANY NO.:Q17 ADDRESS:715 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):1 MASTER STREAM APPLIANCES:1 MAX. FLOW RATE(GPM):1050

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 240 TOTAL WATER APPLIED (HUND. OF GAL.):2520

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 1OVER 3 : 1

HAND EXTING.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 0

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT SLAUGHTER, KINKELAAR, HOPE
Q17 RESPONDED TO A BUILDING FIRE ON THE 4TH ALARM AND UPON ARRIVAL STAGED WEST IN THE STAGING AREA. Q17 WAS DISPATCHED TO THE WEST OF THE SCENE TO SET UP. IT REMAINED THERE FOR THE REST OF THE SHIFT UNTIL BEING RELIEVED BY BAT.2. Q17 WAS USED TO FLOW WATER ON THE WEST SIDE AND PROTECT ANY EXPOSURES.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:13299 COMPANY NO.:BAT9 ADDRESS:712 E. 15TH NORTH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:

NAMES OF WFD COMPANY CREW:
BATTALION CHIEF MIKE MADDOX
BATTALION CHIEF AIDE MARTY SEIPEL
BAT9 DISPATCHED TO A BUILDING FIRE ON THE 3RD ALARM ASSIGNMENT. UPON ARRIVAL, BAT9 GIVEN THE ASSIGNMENT OF NORTHWEST DIVISION. E21, E1, E7, AND Q17 WERE ASSIGNED TO NORTHWEST DIVISION. BAT9 PLACED AND REPOSITIONED CREWS AS FIRE CONDITIONS WARRANTED. AFTER A CODE 4 WAS GIVEN, BAT9 WAS RELEASED TO AVAILABLE STATUS.

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61 RECORD EXP 1 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16215 COMPANY NO.:E3 ADDRESS:701 E. 17TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):1 MASTER STREAM APPLIANCES:1 MAX. FLOW RATE(GPM):1278

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 180 TOTAL WATER APPLIED (HUND. OF GAL.):1800

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 160VER 3 : 0

HAND EXTNG.:2 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 2

SALVAGE COVERS: 2 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE [illegible] BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD CONTENTS:
NAMES OF WFD COMPANY CREW: MATTHEWS, MALTER, JONES
E-3 ASSISTED WITH OFFENSIVE ATTACK BY USING 1- 1 3/4" ATTACK LINE OFF E-10 UNTIL THE FIRE WAS DETERMINED DEFENSIVE. E-3 THEN USED A DECK GUN OFF E-3 AND LAID A DOUBLE REVERSE #3"LINES 1600" IN LENGTH TO THE HYDRANT WERE E-3 HOOK IN. E-3 MANNED THE DECK GUN UNTIL RELEAVED BY THE ON COMING SHIFT.
E-3 USED 2- MSA 1- HOUR PACKS.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/12/95

INCIDENT NO.:16295 COMPANY NO.:AP1 ADDRESS:712 E. 15TH N.

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD CONTENTS:
NAMES OF WFD COMPANY CREW:
LT. TJ CARNEY

JB TOEWS
AP1 RESPONDED TO THE ABOVE ADDRESS FOR A BUILDING FIRE. AP1 COULD NOT SET UP BECAUSE OF POWER LINES. AP1 WAS ASSIGNED TO PROTECT THE SOUTH EXPOSURE ON THE WEST SIDE. AP1 TOOK 400 FEET OF 3 INCH OFF OF E21 AND WYED IT OFF INTO TWO 1 3/4 [illegible] FOR EXPOSURE PROTECTION. AP1 WAS RELEASED BY COMMAND AND RETURNED TO SERVICE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16295 COMPANY NO.:SQ7 ADDRESS:700 E 15 TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF NFD COMPANY CREW:
LT MW MCKEEGAN FF TW ALLEN
SQ7 WAS DISPATCHED TO ASSIST ON THE THIRD ALARM BUILDING FIRE. UPON ARRIVAL COMMAND ASSIGNED SQ7 AS STAGING OFFICER. SQ7 MADE THE STAGING AREA AT 16 TH AND SENTER PL. AND THIRD AND FOURTH ALRAM WERE ASIGNED TO SQ7 IN STAGING. AFTER A CODE 4 COMMAND ADVISED SQ7 TO TERMINATE STAGING AND RETURN TO SERVICE.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:16295 COMPANY NO.:E7 ADDRESS:700 E. 15TH N.

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):1 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM):1000

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 2

DURATION OF FLOW IN MINUTES: 240 TOTAL WATER APPLIED (HUND. OF GAL.):2400

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):Y

HOSE (HUNDREDS OF FEET) - 1 1/2 TO 2 : 02 1/2 TO 3: 20OVER 3 : 0

HAND EXTNG.:0 LADDERS UP TO 30':0 LADDERS OVER 30':0 BREATHING EQUIP: 3

SALVAGE COVERS: 0 ELECTRIC GENERATORS:0 FLOODLIGHTS:0 SMOKE EJECTORS:0

PORTABLE PUMPS:0 BAG MASK/O2: 0 POWER TOOLS: 0

61 RECORD COMMENTS:
NAMES OF NFD COMPANY CREW:
E7, GALYARDT, D. MOORE, G. SIMPSON;
E7 WENT IN SERVICE FROM A 10-48 TO MAKE A THIRD ALARM AT 700 E. 15TH N.

E7 ESTABLISHED STAGING AT 16TH AND SANTA FE. AND SQ7 TOOK CHARGE OF THE STAGING AREA. E7 WAS THEN ASKED TO LAY A SUPPLY LINE TO E2 AT 15TH AND SANTA FE. E7 LAYED THE LINE FROM 16TH AND ST. FRANCIS. THE HYDRANT WOULD NOT TURN ON. THEN E7 LAYED A DOUBLE THREE INCH LINE FROM 17TH AND SANTA FE. WE USED ALL OF OUR [illegible] INCH LINES AND THEN WENT BACK TO HOOKUP AT THE HYDRANT. WE PUMPED E7 [illegible] FOR AN HOUR THEN PUMPED Q17'S AERIAL NOZZLE FOR THREE MORE HOURS. THEN WE [illegible] UP ITS HOSE AND WENT BACK TO ITS STATION AT 0700 HRS.

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61 RECORD [illegible] COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:[illegible] COMPANY NO.:Q14 ADDRESS:715 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 2 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM [illegible] 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS [illegible] (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
CAPT JD WOODS
FA HARVEY
DD WILSON
Q14 RETURNED TO THE SCENE OF A MAJOR FIRE AND PICKED UP ALL 5" HOSE OFF Q14.

---

61 RECORD [illegible] COMPANY INCIDENT REPORT DATE:08/13/95

INCIDENT NO.:[illegible] COMPANY NO.:SQ14 ADDRESS:712 E. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM [illegible] 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS [illegible] (Y/N):N

61 RECORD COMMENTS:
NAMES OF WFD COMPANY CREW:
LT. MERRIMAN, SALMANS
SQ14 SPENT FROM 2030 TO 2330 FOR TOTAL OF 3 HRS. EWT AT ABOVE ADDRESS.

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61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/14/95

INCIDENT NO.:[illegible] COMPANY NO.:SQ19 ADDRESS:715 W. 15TH

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF [illegible]:
VAIL, [illegible]
FIRE [illegible] TO 0400. USED NO EQUIPMENT.

---

61 RECORD EXP 0 COMPANY INCIDENT REPORT DATE:08/14/95

INCIDENT NO.:16299 COMPANY NO.:AP1 ADDRESS:712 E 15TH N

OFFICERS (ON DUTY):1 FIREFIGHTERS (ON DUTY): 1 CREW WORKED (1-YES 0-NO):1

PUMP USED (1-YES 0-NO):0 MASTER STREAM APPLIANCES:0 MAX. FLOW RATE(GPM): 0

3/4 TO 1 HAND LINES: 0 1 TO 2 HAND LINES: 0 2 TO 3 HAND LINES: 0

DURATION OF FLOW IN MINUTES: 0 TOTAL WATER APPLIED (HUND. OF GAL.): 0

ALARM LOCATION: CITY=0, COUNTY=1 0 HAZMAT CALL? 1=YES, 0=NO: 0

WAS EQUIPMENT USED? (Y/N):N

61 RECORD COMMENTS:
NAMES OF [illegible] CREW:
AP1 CREW [illegible] LIVINGSTON, MT STOFFEL
AP1 RELIEVED [illegible] SAT ON WATCHLINE FROM 1900-2100. BRADBURN
WRECKING [illegible] TEARING DOWN THE WALLS OF BUILDING PRIOR TO OUR
ARRIVAL [illegible] AT APPROX 2015 BECAUSE OF THE RAIN. AP1 WAS
RELIEVED [illegible]

---

80 RECORD EXP 0 MEDICAL INCIDENT REPORT

INCIDENT NO.:16299 NAME:KING, WARREN J. PHONE #:686-4154

TIME OF INJURY:0330DATE:08/13/95 AGE:34 HOME ADDRESS:1901 S. LEXINGTON

SEX (1-MALE, 2-FEMALE):1CASUALTY TYPE (1-FIRE, 2-ACTION, 3-EMS): 2

SEVERITY (1-[illegible], 2-DEATH):1

AFFILIATION (1-FIRE SERV., 2-OTHER EMS PERSONS, 3-CIVILIAN):1

FAMILIAR WITH STRUCTURE		LOCATION @ IGNITION		CONDITION BEFORE INJ.	
<1 DAY	1	ON PROPERTY	5	AWAKE	8
CONDITION PRIV. ESCAPE		ACTIVITY @ TIME OF INJ.		CAUSE OF INJURY	
NA	8	FIRE CONTROL	3	STRUCK BY HOSE LINE	7
NATURE OF INJURY		PART OF BODY INJURED		DISPOSITION	
BRUISE, [illegible]	5	LEG	4	REFUSED HELP	1

---

81 RECORD:

MEDICAL AID BY WICHITA FIRE DEPARTMENT UNIT

INCIDENT NO.: [illegible] COMPANY NO.: SQ3

INVESTIGATION.

---

81 RECORD FIRENET INCIDENT REPORTING SYSTEM
TYPE OF ILLNESS/INJURY

INCIDENT NO.: 13295

CUTS/BRUISES, REFUSED AID.

---

81 RECORD

INCIDENT NO.: [illegible] PATIENT CODE: WHITE

GLASGOW COMA SCALE

EYE OPENING:	BEST MOTOR RESPONSE:	VERBAL RESPONSE:
SPONTANEOUS	OBEYS	ORIENTED

---

81 RECORD VITALS

TIME	PUPIL REACTION	BLOOD PRESSURE	PULSE (RATE,TYPE)	RESPIRATIONS (RATE, TYPE)	SKIN (TEMP, (COLOR,TEXTURE)

ORTHOPEDIC INJURIES: DISTAL; PULSE(Y/N)?Y FEELING(Y/N)Y MOVEMENT(Y/N)Y

ALLERGIES	CURRENT MEDICATIONS	POSITION FOUND
NKA	NONE	STANDING

FIRE CREW	HISTORY	E.M.S. CREW
LT KING		
FF [illegible]		
HOSPITAL	FAMILY PHYSICIAN	TYPE OF EMERG. DISP. TO

CHIEF COMPLAINT, NOTED TRAUMA
PAIN AND SWELLING IN RIGHT SHIN AND KNEE

80 RECORD COMMENTS:
PMHX: NONE PERTINENT
HPI: INVOLVED IN FIRE CONTROL ACTIVITIES WHEN STRUCK BY FIVE INCH COUPLING BEING DISCONNECTED FROM HYDRANT.
CC: PAIN AND SWELLING IN RIGHT SHIN AND KNEE
PE: SUBJECT AMBULATORY, BRUISE ON RIGHT SHIN, MODERATE SWELLING. SUBJECT COMPLAINED OF PAIN IN RIGHT KNEE ON MOVEMENT. NO OTHER INJURIES OR COMPLAINTS.
IMP: R/O SOFT TISSUE INJURY TO RIGHT LEG
TX: SUBJECT CONSULTED WITH #186 ABOUT INJURY AND DECIDED TO TREAT INJURY HIMSELF AND TO KEEP #186 ADVISED OF PROGRESS.

58 RECORD FIRE INVESTIGATION REPORT

INCIDENT NO. [illegible] UNIT: 9 ALARM DATE:08/13/95
STREET ADDRESS: [illegible] E. 15TH N.

PROPERTY FIRE: [illegible] LOUISTRA

FIRE ORIGIN AND DEVELOPMENT

LEVEL OF ORIGIN		AREA OF ORIGIN	
GRADE	101	MULTIPLE	97
EQUIPMENT INVOLVED IN IGNITION		FORM OF HEAT OF IGNITION	
SAME AS FORM	98	PROBABLE MATCH	45
TYPE OF MATERIAL IGNITED		FORM OF MATERIAL IGNITED	
POSSIBLE GASOLINE	23	ACCELERANT	86

IGNITION FACTOR	CODE VIOLATION?	TERMINATION STAGE	
INCENDIARY	11(Y OR N) 0	FLAME	3

IF EQUIPMENT INVOLVED IN IGNITION

YEAR	MAKE	MODEL	SERIAL NO.	LIC./VOLT.

INVESTIGATION REPORT COMMENTS:

58 RECORD [illegible]:
FOR MORE [illegible] NARRATIVE REPORTS. LT. K.E. GRIER

Potential source at property known as: 780 E. 15th N.

Current Owner/Business: Mid America Building Maintenance

Contact Person: Dwight Hopper

Mailing Address: Hopper Development Inc.
880 E. Bayley
Wichita, KS 67211-3309

Phone Number: (316) 262-0497

Other information

Name of Company:		
Name and/or Contact Person:		
Street Address of Company:		**780 E. 15th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"Parker Boss Facility"
Phone Number of Contact:		
History:	1951	No Listing
	1961	No Listing
	1965	No Listing
	1970	No Listing
	1975	No Listing
	1980	Southwestern Bell Telephone Co (garage)
	1984/5	Southwestern Bell Telephone Co (garage)
	1990	Southwestern Bell Telephone Co (garage)
	1995/6	Vacant
	1997	Hoffmeyer Chevrolet
	1998	Boss Shooting Products (clay target mach mfg)
	2000	Larry Leatherman
RCRA Info:		

TXRP0601
View Property Information
RKEMPTON
Function 06 Ownership Level 01
Key No.: B -01828 Pin: 122090310300500C
Page: 1

Name HOPPER DEVELOPMENT INC
Situs 780 E 15TH ST N
WICHITA KS 67214-1306

Tax	6,293.92
Specials	6.30
Total	6,300.22

Phone
Mail % HOPPER DEVELOPMENT
To 880 E BAYLEY
WICHITA KS 67211-3309

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 120446

Add Keys THRU B-1829-1, B-1831, B-1831-1

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

SCAN SCREEN U.S.T. TANK INFORMATION ENTER Q-QUIT: _

ENTER INFORMATION CODE: _ ENTER SEQUENCE #: ___
(OPTIONS=T,C)

FACILITY #: 08867 FACILITY NAME: **SOUTHWESTERN BELL TELEPHONE CO**

780 E 15th

SEQ NO.	TNK NO.	EST YR.	CAP. IN GAL.	PETROLEUM	OUT OF SERVICE	STATUS OF TANK
001	U001	1900	008000	GASOLINE	REMOVED	PERM. OUT

STATE OF KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT
Forbes Field
Topeka, Kansas 66620-0001
Phone (913) 296-1500

Mike Hayden, *Governor*

Stanley C. Grant, Ph.D., *Secretary*
Gary K. Hulett, Ph.D., *Under Secretary*

September 27, 1988

Jorge R. Gomez
Mid-America Building
P.O. Box 1107
Wichita, Kansas 67201

Dear Mr. Gomez:

This is to acknowledge that you filed a Notification of Hazardous Waste Activity Form on September 2, 1988 for the facility located at the address shown below to comply with both state and federal regulations. The EPA Identification Number, type of hazardous waste activity and a description of hazardous waste are listed below. This number must be included on all shipping manifests for transporting hazardous waste; on all annual reports that generators of hazardous waste and owners of hazardous waste treatment, storage and disposal facilities must file with the state; on all applications for hazardous waste permits; and other correspondence related to your hazardous waste management activities.

EPA Identification Number: KSD981726094

Installation Address: 1912 North Ohio
Wichita, Kansas 67214

Type of Hazardous Waste Activity: Generator

Description of Hazardous Waste: F002

Since the State of Kansas received authorization from EPA to conduct the state's generator and transporter hazardous waste program in lieu of the respective federal program, we are to be notified of any additions to and/or modifications of the information provided on your notification. All questions or assistance pertaining to the handling of hazardous waste should also be directed to this office.

Sincerely yours,

John W. Mitchell
Hazardous Waste Section
Bureau of Waste Management

jwm:lcp
C District Office - Wichita

Please print or type with ELITE type *(12 characters per inch)* in the unshaded areas only

Wichita

STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT

Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law *(Section 3010 of the Resource Conservation and Recovery Act)*.

For Official Use Only

Comments

Installation's EPA ID Number	Approved	Date Received (yr. mo. day)	
KSD981726094 T/A C 1		88 09 02	173 SEDGWICK

I. Name of Installation

MID-AMERICA BUILDING

II. Installation Mailing Address

Street or P.O. Box: P.O. BOX 1107

City or Town	State	ZIP Code
WICHITA	KS	67201

III. Location of Installation

STREET ADDRESS OR LOCATION FROM KNOWN REFERENCE POINT: 1912 North OHIO

City or Town	State	ZIP Code
WICHITA	KS	67214

IV. Installation Contact

Name and Title	Phone Number *(area code and number)*
JORGE R GOMEZ	316 264 0327

V. Ownership

A. Name of Installation's Legal Owner	B. Type of Ownership *(enter code)*
RICHARD OLLEK	P

VI. Type of Regulated Waste Activity *(Mark 'X' in the appropriate boxes. Refer to instructions.)*

A. Hazardous Waste Activity

- [X] 1a. Generator
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5. Market or Burn Hazardous Waste Fuel *(enter 'X' and mark appropriate boxes below)*
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

NOTE: If generator, you must complete section X.E. on back side of form.

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel *(enter 'X' and mark appropriate boxes below)*
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer *(or On site Burner)* Who First Claims the Oil Meets the Specification

VII. Waste Fuel Burning: Type of Combustion Device *(enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.)*

[ ] A. Utility Boiler [ ] B. Industrial Boiler [ ] C. Industrial Furnace

VIII. Mode of Transportation *(transporters only — enter 'X' in the appropriate box(es))*

[ ] A. Air [ ] B. Rail [ ] C. Highway [ ] D. Water [ ] E. Other *(specify)*

IX. First or Subsequent Notification

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

[X] A. First Notification [ ] B. Subsequent Notification *(complete item C)*

C. Installation's EPA ID Number

ID — For Official Use Only

C W

X. Description of Hazardous Wastes *(continued from front)*

A. Hazardous Wastes from Nonspecific Sources. Enter the four-digit number from 40 *CFR* Part 261.31 for each listed hazardous waste from nonspecific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
F002					
7	8	9	10	11	12

B. Hazardous Wastes from Specific Sources. Enter the four-digit number from 40 *CFR* Part 261.32 for each listed hazardous waste from specific sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. Commercial Chemical Product Hazardous Wastes. Enter the four-digit number from 40 *CFR* Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 — 261.24)*

☐ 1. Ignitable *(D001)* ☐ 2. Corrosive *(D002)* ☐ 3. Reactive *(D003)* ☐ 4. Toxic (D004-D017) Specify Below: _____ _____

E. Total Quantity Generated Per Month. Mark 'X' in the appropriate box below corresponding to the total quantity of hazardous waste generated per month.

☐ a. Greater than 1,000 KG (2,200 lbs)

☒ b. Less than 1,000 KG but greater than 25 KG (55 lbs)

☐ c. Less than 25 KG (55 lbs)

XI. Certification

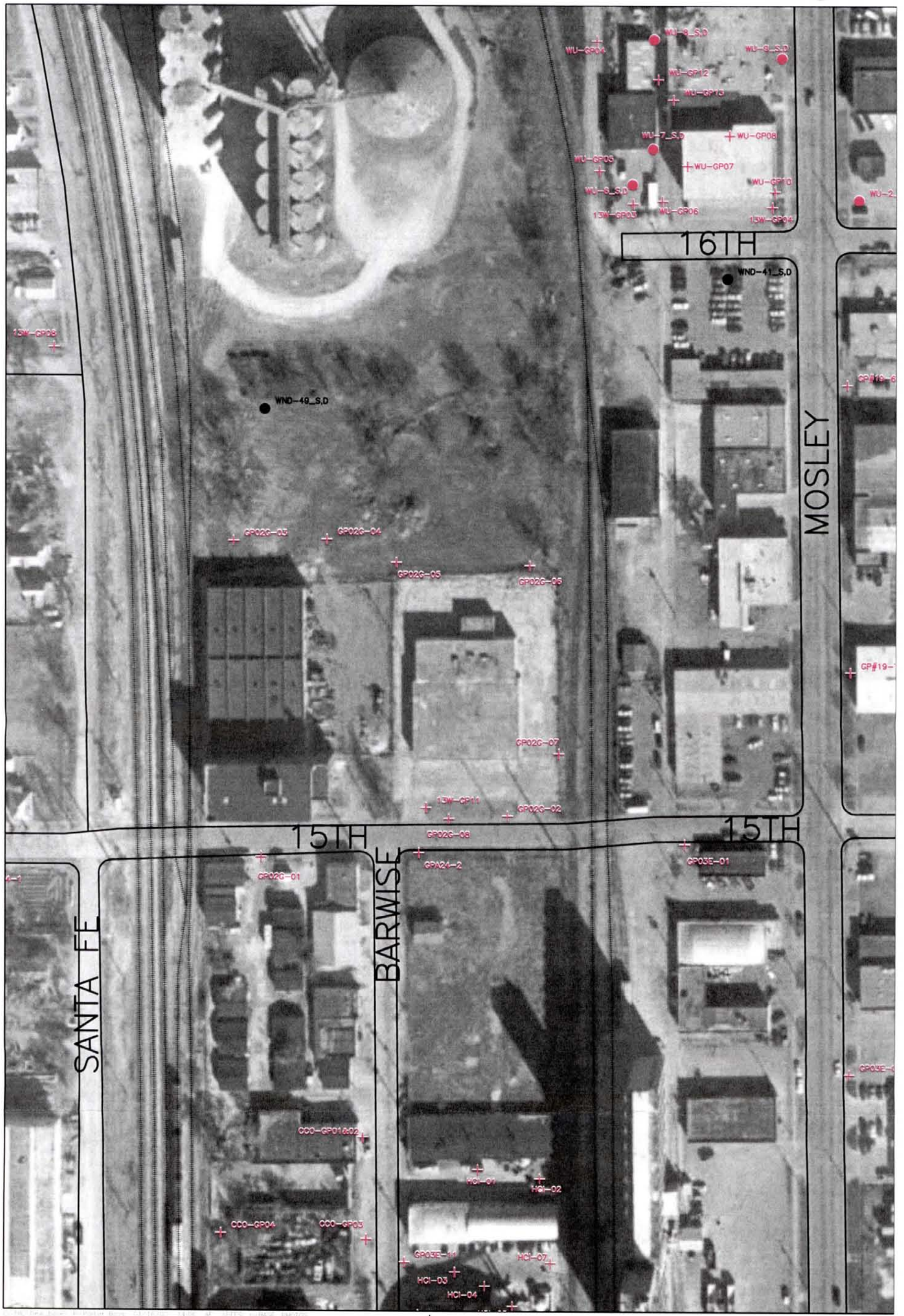
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Name and Official Title *(type or print)*	Date Signed
Jorge R. Gomez	JORGE R. GOMEZ DIRECTOR OF SPECIAL SERVICES	8-31-88

EPA Form 8700-12 (Rev. 11-85) Reverse

RECEIVED
BUREAU OF
SEP 0 2 1988
WASTE
MANAGEMENT

Mail completed form to: Bureau of Waste Management
Kansas Department of Health & Environment
Forbes Field
Topeka, KS 66620



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Parker Boss

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Parker Boss

Appendix L-22
Stockyard Properties (Area 02B)

PRP Evaluation Summary

Stockyard Properties (Area 02B)
Southwest of 25th Street and Mead

Potential Source Area PRP and Work Plan Addendum Map ID - 02B

Contaminants of Concern - TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Stockyard Properties (Area 02B), Vacant Field at Extensions of 24th and Mead

TCE Contamination

Data indicate that TCE concentration increases along the groundwater flowpath across this area. The groundwater samples collected from the shallow aquifer (17 to 20 feet bgs) at upgradient locations generally contained aggregate chlorinated ethene concentrations of less than approximately 80 µg/L. Samples collected from shallow monitoring well EXC-MW08A and Geoprobe sample location GP02B-06 contained total chlorinated ethene concentrations of 88 and 142 µg/L, respectively. Immediately downgradient of area 02B, a shallow groundwater sample collected from downgradient location GP#48-03 indicates a shallow (16 feet bgs) total chlorinated ethene concentrations of 722 µg/L. These data suggest a significant source may be contributing to TCE contamination at this location.

Data collected during the 29th and Mead investigation in the early 1990's indicated that groundwater in the area flowed to the southwest during the one million gallon per day groundwater extraction operation at the Theis Foods property (now Treatco) located east of 22nd and Broadway. Sampling at monitoring well WND-34S detected TCE at a concentration of 1,100 µg/L in 1992. Sampling of the same well in 1998, after the pumping operations at the former Theis Foods facility had ceased showed a TCE concentration in the shallow groundwater had decreased to 17 µg/L. The source of the 1992 TCE concentration is believed to be the area in the vicinity of GP#48-03.

Former tenants of the March Oil Company / Stockyard Properties may be responsible for improper disposal of chlorinated solvents at the property. According to an application for Certificate of Release for Environmental Conditions (also referred to as a Liability Release Form, or "LRF") dated October 11, 1998 by Reddi Root'r of Wichita, Inc. for property located at 702 "rear" East 21st Street North, a former occupant of the facility is listed as "Johnny on the Spot" (JOTS) engaged in sludge dewatering. This company is suspected of releasing chlorinated solvents to the environment at another location in the NIC and is documented to have engaged in illegal dumping of industrial type wastes by KDHE.

Another application for Certificate of Release for Environmental Conditions dated July 29, 1996 and submitted by March Oil Company for 702 East 21st Street North indicates that JOTS has occupied the "facility behind 750 East 21st St. North". This application contains a letter dated March 28, 1993 from Gilbert L. Perez of KDHE to Mr. Charlie Thomas of JOTS regarding a site visit by Perez on March 21, 1993. This letter documents illegal dumping of "car wash muds and industrial type wastes" at the facility. Analytical results of samples collected by Perez are not provided in the application.

Aerial photographs from the 1970s indicate an industrial building nearby and upgradient of sampling location GP#48-03. The former occupant(s) of this building are currently unknown to CDM. Requests to identify former occupants and their locations have been submitted to the owners of the property but a reply has not been forthcoming.

Groundwater Flow

The groundwater flow direction is not well defined in this area. Site-wide water table maps provided in the NIC Phase 1/1a Technical Memorandum indicate that groundwater flow direction is generally to the south or to the south-southwest. Phase 2 of the RI improved definition of groundwater flow in this area. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southeast and south, respectively.

References

City of Wichita Application for Certificate of Release for Environmental Conditions dated October 11, 1998 by Reddi Root'r of Wichita, Inc. for property located at 702 "rear" East 21st Street North

City of Wichita Application for Certificate of Release for Environmental Conditions, July 29, 1996, submitted by March Oil Company for 702 East 21st Street North

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 502 E. 21st

Current Owner/Business: Webb Road Development

Contact Person: Mr. John Stevens

Mailing Address: Building E, Suite 100
1223 N. Rock Rd.
Wichita, KS 67206-1269

Phone Number:

Other information:

Name of Company:		Webb Road Development
Name and/or Contact Person:		
Street Address of Company:		**502 E. 21st Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		502 E. 21st Street North
Phone Number of Contact:		
History:	1951	Sun Ra Frozen Foods Inc.
	1961	Vacant
	1965	Vacant
	1970	No Listing
	1975	No Listing
	1980	No Listing
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

SEDGWICK COUNTY PROPERTY DATA LISTING

FAX TO: DORIS
PROPERTY ID: B -00146-00UP PIN #: 122-04-0-31-00-001.00-A
CTRL #: 118570

OWNER: WEBB ROAD DEVELOPMENT
PROPERTY 502 E 21ST ST N
ADDRESS WICHITA KS 67214
MAILING BLDG E SUITE 100
ADDRESS 1223 N ROCK RD
WICHITA KS 67206-1269

TAX UNIT: 6787 WICHITA LAND USE: 511
LOAN CO: 00000 UNIDENTIFIED LOAN COMPANY

2001 MILL LEVY 116.554

2001 TAXES	BASE	SUP 4			(MORE)
GENERAL	4,551.32	0.00	0.00	0.00	0.00
SPECIALS	2,728.48	0.00	0.00	0.00	0.00
TOTAL	7,279.80	0.00	0.00	0.00	0.00

SPECIALS BREAKDOWN

CODE		CERT #	DESCRIPTION	2002 PAYMENT	2002 THRU PAYOUT	BEG YR	END YR
67-28	W	37041	STORM SEWER			87	01
67-31	W	45208	WEED CUTTING	281.89	281.89	02	02
TOTAL PAYMENT				PRINCIPAL	INTEREST		
281.89			TOTAL SPECIALS DUE FOR 2002	270.00	11.89		

2002	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
CU	39,900	87,590	127,490	9,975	21,898	31,873
VU	74,500		74,500	8,940		8,940

2001	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
CU	10,000	84,760	94,760	2,500	21,190	23,690
VU	127,990		127,990	15,359		15,359

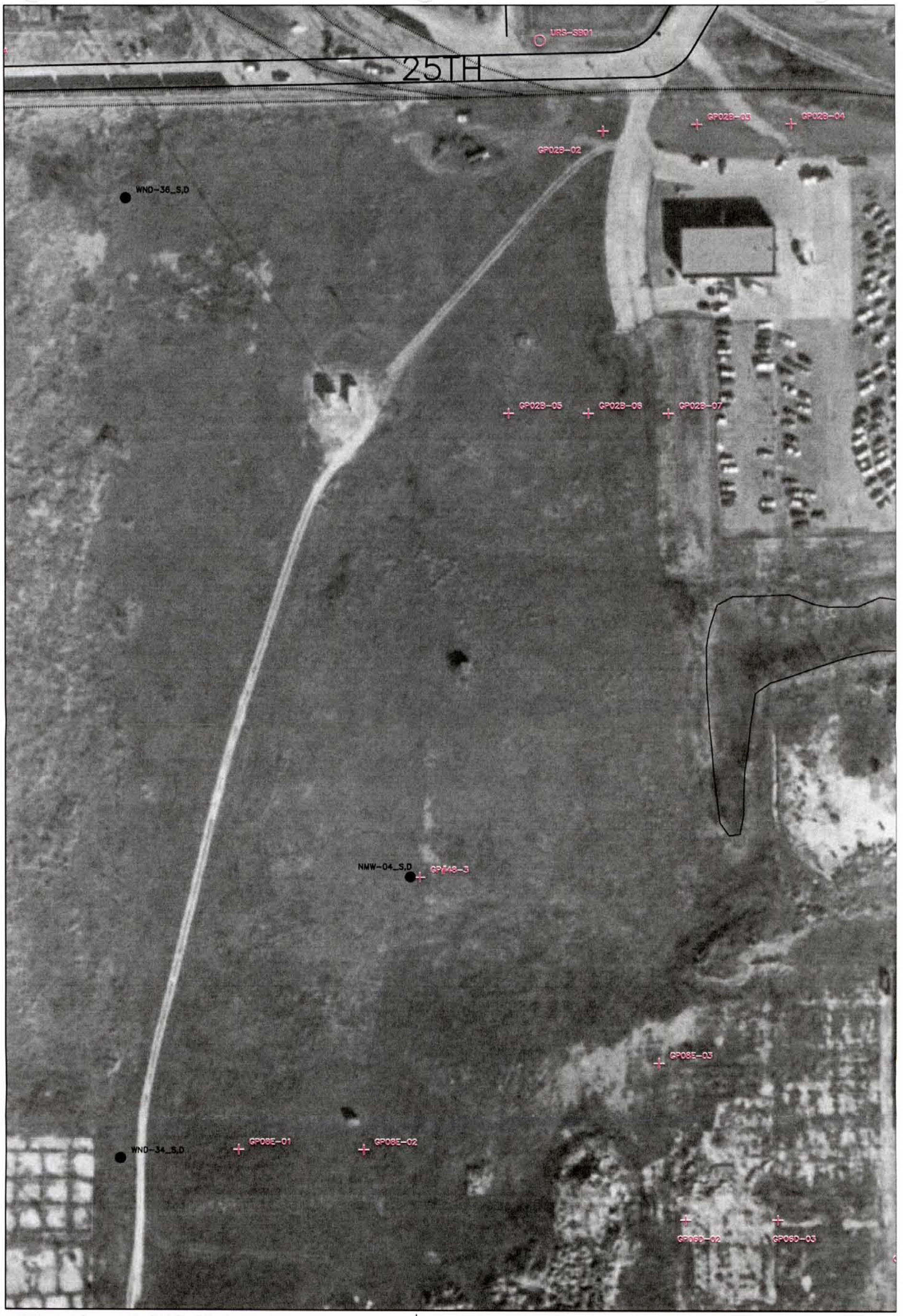
2000	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
CU	10,000	80,420	90,420	2,500	20,105	22,605
VU	127,990		127,990	15,359		15,359

CAMA INFORMATION	FRONT	DEPTH	YR BLT	SQFT
1. COMMERCIAL URBAN			1960	9,250

LEGAL DESCRIPTION
NE1/4 SW1/4 EXC ROW & EXC BEG 208.64 FT W NE COR TH W 423.74 FT SWLY ALG CUR 262.85 FT SLY ALG CUR 196.59 FT S 93 FT E 422.06 FT TO W LI DRNG CANAL TH NE 26.26 FT NW 217.78 FT NE ALG CUR 207.16 FT NE 109.79 FT TO BEG SEC 4-27-1E

No RCRA Information found at the time of review.

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Stockyard Properties (Area 02B)

Table(s)
Analytical Data Table(s)

Stockyard Properties (Area 02B)
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP02B-02	S/17	12/15/99		µg/L	<1	**5.6**	<1	<1	<1	<1	<1	<1	<1	<1	**5**
GP02B-02	D/32	12/15/99		µg/L	<1	**210**	**10**	<1	**2.4**	<1	**3.8**	<1	<1	<1	**5**
GP02B-03	S/17	12/13/99		µg/L	<1	**32**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02B-03	D/33	12/13/99		µg/L	<1	**96**	**5.8**	<1	**1.7**	<1	**1.8**	<1	<1	<1	<5.4
GP02B-03	D/33	12/13/99	DUP	µg/L	<1	**86**	**5.7**	<1	**1.6**	<1	**1.6**	<1	<1	<1	<5.4
GP02B-04	S/17	12/15/99		µg/L	<1	**4.4**	<1	<1	<1	<1	<1	<1	<1	<1	**5**
GP02B-04	D/32	12/15/99		µg/L	<1	**68**	**2.9**	<1	<1	<1	<1	<1	<1	<1	**5**
GP02B-05	S/17	12/17/99		µg/L	<1	**43**	**7.7**	<1	**1.2**	<1	**1.3**	<1	<1	<1	<5.4
GP02B-05	D/37	12/17/99		µg/L	**2.2**	**500 JH**	**95 JH**	**2.9**	**12**	**4.5**	**36**	**18**	**1.8**	<1	<5.4
GP02B-06	S/17	12/20/99		µg/L	<1	**80**	**42**	<1	**1.9**	**1.2**	**3.5**	<1	**1.3**	<1	<5.4
GP02B-06	D/39	12/20/99		µg/L	<1	**300**	**40**	**1.9**	**11**	**4.4**	**31**	**16**	**2.5**	<1	<5.4
GP02B-07	S/17	12/20/99		µg/L	<1	**56**	**2.5**	<1	**1**	<1	<1	<1	<1	<1	<5.4
GP02B-07	D/39	12/20/99		µg/L	<1	**250**	**31**	<1	**5.6**	**2.4**	**10**	<1	<1	<1	<5.4
GP08E-01	S/17	12/20/99		µg/L	<1	**40**	**55**	<1	<1	**4.3**	**2.6**	<1	<1	<1	<5.4
GP08E-01	D/35	12/20/99		µg/L	<1	**35**	**45**	**17**	<1	**8.4**	**5.2**	<1	**1.6**	**24**	**28.4**
GP08E-02	S/17	12/20/99		µg/L	<1	**37**	**30**	<1	<1	<1	**1.3**	<1	<1	<1	<5.4
GP08E-02	D/35	12/20/99		µg/L	<1	**290 JH**	**71 JH**	**17**	**3.2**	**5.6**	**19**	<1	**2.4**	**6.1**	**10.5**
GP08E-02	D/35	12/20/99	DUP	µg/L	<1	**260 JH**	**61 JH**	**18**	**3.3**	**6**	**18**	<1	**2.5**	**6.2**	**10.6**
GP08E-03	S/17	12/20/99		µg/L	<1	**42**	**82 JH**	**34**	<1	**2.3**	**2.3**	<1	<1	<1	<5.4
GP08E-03	D/33	12/20/99		µg/L	**1.1**	**350 JH**	**160 JH**	**33**	**5.4**	**5.3**	**26**	<1	<1	**4.4**	**8.8**
NMW-04D	D	05/07/01		µg/L	<1.0	**140**	**42**	**14**	<1.0	**5.4**	**8.7**	<1.0	<1.0	**1.2**	**5.6**
NMW-04S	S	05/07/01		µg/L	<1.0	**60**	**67**	**36**	<1.0	**5.2**	**5.8**	**1.4**	**1.6**	**2**	**6.4**
WND-34D	D	06/16/98		µg/L	<1	**160**	**74**	**31**	<1	**7.1**	**10**	<1	**5.2**	**230**	**235.1**
WND-34D	D	05/04/01		µg/L	<1.0 JIH	**32 JIH**	**23 JIH**	<1.0 JIH	<1.0 JIH	**1.7 JIH**	**1.4 JIH**	<1.0 JIH	<1.0 JIH	**64 JIH**	**68.4**
WND-34S	S	06/16/98		µg/L	<1	**17**	**33**	**79**	<1	**8.5**	**2.9**	<1	<1	**120**	**124.7**
WND-34S	S	05/04/01		µg/L	<1.0	**11**	**7.3**	**5**	<1.0	**2.3**	<1.0	<1.0	<1.0	**160**	**164.9**
WND-36D	D	12/05/97		µg/L	<1	**400**	**76 JDB**	**22**	**7.8**	**6.7**	**35**	<1	**2.1**	**2.7**	**7.1**
WND-36D	D	05/04/01		µg/L	<1.0	**44**	**49**	**15**	<1.0	**2.2**	**2.5**	<1.0	<1.0	**1.2**	**5.6**
WND-36S	S	12/05/97		µg/L	<1	<1	<1	**65**	<1	**9.1**	<1	<1	<1	**180**	**434**
WND-36S	S	05/04/01		µg/L	<1.0	**3.2**	**1.1**	<1.0	<1.0	**4.6**	<1.0	<1.0	<1.0	**100**	**268**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroether
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane
11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-23
Stockyard Properties (Area 06D)

PRP Evaluation Summary

Stockyard Properties (Area 06D)
North of 700 to 800 block of East 21st Street North

Potential Source Area PRP and Work Plan Addendum Map ID - 06D

Contaminants of Concern - TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Stockyard Properties (Area 06D), north of 700 to 800 block of East 21st Street North

TCE Contamination

Data indicate that TCE concentration increases along the groundwater flowpath across this area. The groundwater sample collected from the shallow aquifer (17 feet bgs) at upgradient location GP08E-03 contained a TCE concentration of 42 ug/L. Shallow groundwater samples collected from further upgradient at locations GP02B-05, -05, and -07 indicate shallow (17 feet bgs) groundwater TCE concentrations of 43, 80, and 56 ug/L, respectively. The downgradient groundwater sample collected from the shallow aquifer (17 feet bgs) at GP06D-02 contained 130 ug/L. These data suggest a moderate source may be contributing to TCE contamination at this location.

According to an application for Certificate of Release for Environmental Conditions (also referred to as a Liability Release Form, or "LRF") dated October 11, 1998 by Reddi Root'r of Wichita, Inc. for property located at 702 "rear" East 21st Street North, a former occupant of the facility is listed as "Johnny on the Spot" (JOTS) engaged in sludge dewatering. This company is suspected of releasing chlorinated solvents to the environment at another location in the NIC and is documented to have engaged in illegal dumping of industrial type wastes by KDHE (see below).

Another application for Certificate of Release for Environmental Conditions dated July 29, 1996 and submitted by March Oil Company for 702 East 21st Street North indicates that JOTS has occupied the "facility behind 750 East 21st St. North". This application contains a letter dated March 28, 1993 from Gilbert L. Perez of KDHE to Mr. Charlie Thomas of JOTS regarding a site visit by Perez on March 21, 1993. This letter documents illegal dumping of "car wash muds and industrial type wastes" at the facility. Analytical results of samples collected by Perez are not provided in the application. The application also contains a report by Scientific Investigations dated September 30, 1992. Included in the report is reference to a concrete tank containing "a dark, oily, odorless liquid with a thin layer of floating sludge" and indication that the tank may have been used activities including "sheep dip, fertilizer drying, and oil recycling." Sampling of the tank was conducted by Terracon Consultants EC, Inc. on August 21, 1987, but the sample was not analyzed for chlorinated solvents.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southeast and southeast, respectively.

References

City of Wichita Application for Certificate of Release for Environmental Conditions dated October 11, 1998 by Reddi Root'r of Wichita, Inc. for property located at 702 "rear" East 21st Street North

City of Wichita Application for Certificate of Release for Environmental Conditions, July 29, 1996, submitted by March Oil Company for 702 East 21st Street North

Polk Directory Review and RCRA Information Summary

Information taken from owner application for release of liablity.

Name of Company: Johnny on the Spot (Pumping Services, Inc.)

Name and/or Contact Person: Charles F Thomas

Street Address of Company:

City, State, and Zip Code: Wichita, KS

Regarding Property at Address: 702 E. 21st N.

History: 1993 to 1996

RCRA Info: Wichita/KDHE Complaint File

Name of Company: Wood Recycle & Compost Center

Name and/or Contact Person:

Street Address of Company:

City, State, and Zip Code: Wichita, Ks

Regarding Property at Address: 750 E. 21st N.

History: 1999

1997 – Not verified

1995 - Vacant

1990 - Vacant

1988 - Vacant

1985 – United American Bank & Trust

RCRA Info: *RCRA Info not completed*

Application for Certification and Release

JUL 3 0 1996
J— 7/31/96

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, March Oil Company

(insert legal name(s) of party seeking certificate)

P.O. Box 782257
Wichita, Kansas 67278

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at: 702 E. 21st Street, Wichita, Kansas

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: same as above

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for Commercial/Industrial property only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant March Oil Company Date 7/29/96

Business Phone 316-636-2100 Home Phone 316-634-1899

Legal Description see attached

Property Tax Key # B-00140-00UP

Street Address of Property 702 E. 21st Street, Wichita, KS

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER		DATES	TYPE OF BUSINESS/SITE USE
March Oil Company	From: 1982 To: Present		Office/Warehouse space
Sierra Petroleum Co., Inc.	From: ____ To: 1982		Office/Warehouse space
	From: ____ To: ____		
	From: ____ To: ____		

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES		DATES	TYPE OF BUSINESS/SITE USE
Kanco	From: 1983 To: Present		office/warehouse
Behavioral Consultants	From: 1995 To: Presnt		offices
Pumping Services, Inc.	From: 1993 To: Present		non hazardous sludge accumulation & removal
Sutherlands	From: 1973 To: Present		Lumber storage

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☒Yes ☐No ☐Unknown
see attached

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☒Yes ☐No ☐Unknown see attached

(d) Has any type of environmental study been performed on this property? ☒Yes ☐No ☐Unknown
If yes, please identify and include a copy of the report.
see attached

(2) Disposal of Wastes.

(a) Are liquid or sludge wastes generated and/or stored on property? ☒Yes ☐No ☐Unknown

(b) What do the liquid wastes consist of? non hazardous autowash sludges

(c) Has any type of characterization of these liquid wastes been conducted? ☒Yes ☐No ☐Unknown
If yes, include copy of results.

Hold

Send

OCT 14 ~~[illegible]~~
10-20-98

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Reddi Root'r of Wichita, Inc.

(insert legal name(s) of party seeking certificate)

4225 Bounous
Wichita, KS 67209

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
702 "Rear" E. 21st North
Wichita, KS

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Our interest in theproperty is limited to the East half of what is commonly known as the Auction Barn and is for lease purposes.

(state whether owner, operator, lender, or other – describe fully)

The Owner of Record is: Webb Road Development, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

COMMERCIAL/INDUSTRIAL ENVIRONMENTAL DISCLOSURE FORM
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
CITY OF WICHITA

Please answer the following questions to the best of your knowledge. This form is for Commercial/Industrial property only and is to be submitted in connection with an Application for Certification and Release for Environmental Conditions; and all information hereon or attached hereto is made a part of the Application. This form may be electronically reproduced to facilitate answering the questions.

Name of Applicant Reddi Root'r of Wichita, Inc. Date 10-09-98

Business Phone _____ Home Phone _____

Legal Description _____

_____ Property Tax Key # _____

Street Address of Property 702 "Rear" E. 21st North

(1) General Information - Please use the following to detail the history of property use.

(a) SITE OWNERS

OWNER	DATES	TYPE OF BUSINESS/SITE USE
Webb Rd. Dev., Inc.	From: ? To: Present	
	From: To:	
	From: To:	
	From: To:	

(b) SITE OCCUPANTS

OCCUPANTS/LESSEES	DATES	TYPE OF BUSINESS/SITE USE
vacant	From: ? To: Present	
Johnny On the Spot	From: ? To: ?	Sludge Dewatering
	From: To:	
	From: To:	

(c) Has this property been the subject of any environmental investigations by the KDHE, EPA, or other regulatory agency?
☒Yes ☐No ☐Unknown

Have there been any notices, orders, reports, etc., from or to any regulatory agency relating to the property and its uses?
☐Yes ☐No ☒Unknown

(d) Has any type of environmental study been performed on this property? ☐Yes ☐No ☒Unknown
If yes, please identify and include a copy of the report.

(2) Disposal of Wastes.
(a) Are liquid or sludge wastes generated and/or stored on property? ☐Yes ☐No ☒Unknown

(b) What do the liquid wastes consist of?

?

(c) Has any type of characterization of these liquid wastes been conducted? ☐Yes ☐No ☒Unknown
If yes, include copy of results.

Excerpts from Report(s) Prepared by Others

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
Robert C. Harder, *Secretary*

March 28, 1993

Reply to: South Central District Office
1919 N. Amidon, Suite 130
Wichita, Kansas 67203
Phone: (316) 838-1071
Fax: (316) 838-0042

Mr. Charlie Thomas
Johnny on the Spot
Pumping Services, Inc.
P.O. Box 12091
Wichita, KS 67277

MAR 1994
RECEIVED
City of Wichita
Water and Sewer

Re: Complaint Investigation
Facility behind 750 East 21st St. North

Mr. Thomas:

On March 21, 1994, I investigated a complaint against your facility located behind 750 East 21st St. North, Wichita, Kansas. Mr. Bill Tucker, District Engineer, also attended this investigation. The complaint alleges illegal open dumping of car wash muds and industrial type sludge wastes. The investigation substantiates the complaint.

During the investigation you stated that you had dumped car wash muds onto the ground approximately 10 meters west by northwest of the building. This was verified by Mr. Tucker and myself as a recently graded area of what appeared to be sandy dirt with car wash brush bristles imbedded in the piles.

In addition, there is a low area, with pooled run-off, approximately 50 meters northwest of the building which, when sampled by the City of Wichita, was analyzed to have an unusually high "pH of 12.4." This may be the result of the lime applications you said you apply to certain sludge loads to control odors. I sampled the soil in this low area and when test results are received from the KDHE laboratory in Topeka there may be a necessity for some contaminated soil excavations at that location.

During the on-site investigation I noted 11 (55 gallon capacity) drums and 31 (20 gallon capacity) drums of waste sludges/liquids stored north of the building. After opening and inspecting the contents of the larger drums, I concluded the drums contain mostly waste antifreeze with varying amounts of waste oil(s) atop the antifreeze layer. The contents of the smaller drums appeared to be typical industrial pit sludges with floating layers of water and/or oil. I sampled the antifreeze layer and took a composite sample of sludge from several of the smaller containers. Proper disposal of all phases of this waste will be necessary. This may require further segregation of the wastes, and, if portions of the wastes are analyzed as "hazardous waste," the disposal will require you to submit a Notification of Regulated Waste Activity form to the department which identifies the hazardous constituents present in this waste.

Inside the building you have constructed a series of concrete pits which will serve to physically separate the solid and liquid phases of the wastes you pick up for disposal. You said you were planning to pump off the water phase to an on-site tanker which would then be used to transport the wastewater to the City of Wichita POTW. You must comply with the acceptance criteria set by the City for this wastewater. The sludge portion must be routed to a sanitary landfill. The floating oil(s) portion must be routed to an approved waste oil reclaimer/recycler.

The following actions must be taken by you correct the violation of Kansas Statutes Annotated 65-3409 :

1. All illegal open dumping of industrial sludges/muds by your company at this location, or any other location in Kansas, must cease immediately.

2. If the illegally dumped waste is non-hazardous, you must begin the removal and transport of the sludges/muds dumped at this location to a permitted sanitary landfill. Attached is an information sheet which explains the process of applying for a Special Waste Authorization permit number for acceptance of your wastes sludge by a permitted sanitary landfill. We suggest you contact the landfill first, to determine what analytical sampling results they may require.

3. Do not remove, return, or dispose of the drummed wastes until further direction from the department is received. Pending analytical results, you may be improperly storing hazardous wastes, in which case, you will be responsible for managing these drums per Kansas Administrative Regulations, Article 31.–Hazardous Waste Management Standards and Regulations (Copy attached).

4. You must submit a specific plan to the department which details the procedures you will implement to assure proper disposal of all effluents from your facility, including waste sludges, wastewaters, and waste oils.

5. You must submit a brief summary of waste segregation procedures which will be implemented at your facility in the future (ie. how will the waste oils be separated from the wastewater, how will you effect the adequate separation of the wastewater portion from the "solids" portion in order for the landfill to accept the de-watered waste).

Please provide our department, by April 28, 1994, documented proof of corrective action(s) taken and a written summary of proper waste management procedures planned for the facility.

Your cooperation with the solid waste management program is appreciated. If you have any questions concerning this letter or the investigation, call me at (316) 838-1071.

Respectfully,

Gilbert L. Perez
Waste Management Programs
Bureau of District Operations

GLP:JOS.94

pc: Tom Gross, BWM, Topeka
Ron Smith, BWM, Topeka
Becky Gagnon, City of Wichita
SCD File

Attachments

Terracon
CONSULTANTS

December 23, 1987

Wichita Union Stockyards
702 East 21st Street
Wichita, KS 67219

Attn: Mr. Johnny Stevens

Re: "Sheep Dip Tank"
Wichita Union Stockyards
Wichita, KS
Job No. 40875074

Gentlemen:

Enclosed are the results of chemical analysis tests performed on a sample of the fluids obtained from the referenced tank. This tank was discovered during construction of the bus garage facility north of the tank. The tank is rectangular, about 15 feet by 25 feet in plan dimension, and on the order of 10 feet deep. The tank is of cast concrete construction, including the cover, which is about 1 to 2 feet above grade. Removal of a portion of the cover during grading operations revealed a dark, oily, odorless liquid with a thin layer of floating sludge.

The Wichita Union Stockyards initially indicated the concrete tank was a sheep dip tank used in the past to disinfect sheep during operation of the stockyard (discontinued in the 1950's). The sheep dip operations purportedly included a range of pesticides or fumigants, including Black Leaf 40 (Nicotine Sulfate), Toxaphene, and Benzene Hexachloride. A site reconnaissance was performed on August 5, 1987 by Terracon Consultants EC personnel with Mr. Ralph Bell, retired veterinary technician for the Wichita Stockyards. At that time, Mr. Bell indicated that the concrete tank was not the sheep dip tank used by the Wichita Union Stockyards, which he indicated was located further to the south. Efforts to locate the sheep dip

tank among the Stockyards rubble were unsuccessful. Mr. Bell indicated that he was not familiar with the concrete tank's origin and could only speculate it may have been associated with a defunct fertilizer drying plant or an oil recycling operation.

Since information regarding the contents of the tank was incomplete and conflicting, a safety plan for sampling the tank was developed to include all possibilities (i.e. sheep dip, fertilizer drying, and oil recycling). Accordingly, the tank was sampled by Terracon EC personnel on August 21, 1987 using Level C protection (protective garments and full-face cartridge respirator). The field observations indicated a thin floating skin of sludge on the order of 1/2 to 1 inch thick, about 8 feet of fluid, and no sludge at the base of the tank. A sample of the fluids was obtained with a PVC hand bailer, placed in appropriate sample containers, and transported to a chemical analysis laboratory (Wilson Laboratories).

As requested, only minimal analytical testing was performed, in order to minimize cost, by using a phased approach. The initial analytical tests were selected to provide information regarding some of the parameters on which the Wichita Sewage Treatment Plant would base its evaluation of whether or not to accept the contents of the tank. These results are attached and indicate that the tank contents are acceptable to the Wichita Sewage Treatment Plant with respect to concentrations of oil and grease, cyanide, and sulfide; also with respect to ignitability, corrosivity, and reactivity. However, the results of the limited tests performed do not significantly define the character or toxicity of the tank contents.

The Wichita Sewage Treatment Plant also requires information regarding concentrations of metals and total toxic organics. These parameters have not been evaluated for the tank contents at this time, although the testing indicated total aromatics (benzene, toluene, ethylbenzene, and xylol) were non-detectable. However, the Wichita Union Stockyards has recently indicated that the concrete tank may have merely housed equipment related to a

platform scale. If this can be verified, it is possible the Wichita Sewage Treatment Plant may waive further testing on the contents. If this can not be verified, we suggest the project be discussed with the Wichita Sewage Treatment Plant to determine whether additional tests would be required. Local scale representatives have indicated that the tank description does not fit that of a platform scale facility. Therefore, verification should include field observations of the tank by either previous operators or a qualified scale manufacturer representative. If desired, we would be pleased to assist in the verification/permitting process.

Please let us know if you have any questions or if we can be of service in any other way.

Very truly yours,

TERRACON CONSULTANTS EC, INC.

Douglas A. Aldrich

Douglas A. Aldrich, P.E.
Kansas No. 10508

C. Fred Schoell

C. Fred Schoell, P.E.
Kansas No. 7095

DAA/jdw/lcl

Terracon
CONSULTANTS EC. INC.

February 22, 1988

Wichita Union Stock Yards
702 E. 21st Street
Wichita, KS 67219

Attn: Mr. Johnny Stevens

Re: Invoice No. 1043
"Sheep Dip Tank"
Wichita Union Stock Yards
Wichita, KS
Job No. 40875074

Gentlemen:

As requested, we are enclosing a copy of our proprietary safety plan which was developed specifically for this project. At the time the safety plan was developed, there was conflicting information regarding whether the concrete tank had been associated with a sheep dip process, a fertilizer recycling plant, or oil recycling operations. The three hours of Safety Officer time on Invoice No. 1043 was used to develop this safety plan. The Principal Engineer and Project Engineer time on this project was used to research the source of the tank, develop the sampling and testing program, and prepare a written report. Our efforts included numerous conversations with individuals associated with the past activities of the stockyards, regulatory agencies, and analytical laboratories, as well as three visits to the site. The tank was sampled and a limited series of screening tests were performed. The results of the initial screening tests were generally favorable, however, efforts to contact you for authorization to complete the testing required by the sewage treatment plant were unsuccessful. The results of the initial screening test were included with our letter of December 23, 1987 and are also enclosed herewith.

As outlined in our letter of December 23, it does not appear the concrete tank is associated either with a sheep dip process or a platform scale. More recently, we have obtained information indicating the tank was located immediately adjacent to the fertilizer drying plant. Confirmation that the concrete tank was associated with the fertilizer drying plant is not available at this time, however, we suggest that the Wichita Sewage Treatment Plant be contacted to determine whether additional tests would be required. As discussed, more accurate characterization of the waste contained within the concrete tank could be provided by performing priority pollutant chemical analysis on the material, however, this would involve additional laboratory fees on the order of $1,000.00 to $1,500.00.

A review of the services provided indicates the scope of work and associated costs are generally within the outline of our letter of August 14, 1987. Should you have any questions regarding the above or enclosed information, or if we can be of service to you in any other way, please let us know.

Very truly yours,

TERRACON CONSULTANTS EC, INC.

Douglas A. Aldrich

Douglas A. Aldrich, P.E.
Kansas No. 10508

C Fred Schoell

C. Fred Schoell, P.E.
Kansas No. 7095

DAA/lcl:3

Enclosures

525 NORTH EIGHTH STREET - P.O. BOX 1884 - SALINA, KANSAS 67402-1884 - (913)825-7186

LABORATORY REPORT

CLIENT: TERRACON CONSULTANTS, INC.
ATTN: DOUG ALDRICH
2111 WEST HARRY
WICHITA, KS 67213

DATE RPTD: 09/11/87
DATE RCVD: 08/22/87
PURCHASE AUTH:
FILE NO.: 87-9583
ORDER NO.: 8127

LAB NUMBER: 87090910
SAMPLE DESCRIPTION: JOB #40875074

ANALYSIS	CONCENTRATION	UNITS	BOOK-PAGE
TOTAL AROMATICS (B,T,E,X)	ND(0.5)	UG/L	1001-[illegible]
FLASH POINT (ASTM D-93)	>70	DEGREES C	815-8
OIL AND GREASE	22	MG/L	920-32
REACTIVITY	SEE COMMENTS		845-13
CYANIDE @ PH 2	ND(1)	MG/KG	842-99
SULFIDE @ PH 2	ND(1)	MG/KG	845-13
CORROSIVITY BY PH	7.8	STANDARD UNITS	869-32

COMMENTS: NOT REACTIVE IN ACCORDANCE WITH 40 CFR 261.23.

—CONCLUSION—LAB NUMBER: 87090910 JOB #40875074

ND(), WHERE NOTED, INDICATES NONE DETECTED WITH THE DETECTION LIMIT IN PARENTHESES.

ANALYSES WERE PERFORMED ON SAMPLES AS RECEIVED IN ACCORDANCE WITH PROCEDURES REFERENCED IN THE FEDERAL REGISTER, VOL. 49, NO. 209, OCT. 26, 1984; PUBLISHED IN EPA PUBLICATION, SW 846, 2ND ED., JULY 1982 AND IN THE PROPOSED ADDITION TO SW 846, 1984; OR IN EPA PUBLICATION, SW846 3RD ED.,SEPTEMBER 1986. WHERE APPROVED METHODS ARE NOT AVAILABLE, EFFORTS ARE MADE TO USE APPROPRIATE STANDARD METHODS.

SAMPLES WILL BE RETAINED FOR 30 DAYS UNLESS OTHERWISE NOTIFIED.

IF YOU HAVE ANY QUESTIONS CONCERNING THIS REPORT, PLEASE CONTACT PROJECT MANAGER CLIFFORD J. BAKER , OR THE UNDERSIGNED.

WILSON LABORATORIES

Lynn R. Newcomer

LYNN R. NEWCOMER
CHIEF CHEMIST

2.0

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

Bureau of District Operations - South Central District Office

---

MEMORANDUM

Date: January 5, 19[redacted]95

To: Johnny-On-The-Spot; 2.0 Facility File, Sedgwick Co (Wichita

Through: Miles Stotts, BWM, Topeka

From: Gil Perez, BDO, Wichita

Re: Current Status of Complaint Investigation (March 21, 1994)

On March 21, 1994, I investigated a complaint against Johnny-On-The-Spot (JOTS) Pumping Services alleging illegal open dumping of car wash muds and industrial type sludges. My letter to Mr. Charlie Thomas, Owner, dated March 28, 1994 outlines the steps JOTS needed to take in order to return to compliance.

JOTS response letter was formulated by Integrated Solutions under contract to address the specific requirements of my letter. Mike Tate, BWM, responded by letter on May 25, 1994 to a "permit application" from Integrated Solutions submitted on behalf of JOTS. Mike Tate also sent a memo to me dated May 23, 1994 which listed what he perceived as three separate deficiencies in the JOTS "permit application." JOTS reponse has adequately addressed the waste disposal requirements. Proof of adequate waste monitoring is still a question.

A telephone conversation with Mr. Greg Armstrong, Brooks Landfill, indicates JOTS is on record as having disposed of approximately 115 cubic yards of contaminated soils/sludge. Mr. Armstrong also related information confirming that JOTS has cleaned out the pits at the facility and appears to be addressing the original concerns listed in the complaint.

Brooks Landfill's special wastes acceptance policy is being formulated to mirror the requirements the Landfill has placed on the Reddi-Rooter facility which deals with similar soils/sludge wastes. This would be the regulatory guideline by which JOTS must abide in order to route wastes in the future to the Landfill. A copy of these guidelines is attached for reference.

Since KDHE is not currently permitting these types of facilities as solid waste management facilities, the recommendations for wastestream profiling/identification and tracking is not a requirement. I have informed Mr. Charlie Thomas of the need for continual monitoring of the wastes which he accepts into his facility and of the risks of receiving inappropriate wastes without a quantitative/qualitative screening process. Furthermore, Brooks Landfill will have it's own acceptance criteria which JOTS' wastes must meet.

In the future, JOTS may be required to document waste management and Tate's letter addresses some of the items which would be an integral of any state level regulatory program. I have discussed this letter in detail with Mr. Thomas. At this time, Mr. Thomas is under no obligation to the KDHE to provide more information, however, I suspect there will be a time when these records will need to be in place for review. This memo is to serve as reminder should any more complaints regarding waste mismanagement by JOTS be received.

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
DIVISION OF ENVIRONMENT
BUREAU OF DISTRICT OPERATIONS

#94-27

REFERRAL FORM

This form is to be completed on All complaints, correspondence, and required investigations referred to the district office. Send form to the DISTRICT. Correspondence should be attached to this form.

BODO REFERENCE

[X] Complaint [ ] Correspondence [ ] Other:

Time Rec'd: 9:00 Person Rec'ing: John Paul Goetz
Date Rec'd: 15-Mar-94 Organization of Person Rec'ing: KDHE SCDO
Example: USEPA/Region7/Water/ Compliance, KDHE/Office of Sec., KDHE/BOW

Received Fm (Name): Becky Gagnon
Address: City of Wichita
City: Water and Sewer Dept.
Phone # Day: 522-9353 Night:

Source:
[X] Telephone [ ] Written [ ] Others (Specify):

Description: (Please describe the complaint, concern or issue to be addressed by this referral)

A firm that disposes of wastes such as car wash mud and owned by Charley Thomas had been low bidder on a contract for disposal of some Sewer Dept. wastes. However, Sewer Dept. personnel were skeptical of the legality of his operation and of the ability of his process to handle the waste in question. They asked for KDHE help in investigating these questions.

Location: SW (Complete if site investigation is likely or required)
Legal: 1/4, Sec. 04 TWP: 27S Range: 01 E County: SG
Street: 21st Street City: Wichita County: Sedgwick
Other Directions: Located on old Wichita Stockyard property and in a building that was used by stockyard operations.

Referred:	Time:	Date:
By: John Paul Goetz	Sent: 3:00 PM	Sent: 15-Mar-94
To: Bill Tucker / G. Pen	Rec'd: 3:00 PM	Rec'd: 15-Mar-94

Action Required: Deadline:
[ ] FYI [ ] Response Required [X] Investigation Required
[ ] Other (Specify) Sample suspicious drums, puddles, and pit sludge

Response: (When response is completed, complete this section, date and sign. Return a completed copy to BODO-Topeka.)

I investigated and substantiated this complaint on March 21, 1994. A letter dated March 28, 1994, was mailed to Mr. Thomas ordering the facility to cease all open dumping of muds/sludges, and samples were taken of drums, pit sludge, and soil which appeared to be contaminated. This investigation will continue, with eventual soil removal and/or other remediation activities, contingent upon analytical results.

Date: 3-30-94 Name: Gilbert A. Pen

Bureau of District Office staff directory is listed on other side. Please refer to list for contact person.

C: BODO-TOPEKA

1a

KANSAS HEALTH AND ENVIRONMENTAL LABORATORY
Department of Health and Environment
Inorganic Chemistry Laboratory
Bldg. 740, Forbes Field, Topeka, KS 66620-0001
(913) 296-1657

RESULTS OF LABORATORY ANALYSES

Report To: RON SMITH-BAWM
Address:

Lab Number: 401610PT
Lab Acct Code: WM
Env Acct Code: HS

Locality: JOHNNIE ON THE SPOT #1 PIT SLUDGE

Collected By: GIL PEREZ Time: 1000 Depth: .5

Site ID: Matrix: Sediment/Sludge

Date Collected: 3-21-94
Date Received: 3-23-94
Date Reported: 4- 1-94

Comments:
TCLP PENDING.

* *

Results Expressed in Milligrams/Kilogram

Total Hard. (CaCO3)	NA	pH (Units)	NA	Aluminum		1763.417
Calcium	29689.457	Turbidity (NTU)	NA	Antimony	LT	5.0
Magnesium	1548.041	Spec. Conductance (micromhos/cm)	NA	Arsenic	LT	5.0
Sodium	160.383	T. Diss. Solids	NA	Barium		118.966
Potassium	521.58	T. Phosphorus (P)	NA	Beryllium		0.118
		o-Phosphorus (P)	NA	Cadmium		2.302
Total Alk. (CaCO3)	NA	Silica (SiO2)	63.080	Chromium		10.512
Chloride	NA	Boron	2.109	Cobalt		2.079
Sulfate	NA	Dissolved Oxygen	NA	Copper		32.427
Nitrate (N)	NA	BOD	NA	Iron		5053.550
Nitrite (N)	NA	COD	NA	Lead		103.000
Fluoride	NA	CBOD	NA	Manganese		145.612
Cyanide	NA			Mercury		NA
Oil/Grease	NA	Ammonia (N)	NA	Molybdenum	LT	1.0
Phenols	NA	T. Sus. Solids	NA	Nickel		6.425
TDP	NA	Corrosivity (LI)	NA	Selenium	LT	5.0
Sulfide	NA	Kjeldahl Nitrogen	NA	Silver	LT	1.0
MBAS	NA	Flash Pt (Celsius)	NA	Thallium	LT	5.0
				Vanadium		5.904
				Zinc		220.523
Chlorate	NA	Total Coliform	NA	Tin		NA
Chlorite	NA	Fecal Coliform	NA	Hex Chrome		NA
Bromate	NA	Fecal Strep	NA			

Chemist: JKR NA - Not Analyzed LT - Less Than

* *

Copy To: File
GIL PEREZ-SCD

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

Bureau of District Operations - South Central District Office

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M E M O R A N D U M

Date: July 27, 1994

To: Mike Tate, BWM, Topeka

From: Gil Perez, BDO, Wichita

Re: Johnny on the Spot - Drummed Waste Analyses

Per our telephone conversation yesterday, I am sending copies of the "drummed" waste analyses information recorded by our lab in Topeka. Attached to this memo are copies of four separate pages of analytical results.

I collected a composite sample of the drummed sludge. The comment by analyst Richard L. Pierce regarding the purgable organics test was "results are from a "total analysis" of the sample and are not high enough to warrant a TCLP extraction."

The Inorganic Lab results are contained on three separate pages. The first is a totals for heavy metals. The results indicated a concern for high levels of some metals, therefore, a TCLP was performed as well. Initial information from the lab regarding TCLP levels caused concern over selenium concentrations. An amended report from the KDHE lab proved the initial results inaccurate. The lab recorded "spike" information on the metals rather than actual levels.

I suspected an anomaly in the results since all four of the samples I submitted to the Inorganic Lab had mirror readings, even though they had been taken from distinct locations. When I transported another set of samples to the lab I asked about the uniformity of the lab results and at that time the error was discovered.

I contacted Mr. Charlie Thomas to re-stated my directive to him to have the drummed waste further segregated into sludge, oil, and antifreeze/water portions. He stated he had purchased an antifreeze recycler, had contracted with Midland Refinery for disposal of the waste oil, and was in the process of drying out the remaining sludge to take to Brooks Landfill.

According to the test results, the sludge portion of this waste should be acceptable to the landfill. However, its acceptability is contingent upon adequate segregation the wastes. I again informed Mr. Thomas of this requirement. A copy of this memo and accompanying lab results is being shared with Greg Armstrong, Brooks Landfill.

pc: Bill Tucker

Attachments

State of Kansas

Joan Finney Governor

Department of Health and Environment

Robert Harder, Secretary

RECEIVED
MAY 31 1994

May 25, 1994

Mr. Gary T. Mason
Integrated Solutions
4304 E. Kellogg
Wichita, Kansas 67218

Re: Johnny-On-The-Spot

Dear Mr. Mason:

The Kansas Department of Health and Environment is in receipt of your letter and other documentation concerning the Johnny-On-The-Spot (JOTS) proposal for separating industrial muds/sludges and water. You referred to the materials submitted as a "permit application". At the current time, we do not require these types of facilities to be permitted solid waste management facilities. As long as this type of facility is permitted by the City of Wichita for pre-treatment purposes, that is the only type of permit we are aware of that is required. We will be developing special waste regulations in the near future where we will consider whether these types of facilities will require solid waste permits. Again, however, we will not issue a solid waste management facility permit at this time.

We did, however review your proposal to ensure that a permit was not needed from KDHE. Our review turned up items that your client should review:

1. Verification of appropriate zoning for the facility. This is required regardless of the permitting status by KDHE.
2. Approval of the facility by the Board of County Commissioners. This is a standard requirement for all solid waste management facilities. Even if we do not consider it necessary to permit the JOTS facility at this time, it would be in your client's best interest to notify the County/City Commission of his intentions and receive their approval.
3. A plan for handling oily wastes and antifreeze and other materials associated with the types of businesses your client is serving. Improper handling could result in violations of state and federal hazardous or waste oil regulations.
4. An industrial waste disposal authorization will be required for the de-watered material if it is landfilled. This material is considered a special waste which would need to be authorized for landfill disposal by KDHE and the landfill receiving the waste. This authorization would be required regardless of whether we permit the facility.

If we do choose to permit these types of facilities in the future, some of the things that we would look for that are deficient in the plan as submitted include:

Division of Environment, Bureau of Waste Management, Forbes Field Building 740, Topeka, Kansas 66620-0001 Telephone: (913) 296-0
Fax Number: (913) 296-1

1. Secondary containment for all tanks/pits.
2. A background check addressing the financial, technical, and management capabilities of your client.
3. Financial assurance would be required of your client in an amount necessary to provide for a third-party clean up and closure of the site.
4. Plans and specifications for the facility would need to be stamped by a professional engineer licensed to practice in Kansas.
5. A closure plan for the facility would need to be stamped by a professional engineer licensed to practice in Kansas.

We would strongly suggest your client evaluate the items listed above. While many of them are not pertinent due to the fact we are not permitting the facility at this time, it does appear a more detailed design of the facility and the monitoring system is in order. Additional detail might reveal some flaws in the system that are not evident in the conceptual design.

Sincerely,

Michael B. Tate, P.E.
Solid Waste Section
Bureau of Waste Management

MBT/sh

c- Tom Gross
Joe Cronin
Charlie Thomas
SCDO

2.0

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment

Robert C. Harder, *Secretary*

March 28, 1993

Reply to: South Central District Office
1919 N. Amidon, Suite 130
Wichita, Kansas 67203
Phone: (316) 838-1071
Fax: (316) 838-0042

Mr. Charlie Thomas
Johnny on the Spot
Pumping Services, Inc.
P.O. Box 12091
Wichita, KS 67277

Re: Complaint Investigation
Facility behind 750 East 21st St. North

Mr. Thomas:

On March 21, 1994, I investigated a complaint against your facility located behind 750 East 21st St. North, Wichita, Kansas. Mr. Bill Tucker, District Engineer, also attended this investigation. The complaint alleges illegal open dumping of car wash muds and industrial type sludge wastes. The investigation substantiates the complaint.

During the investigation you stated that you had dumped car wash muds onto the ground approximately 10 meters west by northwest of the building. This was verified by Mr. Tucker and myself as a recently graded area of what appeared to be sandy dirt with car wash brush bristles imbedded in the piles.

In addition, there is a low area, with pooled run-off, approximately 50 meters northwest of the building which, when sampled by the City of Wichita, was analyzed to have an unusually high "pH of 12.4." This may be the result of the lime applications you said you apply to certain sludge loads to control odors. I sampled the soil in this low area and when test results are received from the KDHE laboratory in Topeka there may be a necessity for some contaminated soil excavations at that location.

During the on-site investigation I noted 11 (55 gallon capacity) drums and 31 (20 gallon capacity) drums of waste sludges/liquids stored north of the building. After opening and inspecting the contents of the larger drums, I concluded the drums contain mostly waste antifreeze with varying amounts of waste oil(s) atop the antifreeze layer. The contents of the smaller drums appeared to be typical industrial pit sludges with floating layers of water and/or oil. I sampled the antifreeze layer and took a composite sample of sludge from several of the smaller containers. Proper disposal of all phases of this waste will be necessary. This may require further segregation of the wastes, and, if portions of the wastes are analyzed as "hazardous waste," the disposal will require you to submit a Notification of Regulated Waste Activity form to the department which identifies the hazardous constituents present in this waste.

Inside the building you have constructed a series of concrete pits which will serve to physically separate the solid and liquid phases of the wastes you pick up for disposal. You said you were planning to pump off the water phase to an on-site tanker which would then be used to transport the wastewater to the City of Wichita POTW. You must comply with the acceptance criteria set by the City for this wastewater. The sludge portion must be routed to a sanitary landfill. The floating oil(s) portion must be routed to an approved waste oil reclaimer/recycler.

The following actions must be taken by you correct the violation of Kansas Statutes Annotated 65-3409 :

1. **All illegal open dumping of industrial sludges/muds by your company at this location, or any other location in Kansas, must cease immediately.**

2. If the illegally dumped waste is non-hazardous, you must begin the removal and transport of the sludges/muds dumped at this location to a permitted sanitary landfill. Attached is an information sheet which explains the process of applying for a Special Waste Authorization permit number for acceptance of your wastes sludge by a permitted sanitary landfill. We suggest you contact the landfill first, to determine what analytical sampling results they may require.

3. Do not remove, return, or dispose of the drummed wastes until further direction from the department is received. Pending analytical results, you may be improperly storing hazardous wastes, in which case, you will be responsible for managing these drums per Kansas Administrative Regulations, Article 31.–Hazardous Waste Management Standards and Regulations (Copy attached).

4. You must submit a specific plan to the department which details the procedures you will implement to assure proper disposal of all effluents from your facility, including waste sludges, wastewaters, and waste oils.

5. You must submit a brief summary of waste segregation procedures which will be implemented at your facility in the future (ie. how will the waste oils be separated from the wastewater, how will you effect the adequate separation of the wastewater portion from the "solids" portion in order for the landfill to accept the de-watered waste).

Please provide our department, by April 28, 1994, documented proof of corrective action(s) taken and a written summary of proper waste management procedures planned for the facility.

Your cooperation with the solid waste management program is appreciated. If you have any questions concerning this letter or the investigation, call me at (316) 838-1071.

Respectfully,

Gilbert L. Perez
Waste Management Programs
Bureau of District Operations

GLP:JOS.94

pc: Tom Gross, BWM, Topeka
Ron Smith, BWM, Topeka
Becky Gagnon, City of Wichita
SCD File

Attachments

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
DIVISION OF ENVIRONMENT
BUREAU OF DISTRICT OPERATIONS

#94-27

REFERRAL FORM

This form is to be completed on All complaints, correspondence, and required investigations referred to the district office. Send form to the DISTRICT. Correspondence should be attached to this form.

BODO REFERENCE

[X] Complaint [ ] Correspondence [ ] Other:

Time Rec'd: 9:00 Person Rec'ing: John Paul Goetz
Date Rec'd: 15-Mar-94 Organization of Person Rec'ing: KDHE SCDO

Example: USEPA/Region7/Water/ Compliance, KDHE/Office of Sec., KDHE/BOW

Received Fm (Name): Becky Gagnon
Address: City of Wichita
City: Water and Sewer Dept.
Phone # Day: 522-9353 Night:

Source:
[X] Telephone [ ] Written [ ] Others (Specify):

Description: *(Please describe the complaint, concern or issue to be addressed by this referral)*

A firm that disposes of wastes such as car wash mud and owned by Charley Thomas had been low bidder on a contract for disposal of some Sewer Dept. wastes. However, Sewer Dept. personnel were skeptical of the legality of his operation and of the ability of his process to handle the waste in question. They asked for KDHE help in investigating these questions.

Location: *(Complete of site investigation is likely or required)*
Legal: 1/4, SW Sec. 04 TWP: 27S Range: 01 E County: SG
Street: 21st Street City: Wichita County: Sedgwick
Other Directions: Located on old Wichita Stockyard property and in a building that was used by stockyard operations.

Referred:	Time:	Date:
By: John Paul Goetz	Sent: 3:00 PM	Sent: 15-Mar-94
To: Bill Tucker / G. Pauz	Rec'd: 3:00 PM	Rec'd: 15-Mar-94

Action Required: Deadline:
[ ] FYI [ ] Response Required [X] Investigation Required
[ ] Other (Specify) Sample suspicious drums, puddles, and pit sludge

Response: *(When response is completed, complete this section, date and sign. Return a completed copy to BODO-Topeka.)*

I investigated and substantiated this complaint on March 21, 1994. A letter dated March 28, 1994, was mailed to Mr. Thomas ordering the facility to cease all open dumping of muds/sludges, and samples were taken of drums, pit sludge, and soil which appeared to be contaminated. This investigation will continue, with eventual soil removal and/or other remediation activities, contingent upon analytical results.

Date: 3-30-94 Name: Gilbert G. Pauz

Bureau of District Office staff directory is listed on other side. Please refer to list for contact person.

C: BODO-TOPEKA

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

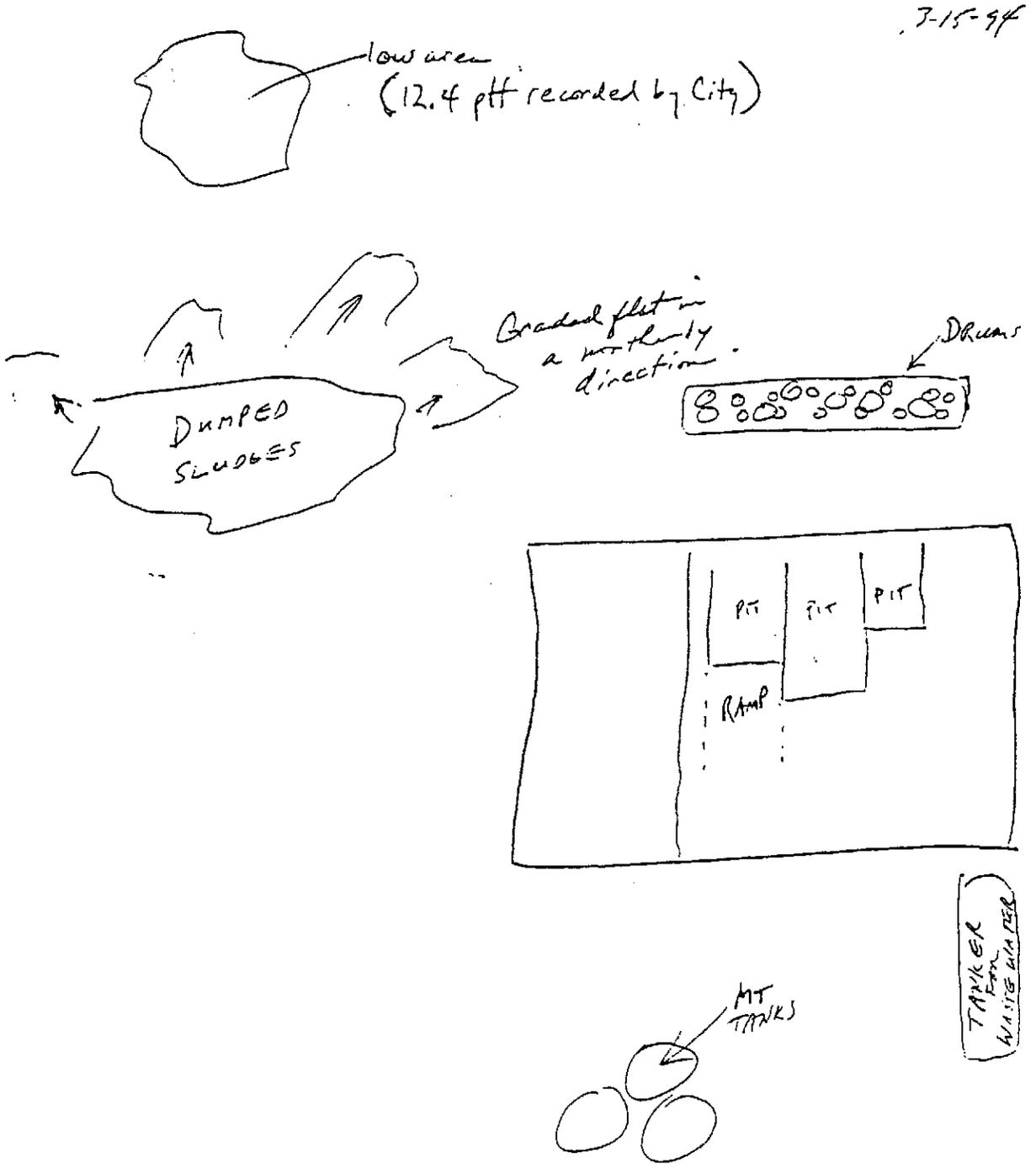
Bureau of District Operations - Southcentral District Office

Additional Information for Inspection/Investigation
Facility Sketch (Not to Scale)

Facility/Site JOHNNY ON THE SPOT EPA-Iden. NA

City WICHITA County SEDGWICK Legal Desc. SW¼ 04-27S-R1E

3-15-94



APR 25 1994

KANSAS HEALTH AND ENVIRONMENTAL LABORATORY
Department of Health and Environment
Inorganic Chemistry Laboratory
Bldg. 740, Forbes Field, Topeka, KS 66620-0001
(913) 296-1657

RESULTS OF LABORATORY ANALYSES

Report To: RON SMITH-BWM
Address:

Lab Number: 401819PT
Lab Acct Code: WM
Env Acct Code: HS

Locality: JOHNNIE ON THE SPOT #4

Collected By: GIL PEREZ Time: 1100 Depth: .4

Site ID: Matrix: Sediment/Sludge

Date Collected: 3-22-94
Date Received: 3-23-94
Date Reported: 4-21-94

Comments: TCLP ON 401614PT

* *

Results Expressed In Milligrams/Liter

Total Hard. (CaCO3)	NA	pH (Units)	NA	Aluminum	NA
Calcium	NA	Turbidity (NTU)	NA	Antimony	NA
Magnesium	NA	Spec. Conductance (micromhos/cm)	NA	Arsenic	4.834
Sodium	NA	T. Diss. Solids	NA	Barium	46.418
Potassium	NA	T. Phosphorus (P)	NA	Beryllium	NA
		o-Phosphorus (P)	NA	Cadmium	0.941
Total Alk. (CaCO3)	NA	Silica (SiO2)	NA	Chromium	4.362
Chloride	NA	Boron	NA	Cobalt	NA
Sulfate	NA	Dissolved Oxygen	NA	Copper	NA
Nitrate (N)	NA	BOD	NA	Iron	NA
Nitrite (N)	NA	COD	NA	Lead	4.552
Fluoride	NA	CBOD	NA	Manganese	NA
Cyanide	NA			Mercury	NA
Oil/Grease	NA	Ammonia (N)	NA	Molybdenum	NA
Phenols	NA	T. Sus. Solids	NA	Nickel	NA
TDP	NA	Corrosivity (LI)	NA	Selenium	1.054 *
Sulfide	NA	Kjeldahl Nitrogen	NA	Silver	4.441
MBAS	NA	Flash Pt (Celsius)	NA	Thallium	NA
				Vanadium	NA
Chlorate	NA	Total Coliform	NA	Zinc	NA
Chlorite	NA	Fecal Coliform	NA	Tin	NA
Bromate	NA	Fecal Strep	NA	Hex Chrome	NA

Chemist: JKR NA - Not Analyzed LT - Less Than

* *

Copy To: File
GIL PEREZ-SCD

* over 1.0 limit - hazardous waste according to analysis.

Amended Report *

KANSAS HEALTH AND ENVIRONMENTAL LABORATORY
Department of Health and Environment
Inorganic Chemistry Laboratory
Bldg. 740, Forbes Field, Topeka, KS 66620-8420
(913) 296-1657

RESULTS OF LABORATORY ANALYSES

Report To: RON SMITH-BWM
Address:

Lab Number: 401819PT
Lab Acct Code: WM
Env Acct Code: HS

Locality: JOHNNIE ON THE SPOT #4

Collected By: GIL PEREZ Time: 1100 Depth: .4

Site ID: Matrix: Sediment/Sludge

Date Collected: 3-22-94
Date Received: 3-23-94
Date Reported: 4-21-94

Comments: TCLP ON 401614PT

* *

Results Expressed In Milligrams/Liter

Total Hard.		pH (Units)	NA	Aluminum			NA
(CaCO3)	NA	Turbidity (NTU)	NA	Antimony			NA
Calcium	NA	Spec. Conductance		Arsenic	LT	0.05	
Magnesium	NA	(micromhos/cm)	NA	Barium		0.876	
Sodium	NA	T. Dissolved Solids	NA	Beryllium			NA
Potassium	NA	Total Phosphorus (P)	NA	Cadmium	LT	0.005	
		Silica (SiO2)	NA	Chromium	LT	0.01	
Total Alk.		Boron	NA	Cobalt			NA
(CaCO3)	NA	Dissolved Oxygen	NA	Copper			NA
Chloride	NA	BOD	NA	Iron			NA
Sulfate	NA	COD	NA	Lead	LT	0.05	
Nitrate (N)	NA	CBOD	NA	Manganese			NA
Nitrite	NA	Ammonia (N)	NA	Mercury			NA
Fluoride	NA	T. Sus. Solids	NA	Molybdenum			NA
		Corrosivity (LI)	NA	Nickel			NA
Cyanide	NA	Kjeldahl Nitrogen	NA	Selenium	LT	0.05 *	
Oil/Grease	NA	Chromium (+6)	NA	Silver	LT	0.01	
Phenols	NA	Tin	NA	Thallium			NA
TDP	NA	MBAS	NA	Vanadium			NA
Sulfide	NA	Flash Pt (Celsius)	NA	Zinc			NA

Total Coliform	NA
Fecal Coliform	NA
Fecal Strep	NA

Chemist: JKR NA - Not Analyzed LT - Less Than

* *

Copy To: File
Gil Perez - SCDO

* Report is commented by Lab
Sample is non hazardous material.

KANSAS HEALTH AND ENVIRONMENTAL LABORATORY
Department of Health and Environment
Inorganic Chemistry Laboratory
Bldg. 740, Forbes Field, Topeka, KS 66620-0001
(913) 296-1657

RECEIVED APR 5 1994

RESULTS OF LABORATORY ANALYSES

Report To: RON SMITH-BAWM
Address:

Lab Number: 401614PT
Lab Acct Code: WM
Env Acct Code: HS

Locality: JOHNNIE ON THE SPOT #4-N. FIELD

Collected By: GIL PEREZ Time: 1100 Depth: .4

Site ID: Matrix: Sediment/Sludge

Date Collected: 3-22-94
Date Received: 3-23-94
Date Reported: 4- 1-94

Comments:
TCLP PENDING.*

* *

Results Expressed in Milligrams/Kilogram

Total Hard. (CaCO3)	NA	pH (Units)	NA	Aluminum		8368.856
Calcium	6597.959	Turbidity (NTU)	NA	Antimony	LT	5.0
Magnesium	2218.282	Spec. Conductance (micromhos/cm)	NA	Arsenic		14.163
Sodium	181.438	T. Diss. Solids	NA	Barium		142.241
Potassium	1852.52	T. Phosphorus (P)	NA	Beryllium		0.555
		o-Phosphorus (P)	NA	Cadmium		2.410
Total Alk. (CaCO3)	NA	Silica (SiO2)	54.034	Chromium		11.155
Chloride	NA	Boron	2.835	Cobalt		5.978
Sulfate	NA	Dissolved Oxygen	NA	Copper		47.574
Nitrate (N)	NA	BOD	NA	Iron		9945.475 *
Nitrite (N)	NA	COD	NA	Lead		115.715
Fluoride	NA	CBOD	NA	Manganese		247.165
Cyanide	NA			Mercury		NA
Oil/Grease	NA	Ammonia (N)	NA	Molybdenum		1.433
Phenols	NA	T. Sus. Solids	NA	Nickel		13.653
TDP	NA	Corrosivity (LI)	NA	Selenium		6.157
Sulfide	NA	Kjeldahl Nitrogen	NA	Silver	LT	1.0
MBAS	NA	Flash Pt (Celsius)	NA	Thallium	LT	5.0
				Vanadium		16.226
				Zinc		205.436
Chlorate	NA	Total Coliform	NA	Tin		NA
Chlorite	NA	Fecal Coliform	NA	Hex Chrome		NA
Bromate	NA	Fecal Strep	NA			

Chemist: JKR NA - Not Analyzed LT - Less Than

* *

Copy To: File
GIL PEREZ-SCD

* prompt TCLP (suspicion)

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Kansas Health & Environmental Laboratory
Organic Chemistry Laboratory
Topeka, Kansas 66620

GC/MS ANALYSIS REPORT

Report To: RON SMITH-BWM
Address: FORBES BLDG. 740, TOPEKA, KS. 66620

Lab Number: 40248700
Report Date: 3-31-94

SAMPLE COLLECTION INFORMATION

Site ID No.:
Sample Type: SLUDGE
Program Code: HS
Collection Site: JOHNNIE ON THE SPOT #4 (N FIELD)
Collected By: GIL PEREZ
Date: 3-22-94
Time: 1100

RESULTS OF ANALYSIS

PURGABLE ORGANICS	CONCENTRATION (MG/KG)	REPORTING LIMIT (MG/KG)
CHLOROMETHANE	NOT DETECTED	5.0
BROMOMETHANE	NOT DETECTED	1.2
VINYL CHLORIDE	NOT DETECTED	0.8
CHLOROETHANE	NOT DETECTED	3.7
DICHLOROMETHANE	NOT DETECTED	0.9
1,1-DICHLOROETHYLENE	NOT DETECTED	0.6
1,1-DICHLOROETHANE	NOT DETECTED	0.5
TRANS &/OR CIS 1,2-DICHLOROETHYLENE	NOT DETECTED	0.5
TRICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROETHANE	NOT DETECTED	0.6
1,1,1-TRICHLOROETHANE	NOT DETECTED	0.7
TETRACHLOROMETHANE	NOT DETECTED	0.7
BROMODICHLOROMETHANE (THM)	NOT DETECTED	0.5
1,2-DICHLOROPROPANE	NOT DETECTED	0.5
TRANS 1,3-DICHLOROPROPENE	NOT DETECTED	0.8
TRICHLOROETHYLENE	NOT DETECTED	0.6
BENZENE	NOT DETECTED	0.5
DIBROMOCHLOROMETHANE (THM)	NOT DETECTED	0.7
CIS 1,3-DICHLOROPROPENE	NOT DETECTED	0.9
1,1,2-TRICHLOROETHANE	NOT DETECTED	0.6
BROMOFORM (THM)	NOT DETECTED	1.5
1,1,2,2-TETRACHLOROETHANE	NOT DETECTED	0.6
TETRACHLOROETHYLENE	NOT DETECTED	1.1
TOLUENE	NOT DETECTED	0.5
CHLOROBENZENE	NOT DETECTED	0.5
ETHYLBENZENE	NOT DETECTED	0.7
META-XYLENE	NOT DETECTED	0.6
ORTHO &/OR PARA-XYLENE	NOT DETECTED	0.6
1,3-DICHLOROBENZENE	NOT DETECTED	1.0
1,2-DICHLOROBENZENE	NOT DETECTED	1.0
1,4-DICHLOROBENZENE	NOT DETECTED	1.0
METHYL ETHYL KETONE	NOT DETECTED	50

Comment: RESULTS ARE FROM A "TOTAL ANALYSIS" OF THE SAMPLE AND WERE NOT HIGH ENOUGH TO WARRANT A TCLP EXTRACTION.

Analyst: Richard L. Pierce RLP

Roger H. Carlson, Ph.D., Director

Copy To: Gil Perez - SCJ Wichita

PRODUCTION & PUMPING DIVISION
WATER TREATMENT PLANT
WATER AND WASTEWATER LABORATORY
KDHE CERTIFIED E-601/1601

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Water and Sewer

INDUSTRIAL WASTEWATER ANALYSIS REPORT

MAY 2 1994

SAMPLE SOURCE: JOHNNY ON THE SPOT
SAMPLE DATE: 03/14/94 TIME: 2:50 PM
SAMPLE DATE: 03/15/94 TIME: 2:25 PM

LAB LOG # #940408
REPORT DATE: 03/17/94

ANALYSIS -	RESULT		METHOD	ANALYST
BOD		MG/L	EPA405.1 +	
DO		MG/L	EPA360.1	
TSS		MG/L	EPA160.2	
AMMONIA-N		MG/L	EPA350.3	
AMMONIA		MG/L	CHEMETRIC	
PH	12.4		*	WD
PH			EPA150.1	
SULFIDE		MG/L	*	
SULFIDE		MG/L	CHEMETRIC	
CYANIDE		MG/L	SM4500-CN C,E	
OIL & GREASE	11	MG/L	EPA413.1	
OIL & GREASE		MG/L	EPA413.1	
PHENOLS		MG/L	EPA420.1	
SURFACTANTS		MG/L	SM45540C	
TRACE METALS -				
Ag	.02	MG/L	EPA200.7,272.1	JW
Cd	.71	MG/L	EPA200.7,213.1	JW
Cr	.84	MG/L	EPA200.7,218.1	JW
Cu	10.1	MG/L	EPA220.1	JW
Pb	18.0	MG/L	EPA200.7,239.1	JW
Hg		UG/L	EPA245.1	
Ni	1.10	MG/L	EPA200.7,249.1	JW
Zn	27.4	MG/L	EPA200.7,289.1	JW
OTHER -				
METAL DIGESTION	X			JW
SIO2		MG/L	EPA370.1	
TDS		MG/L	EPA160.1	

+olc Chemical Oxygen Demand Method, Oceanographic Int. Corp.
512 Westhoop, P.O. box 2988 College Station, TX
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Listings of this classification are continued on page 537

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Figure(s)
Aerial Photographs and Sample Location Map(s)

CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Stockyard Properties (Area 06D) Facility

Table(s)
Analytical Data Table(s)

Stockyard Properties (Area 06D)
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#48-3	S/16	06/05/98		µg/L	<1	**360**	**360**	**1.9**	**7.6**	**14**	**39**	<1	<1	**2.2**	**6.6**
GP#48-3	S/16	12/20/99		µg/L	<1	**220**	**280**	**14**	**2.3**	**11**	**21**	<1	**1.1**	**1.4**	**5.8**
GP#48-3	D/36	06/05/98		µg/L	<1	**590**	**200**	**2**	**15**	**11**	**45**	**5.8**	**4**	**1.4**	**5.8**
GP#48-3	D/34	12/20/99		µg/L	<1	**87**	**44**	**61**	**1.8**	**6.7**	**13**	<1	**1.1**	**21**	<5.4
GP#48-4	S/18	06/05/98		µg/L	<1	**12**	**3.2**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#48-4	D/36	06/05/98		µg/L	<1	**56**	**5.5**	<1	<1	<1	**1.8**	<1	<1	<1	<5.4
GP06D-02	S/17	01/18/00		µg/L	<1	**130**	**27**	<1	**2.2**	<1	**2.8**	<1	<1	<1	<5.4
GP06D-02	D/35	01/18/00		µg/L	<1	**520**	**210**	**27**	**5.6**	**5.3**	**20**	<1	**1.1**	**4.3**	**8.7**
GP06D-03	S/17	01/18/00		µg/L	<1	**7.2**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP06D-03	D/35	01/18/00		µg/L	<1	**690**	**220**	**20**	**7.3**	**4.9**	**21**	<1	<1	**2.4**	**6.8**
GP08E-02	S/17	12/20/99		µg/L	<1	**37**	**30**	<1	<1	<1	**1.3**	<1	<1	<1	<5.4
GP08E-02	D/35	12/20/99		µg/L	<1	**290 JH**	**71 JH**	**17**	**3.2**	**5.6**	**19**	<1	**2.4**	**6.1**	**10.5**
GP08E-02	D/35	12/20/99	DUP	µg/L	<1	**260 JH**	**61 JH**	**18**	**3.3**	**6**	**18**	<1	**2.5**	**6.2**	**10.6**
GP08E-03	S/17	12/20/99		µg/L	<1	**42**	**82 JH**	**34**	<1	**2.3**	**2.3**	<1	<1	<1	<5.4
GP08E-03	D/33	12/20/99		µg/L	**1.1**	**350 JH**	**160 JH**	**33**	**5.4**	**5.3**	**26**	<1	<1	**4.4**	**8.8**
NMW-04D	D	05/07/01		µg/L	<1.0	**140**	**42**	**14**	<1.0	**5.4**	**8.7**	<1.0	<1.0	**1.2**	**5.6**
NMW-04S	S	05/07/01		µg/L	<1.0	**60**	**67**	**36**	<1.0	**5.2**	**5.8**	**1.4**	**1.6**	**2**	**6.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-24
VW&R South Facility

PRP Evaluation Summary

VW&R South Facility
2041 North Mosley Avenue

Potential Source Area PRP and Work Plan Addendum Map ID - 02D
Contaminants of Concern – PCE, TCE and degradation products
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of VW&R South Facility

Data indicate that the Van Waters & Rogers, Inc., South, Facility (VWRS) at 2071 North Mosley Avenue is a potential source of chlorinated VOC contamination. Groundwater sampling data collected by VWRS (Secor 1999 AND Secor 2001), the City of Wichita, and by CDM during the NIC Phase 2 Investigation have shown an increase in concentrations of PCE and TCE along the groundwater flow path through this area.

The VWRS facility conducted repackaging and distribution of chemicals including TCE and 1,1,1-TCA. Prior to VW&R acquisition of the facility, approximately 375 and 75 gallons of TCE were spilled in 1984 and 1986, respectively (Univar 1994). Other activities conducted at the VWRS facility include storage of hazardous waste collected from VW&R customers prior to shipping the wastes to treatment or disposal facilities such as Hydrocarbon Recyclers, Inc. (E&E 1990).

Groundwater TCE Distribution

Data collected by VWR indicate that TCE concentrations increase along the groundwater flow path from northwest to southeast. In the June and October 1998 sampling rounds and the May 2001 sampling round conducted at the facility, TCE concentrations were consistently higher at the downgradient end of the site than the upgradient portion of the site. Sampling data from monitoring well MW-1S at the furthest upgradient portion of the facility indicated concentrations of 140 and 150 μg/L TCE in June and October of 1998, respectively. Sampling of downgradient wells in the central part of the facility indicated concentrations of between 60 and 130 μg/L at monitoring wells MW-4S, -5S, and -6S. Directly downgradient of SWMU-3 (former satellite/repack area) and SWMU-4 (former waste liner storage area) MW-8S and -9S yielded groundwater samples containing 190 and 230 μg/L, respectively, in June 1998 and 180 and 270 μg/L, respectively in October, 1998. TCE was also detected in two of the soil samples that were collected and analyzed during the 1998 investigation. The TCE detections were at the 3 to 4 foot depth at MW-3 (TCE at 5.2 μg/kg) and the 2 to 3 foot depth at MW-8 (TCE at 12.0 μg/kg). During the first two sampling events conducted for the VWRS RI, the distribution of dissolved TCE in groundwater has remained generally consistent. TCE concentrations were somewhat lower in the May 2001 sampling event with

concentrations in wells MW-6S, MW-8S, and MW-9S, which are located in the downgradient portion of the property reported at 120, 120 and 140 μg/L, respectively. However, the TCE concentration was also lower in MW-1S (25 μg/L) at the upgradient boundary of the facility.

The TCE concentration change in groundwater flowing beneath SWMU-3 and SWMU-4 indicated by October 1998 data represents an increase of between 50% and 329% over a groundwater flow path distance of approximately 60 feet, depending on which wells are considered. The May 2001 sampling results show an increase in TCE concentration of up to 560%. The wells are all screened at approximately the same level and lithology in the shallow aquifer. These data indicate that the VWRS facility is a moderate source of TCE contamination to groundwater at the NIC Site. Figures presenting posted data are attached.

The City believes that a Geoprobe investigation at this facility with more discrete sampling intervals near the top of the water table is warranted. The screen intervals of the current monitoring wells may reflect a diluted composite at the monitoring well locations. Geoprobe investigations should be conducted at the TCE storage and transfer locations.

Groundwater PCE Distribution

Shallow groundwater samples collected from the upgradient corner of the VWRS facility indicate no detectable PCE in flowing onto the site. Samples collected from monitoring well MW-4S, immediately downgradient of SWMU-1 (the facility's former repack area), revealed concentrations of 6.0 and 11.0 μg/L PCE in June and October 1998, respectively. Further downgradient of SWMU-1, concentrations of between 5 and 10 μg/L were observed during both 1998 sampling events. PCE was not reported in any of the 2001 groundwater samples from the facility above the 5.0 μg/L detection limit. The 1998 data indicate that the VWRS facility may have been a low-level source of PCE contamination to groundwater at the NIC Site. The 2001 results suggest that either the facility is minor source of PCE groundwater contamination.

Groundwater Flow Direction

Groundwater elevation data collected by VWRS indicate a localized groundwater flow direction to the south-southeast. These data are consistent with data collected during the NIC Phase 1/1A Investigation (CDM 2000). However, observation of deep groundwater concentrations on both the VWRS facility and the Western Uniform facility (1707 North Mosley) indicate that deep groundwater contamination may have a preferential flow direction of approximately due south. The preferential flow direction may be due to lithologic conditions in the lower portion of the aquifer. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southeast.

References

SECOR 2001, VOC Analytical Sampling Results, Vopak USA Facility, 2041 N. Mosley, Wichita, Kansas, July 10, 2001.

SECOR 1999, *Draft Remedial Investigation, Van Waters & Rogers Inc., Mosley Avenue Facility, Wichita, Kansas*, March 29, 1999.

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Univar, 1994, Letter to Christine Jump, KDHE Bureau of Environmental Remediation. Response to request for information. January 20, 1994.

E&E 1990, *Final Report - Environmental Priorities Initiative - Preliminary Assessment - Van Waters Rogers Corporation - Wichita, Kansas. TDD #f-07-9001-010 Project #001.* Ecology and Environment, Inc, October 1, 1990

Polk Directory Review and RCRA Information Summary

Polk Search Results

Reference ID	Location	1951	1961	1965	1970	1975	1980	1984-1985	1990	1995-1996	2000
VW&R South Facility	2041 N. Mosley	Southwestern Serum Co. (stock pen)	Barda & Page Inc (chem mfrs)	McKesson & Robbins Inc. (chem division)	McKesson Chemical Co (ofc & chem div)	McKesson Chemical Co	McKesson Chemical Co.	McKesson Chemical (chem distr)	Van Waters & Rogers (chem alld prdts)	Van Waters & Rogers (chem alld prdts)	Van Waters & Rogers (chem alld prdts)

Potential source at property known as: 2041 N. Mosley

Current Owner/Business: DSW Inc. (Van Waters & Rogers)

Contact Person: Anthony Perelli, Senior Project Manager

Mailing Address: W 205 N 6849 Woodward Ct.
Menomonee Falls, WI 53051

Phone Number: (262) 250-1381

Other information

Name of Company:	Van Waters & Rogers
Name and/or Contact Person:	
Street Address of Company:	**2041 N Mosley**
City, State, and Zip Code:	Wichita, KS
Regarding the Following Property:	
Phone Number of Contact:	

History:

1951	Southwestern Serum Co. (stock pen)
1961	Barda & Page Inc. (chem. mfrs)
1965	McKesson & Robbins Inc. (chem. division)
1970	McKesson & Robbins (ofc & chem. division)
1975	McKesson Chemical Co
1980	McKesson Chemical Co
1984/5	McKesson Chemical (chem. distr)
1990	Van Waters & Rogers (chem. distr)
1995/6	Van Waters & Rogers (chem. alld prdts)
2000	Van Waters & Rogers 9chem alld products)

RCRA Info:

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -13845
Page: 1

Pin: 122090210200400

Name DSW INC
Situs 2041 N MOSLEY
WICHITA KS 67214

Phone
Mail ATTEN: TAX DEPT. / VAN WATERS
To PO BOX 34325
SEATTLE WA 98124-1325

Tax	16,492.39
Specials	6.30
Total	16,498.69

Tax Unit 6787 WICHITA
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CITY OF WICHITA-NIC
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Legal Description

Function 06
Key No.: B -13845
Page: 2

Pin: 122090210200400
Name: DSW INC

Legal Description
LOT 1 MC KESSON ADDITION

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REMARKS

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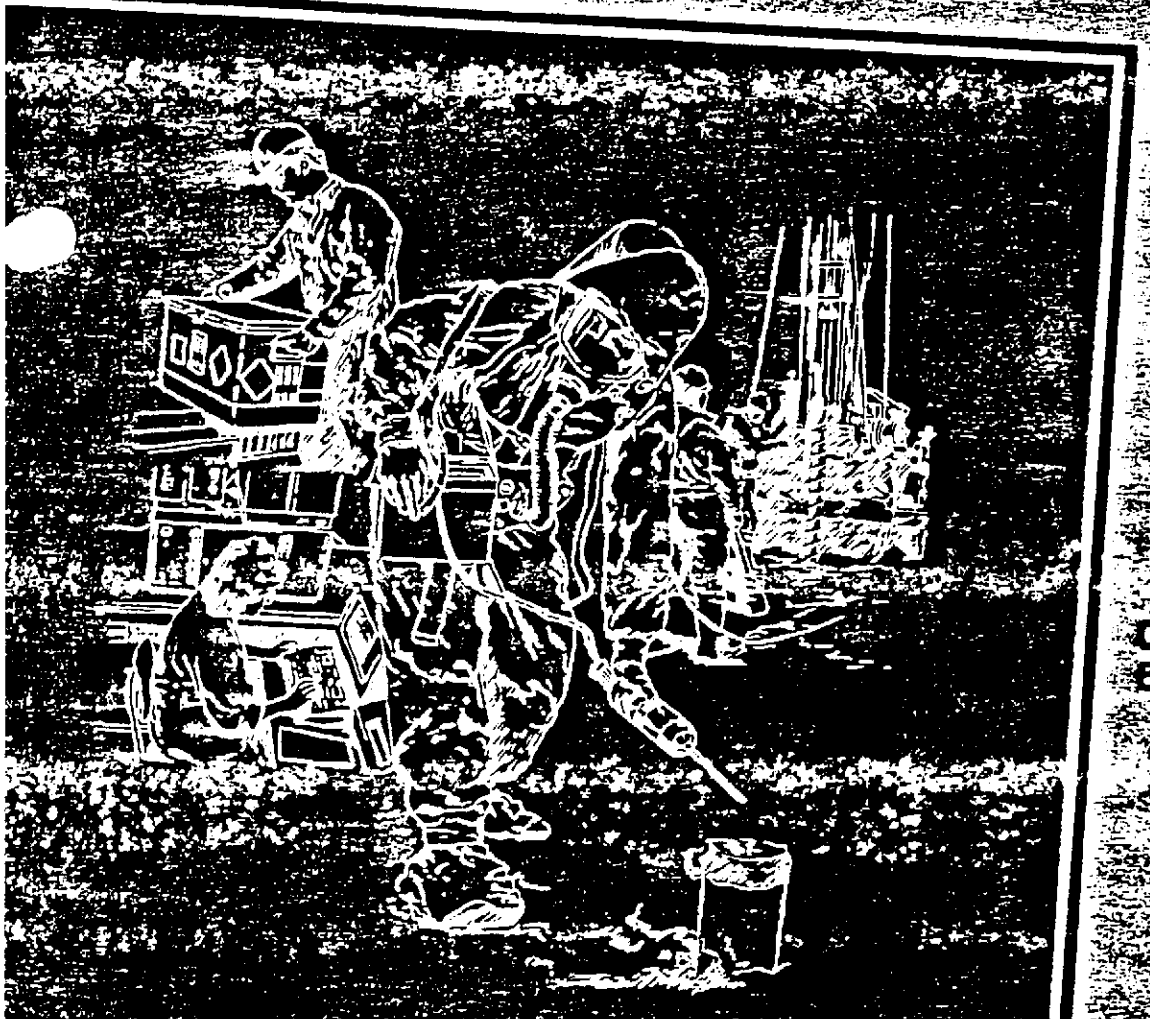
Final Report
Environmental Priorities Initiative
Preliminary Assessment
Van Waters Rogers (VWR) Corporation
Wichita, Kansas
TDD #F-07-9001-010 PAN #FKS0283RA
Site #S02 Project #001
Prepared by: E & E/FIT for Region VII EPA
FIT Task Leader: Anne Melia
RCRA-EPI Contact: Mark Matthews
Date: October 1, 1990

EPA
HAZARDOUS SITE EVALUATION DIVISION

Field Investigation Team Zone II



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SECTION 1: INTRODUCTION

As part of the United States Environmental Protection Agency's (EPA) Environmental Priorities Initiative (EPI) program, EPA has requested the Ecology and Environment, Inc., Field Investigation Team (E & E/FIT) to conduct an EPI Preliminary Assessment (EPI/PA) of the Van Waters Rogers (VWR) facility located in Wichita, Kansas.

The EPI program integrates the Resource Conservation and Recovery Act of 1976 (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA) in order to set priorities for the cleanup of the most environmentally significant sites first. This EPI/PA is essentially equivalent to RCRA's Preliminary Review/Visual Site Inspection (PR/VSI) and identifies potential or actual releases at the facility and determines if remedial measures are necessary.

This report discusses information obtained from the EPA Region VII and Kansas Department of Health and Environment (KDHE) files and describes each Solid Waste Management Unit (SWMU). Observations obtained from the VSI conducted by E & E/FIT on May 15, 1990, are included along with site-specific information concerning the physical and environmental setting. Photographic documentation is included as Appendix A. Appendix B consists of EPA's Preliminary Assessment Form 2070-12. Waste characteristics Data Sheets are included as Appendix C.

SECTION 2: SITE LOCATION AND DESCRIPTION

2.1 SITE LOCATION

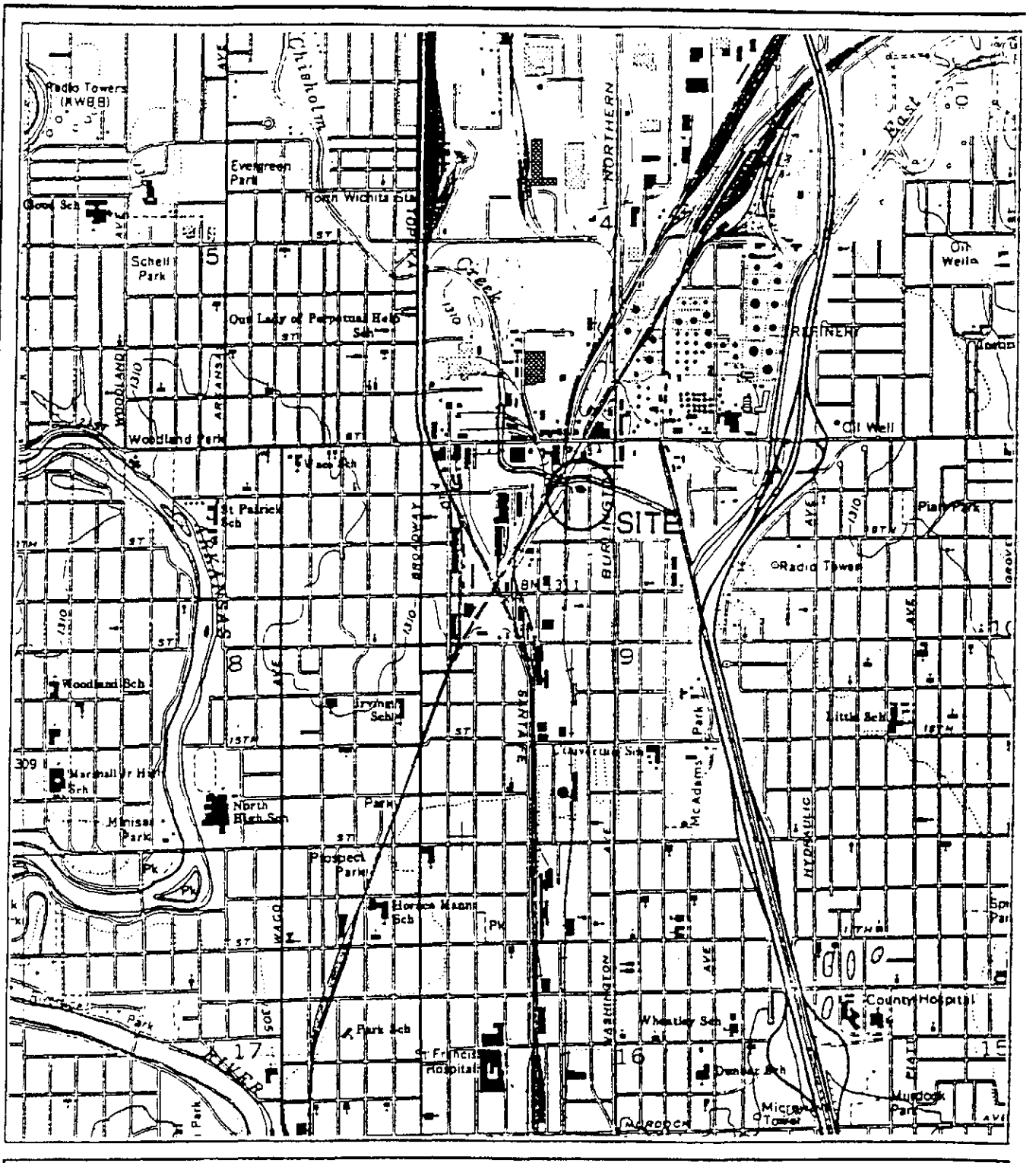
The VWR facility is located at 2041 N. Mosely and is situated in an industrial area of north-central Wichita, Kansas. The approximate legal description of the site is the NE 1/4, NW 1/4, Section 9, T.27S., R.1E Wichita East Quadrangle, Sedgwick County, Kansas. The coordinates of the site are latitude 37°43'15" North; longitude 097°19'38" West (Figure 2-1) (USGS 1982).

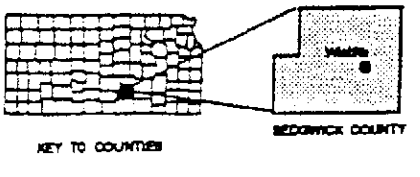
2.2 SITE DESCRIPTION/WASTE HANDLING

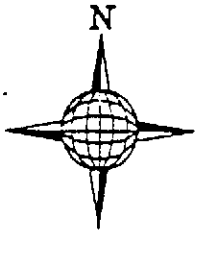
VWR is a division of Univar Corporation. VWR is a distributor of organic and inorganic chemicals for industrial use. Chemicals handled include solvents, acids, and caustics. Uses of these chemicals include water and sewage treatment; ice, dust, and rodent control; oil and gas drilling; petroleum refining, natural gas processing and petrochemical production; as paint ingredients; pest control; food production, processing, and packaging; mining, milling, plating and finishing, and electronics; laundry and dry cleaning; forestry, and pulp and paper manufacturing (Univar Corp 1986).

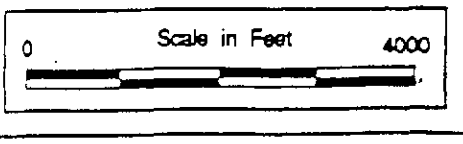
A site reconnaissance of the VWR facility was conducted on May 15, 1990, by Anne Melia and Patty Roberts, E & E/FIT; Mark Matthews, EPA RCRA; and Paul Calhoun KDHE/RCRA.

This VWR facility operates mainly as a distribution facility. It repackages a limited number of products from bulk into smaller packages. Chemicals repackaged include trichloroethene, triethanolamine, 1,1,1-trichloroethane, hexane, methanol, butyl cellosolve, hydrochloric acid, phosphoric acid, and sulfuric acid (E & E/FIT 1990). In the past, as a service to some of the customers, VWR also picked up and temporarily stored their spent solvent waste streams. Once a complete shipment was accumulated, the load was manifested and transported to a recycling facility (Stuckey 1989). For the past year, the majority of wastes VWR picks up from its customers are transported directly to Hydrocarbon Recyclers Incorporated (HRI); a new treatment, storage, and disposal





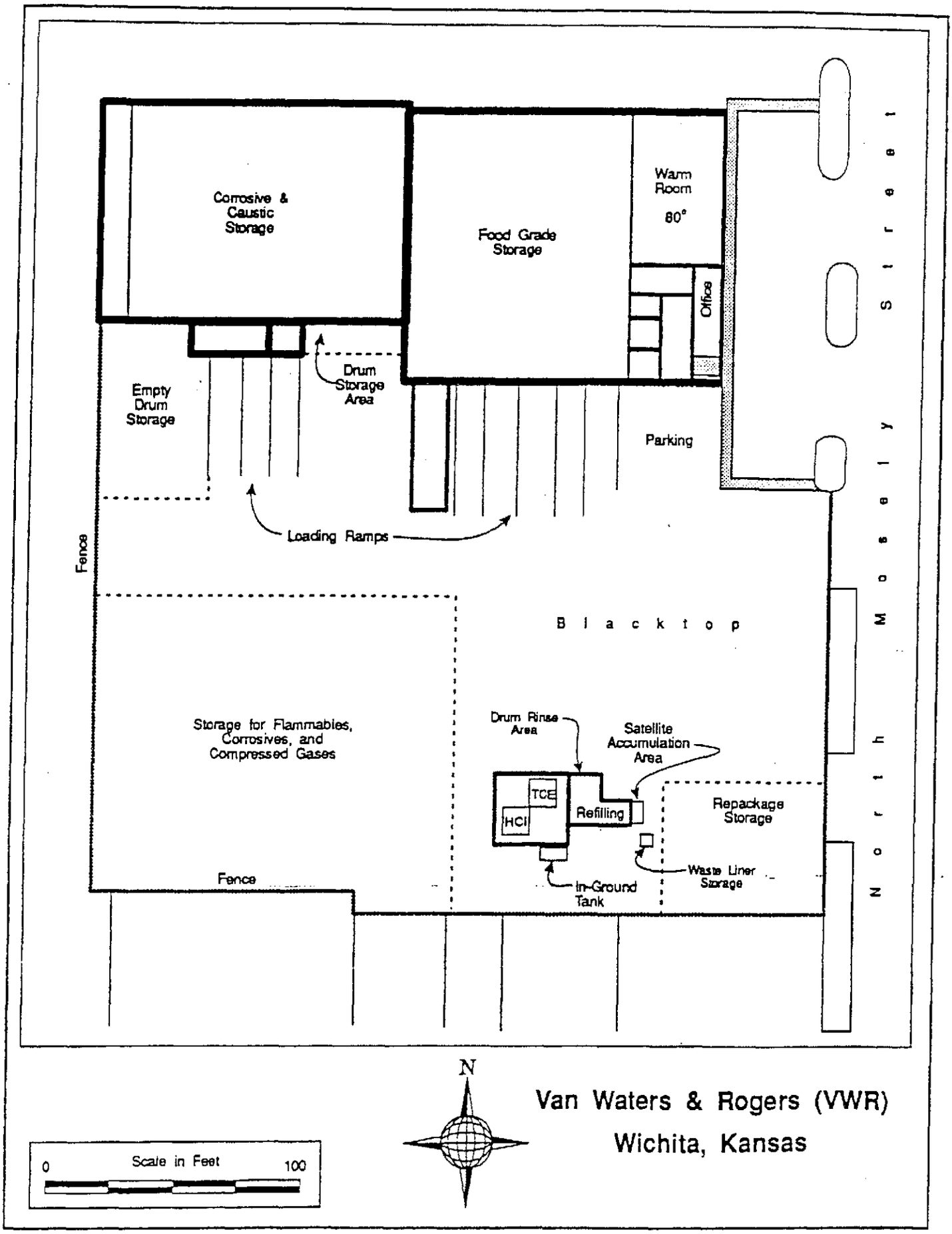




Van Waters & Rogers
Wichita, Kansas

Prepared by Lee Robertson
Ecology & Environment/FIT June 1990

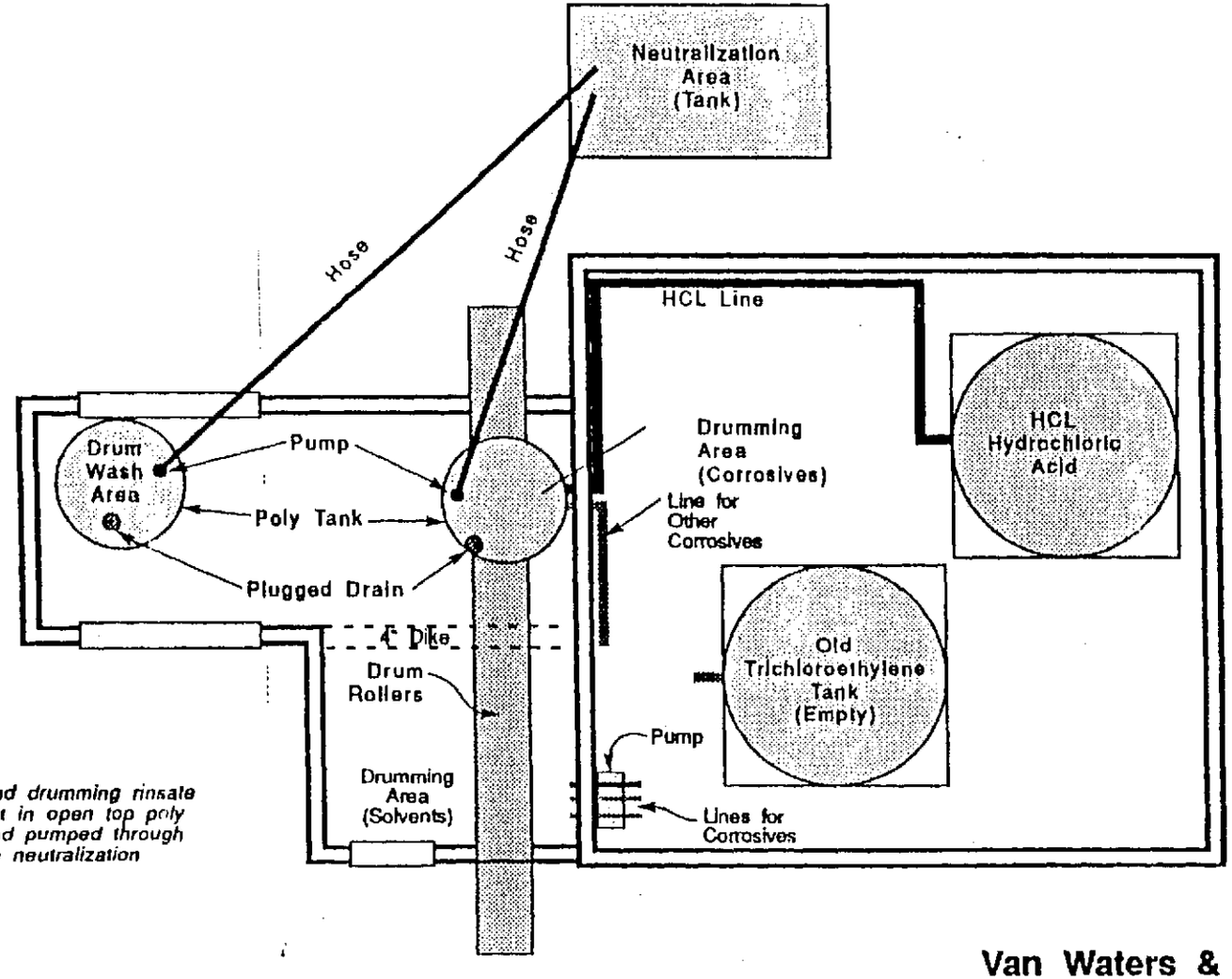
Waste Site Tracking #: KS028
Source: USGS 7.5' Topo, Wichita E., KS 19



Prepared by Lee Robertson
Ecology & Environment/FIT June 1990

Figure 2-2: SITE MAP

Waste Site Tracking #: KS0283
Source: Van Waters & Rogers



Note: Wash and drumming rinsate is caught in open top poly tanks and pumped through hoses to neutralization area.

Van Waters & Rogers
Wichita Branch
Rinsing & Filling Room

Prepared by Lee Robertson
Ecology & Environment/FIT September 1990
Waste Site Tracking #: KS0283
Source: Van Waters & Rogers, Inc. 1990

Figure 2-3: Chemical Repackaging & Drum Rinse Building

(TSD) facility located in Wichita. VWR no longer routinely stores these wastes on site (E & E/FIT 1990).

Figure 2-2 shows the layout of the entire facility. The VWR facility consists of a 20,200-square-foot metal and masonry building, of which 1,600 square feet is office space and the remainder is warehouse space (MCC 1984a). To the north of the office area is the Warm Room, which is maintained at 80°C. Here VWR stores chemicals that may freeze such as acetic acid, liquid sodium hydroxide, and formaldehyde. Beyond the Warm Room and the office area to the west is the Food Grade Storage area. Here VWR stores such chemicals as sodium nitrate and sodium benzoate. West of the Warm Room is the Caustic and Corrosive Storage area. The Hazardous Waste Drum Storage Area is located outside along the southern edge of the building. This storage area encompasses approximately 492 square feet; measuring 41 feet by 12 feet (Appendix A; Photos 1 through 3). No evidence of any releases in the product storage area was observed during the May 1990 VSI. A small spill of hydrofluoric acid occurred in April 1989, when a fork lift punctured a container. No evidence of this spill was visible in the corrosive storage area (E & E/FIT 1990).

VWR leases the blacktopped area southwest of the warehouse building from Clint Linsey of CW Feed Products to store some flammables, corrosives, and compressed gases such as chlorine, sulfur dioxide, and anhydrous ammonia (Appendix A; Photos 5 through 7). Of its 1-acre facility, VWR owns 0.75 acres and leases 0.25 acres (Matthews 1990). East of the compressed gas storage area is the Chemical Repackaging and Drum Rinse Building (Appendix A; Photos 8 and 11). VWR has two large aboveground tanks, one of which can hold hydrochloric acid and one which has contained TCE in the past (Appendix A; Photos 9 and 10). VWR no longer stores TCE in this tank (Matthews 1990). These tanks are in a containment area of unknown volume which lies immediately west of the Rinsing and Chemical Repackaging Building (Appendix A; Photo 9). VWR rinses empty drums and refills/repackages bulk chemicals in this room. There is a separate filling apparatus for the solvents, and the corrosives and caustics (Figure 2-3). The caustic and corrosive rinses previously flowed along the floor of the building into floor drains that lead to an in-ground tank. Because of cracks in the floor of the

building, VWR has plugged the floor drains and now catches all corrosive/caustic wash and repackaging rinsate in cut up poly tanks (Figure 2-3). Portable pumps and hoses are used to pump the rinsate into the in-ground tank (Figure 2-3). The contents of the in-ground tank are neutralized and released into the sanitary sewer (Appendix A; Photo 10). HCl flows by gravity through the line shown on Figure 2-3 into a drum located in the drumming area. Other corrosives are repackaged from bulk storage on tanker trucks. These chemicals flow by air pressure from the tanker trucks; the lines are illustrated on Figure 2-3 (Linos 1990b).

A 4-inch dike separates the corrosive area from the solvent area (Figure 2-3). The solvents are repackaged only from bulk stored on tanker trucks. Three lines attached to a pump extend out from the building for the solvent repackaging. Drum rollers extend from the south to the north ends of the building. Empty drums are brought in from the south end, filled, moved along the rollers, off-loaded at the south end by fork lifts, and taken to the repackage storage area (Linos 1990b) (Figure 2-3; Photo 8).

The solvent rinses are drummed, accumulated in a Satellite Accumulation Area just east of the Rinsing and Repackaging Building, and eventually shipped out for recycling. East of the Drum Rinse and Repackaging Building, VWR stores the repackaged chemicals (Appendix A; Photo 8). VWR plans to discontinue repackaging operations in early 1991 (Sims 1990). No evidence of release of hazardous constituents from this area was noted during the May 1990 VSI. Because VWR no longer allows corrosive rinsate to flow into the floor drains, potential environmental releases of corrosives through the cracks in the floor have been reduced. Also, as VWR plans to discontinue these operations all together by early 1991; the likelihood of a release from this building and its operation is minimal.

The entire outside storage area adjacent to the facility is surrounded by a 6-foot-high chain-link fence topped with three strands of barbed wire that extend an additional foot above the chain-link. There are two 15-foot gates along Mosely Street that allow access to the loading and unloading dock area. Generally, only the north gate is open during working hours of 0730 hours to 1700 hours (Matthews 1990). The south gate is routinely padlocked. The north gate is padlocked during

non-working hours. A vehicle gate along the south perimeter of the property provides access to an alley leading to 19th Street but is never used during normal facility operation. It is padlocked at all times (MCC 1983).

2.3 SITE CONTACTS

Persons familiar with operations or who have regulatory involvement with the VWR facility include:

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VWR
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SECTION 3: SITE BACKGROUND AND HISTORY

3.1 GENERAL HISTORY

The N. Mosely facility began operations on October 1, 1959, as the McKesson Chemical Company (MCC). The operations of MCC were similar to those of VWR; MCC distributed industrial chemicals, repackaged some chemicals from bulk, and picked up spent solvents from customers for recycling. MCC did not manufacture or recycle solvents at this facility (Butter 1980). In 1986, MCC was sold to VWR, a division of Univar. The ownership, including all RCRA permits, was officially transferred from MCC to VWR on October 31, 1986. VWR currently has 12 employees, five of whom are involved in the hazardous waste management enterprise (E & E/FIT 1990).

3.2 NON-REGULATORY PAST INVESTIGATIONS

None known or reported to date.

3.3 PERMIT AND REGULATORY ACTIONS SUMMARY

8/18/80 MCC notified EPA of hazardous waste activity and submitted a Part A notification.

11/17/80 MCC submitted a revised Part A notification to allow them to act as a transporter of hazardous waste. MCC picked up spent solvents from off-site customers, stored them on site, and eventually transported the waste to a recycling facility (Minor 1980).

8/4/82 MCC notified of the need to submit a closure plan and cost estimate, and a post-closure plan and cost estimate within 15 days. An inspection of the facility was to follow the submittal of the plans (Morby 1982).

9/7/82 Scott Helmke of MCC was notified by the EPA that the facility had received RCRA interim status (Wagoner 1982).

9/13/82 MCC notified by EPA and KDHE to submit a Part B permit application by March 13, 1983 (Kamath 1982).

5/16/83 MCC submits original Part B permit application, and several written revisions are required.

6/22/83 A joint RCRA/KDHE compliance inspection was conducted by Robert B. Dona, EPA Field Investigation Section, and Dale Stuckey, KDHE Wichita Field Office. MCC was represented by Helmke, Branch Manager; Tom Nisler, Regional Warehouse Manager; and Alex Maslow, Operations Manager. Five minor violations were noted: 1) transporter information was missing from one hazardous waste transportation manifest; 2) the waste analyses plan did not include parameters to be analyzed, rationale for analysis, or analytical methods to be used; 3) site security was provided for only the 10-hour working day; security was then provided only with locked gates. The fence was only 6 feet high topped with three strands of barbed wired; 4) the inspection log did not contain dates and had other discrepancies; and 5) some hazardous waste drums to be reshipped had two labels because the old one had not been removed. At the time of the compliance inspection, MCC had 44 drums in the drum storage area. They indicated that drums were to be shipped when 60 drums accumulated (Dona 1983; Stuckey 1983).

8/31/83 MCC submitted revised Part B permit application.

11/3/83 EPA and KDHE conducted a Part B inspection at MCC. Present were Karen Flournoy, EPA; John Paul Goetz, KDHE; and Helmke and Nisler of MCC. KDHE and EPA concluded that the MCC Part B permit application be processed with minor modifications (Flournoy 1983; KDHE 1983).

2/1/84 EPA/KDHE sent a letter to Nisler of MCC outlining comments on the revised Part B permit application submitted on August 31, 1983, and the Part B inspection conducted in November 1983 (Wagoner 1984a). MCC was allowed until March 7, 1984, to respond by submitting another revised Part B application, and was granted an extension until March 16, 1984 (Flournoy 1984a).

3/15/84 MCC submitted a revised permit to EPA and KDHE (Nisler 1984a).

3/27/84 MCC representatives Don Black and Nisler met with Lyndell Harrington and Flournoy of EPA, and Dan Tschirgi of the Missouri Department of Natural Resources (MDNR) to discuss remaining problems with the MCC Part B permit. The major problem was dealing with precipitation or other liquids accumulating in the waste storage containment area (Flournoy 1984b).

4/6/85 EPA issued an official Notice of Deficiency/Letter of Warning (NOD/LOW) to MCC concerning their Part B application; MCC was required to submit an approvable Part B permit application by April 13, 1984. The main deficiency was the issue of disposal of accumulated liquids in the waste storage containment area (Wagoner 1984b).

4/13/84 MCC responded to the NOD/LOW on April 6, 1984 (Nisler 1984b).

4/30/84 The draft Part B permit application went before public comment for 45 days (Wagoner 1984c).

7/10/84 EPA notified MCC that a final permit decision had been made; it was to become effective on August 16, 1984 (Wagoner 1984d). KDHE notified MCC on August 24, 1984, of their decision to issue a Part B permit. The permit with KDHE was to be effective September 24, 1984, until September 25, 1994 (Murphy 1984).

8/28/84 KDHE performed a RCRA compliance inspection and noted three violations: 1) An improperly labeled drum of waste TCE was observed; 2) triethanolamine was labeled improperly as a hazardous waste when it is not considered a waste under RCRA or DOT; and 3) a discrepancy was found in the listing of waste xylene as being generated off-site. KDHE informed MCC that if waste xylene is not generated now or in the future, MCC needed to notify KDHE (Stuckey 1984). MCC notified KDHE on November 15, 1984, that xylene should be retained in the Part B permit as it might be generated in the future (Stuckey 1984b).

3/11/85 A joint RCRA compliance inspection was performed by KDHE. MCC was found to be out of compliance with state and federal regulations concerning the following items: 1) an operating record (40 CFR §264.73) was not being maintained; 2) a discontinued shipping name was still being used on some hazardous waste manifests; 3) a dented drum was noted in the storage area; 4) a bent fence post along the southern perimeter allowed unauthorized entry, and MCC had no way to control access between its property and the adjoining veterinary supply; and 5) MCC had no detailed waste analysis on file for a paint booth cleanup waste obtained from Fuller Brush. MCC was found to be in indirect violation of their Part B permit for the following items: 6) MCC was not noting on its manifests the number of drums from which samples were being collected or a color description of the waste. MCC was also using a hand pump and a flask to do the visual check, rather than a clear thief tube as described in the permit; 7) no waste analyses verifications were on file; and 8) the most recent weekly "In House Container" and "TSD Facility and Equipment " checklist had not been completed. MCC was told to correct items 2, 3, and 8 immediately; mitigate items 6 and 7 by the next incoming shipment of waste; and remedy items 1, 4, and 5 by May 1, 1985 (Stuckey 1985; Boskey 1985).

4/4/86 KDHE performed a RCRA compliance inspection, and noted one permit violation; MCC did not have the original lab analysis for a KG & E waste on file. MCC was required to provide proof of compliance by May 26, 1986 (Stuckey 1986).

10/31/86 VWR acquired the assets of MCC, filed an updated Part A permit, and had the facility Part B permit transferred to the new name (Thompson 1986). On November 17, 1986, KDHE received all the documents necessary to insure VWR's compliance with RCRA requirements for closure and liability financial assurance. MCC was notified of release from financial assurance requirements at the Wichita facility on December 11, 1986 (Clark 1986). VWR was also notified on that date of complete transfer of all documents (Rogers 1986). EPA noted the transfer request on November 25, 1986 (Sanderson 1986).

1/21/87 KDHE performed a RCRA compliance inspection, and noted that VWR was out of compliance in the following areas: 1) an alternate disposal facility should have been listed on the manifest or instructions given to the transporter to return the waste to the generator if undeliverable; 2) a severely dented drum of waste cyclohexanone was in storage; 3) three drums of waste flammable liquid in storage lacked beginning accumulation dates; 4) the railroad tie dike around the waste storage area was deteriorated and needed repair (Stuckey 1987a). KDHE informed VWR to correct these violations by March 26, 1987.

3/20/87 VWR poured a new concrete dike around the waste containment area (Goossen 1987).

4/10/87 KDHE conducted a follow-up compliance inspection and found VWR to be in compliance with state or federal hazardous waste regulations (Stuckey 1987).

1/10/88 KDHE performed a RCRA compliance inspection. The only non-compliance item noted was that improper waste codes were labeled on drums (Stuckey 1988).

2/2/89 A RCRA compliance inspection was performed by KDHE, and VWR was found to be out of compliance for three items: 1) a drum of waste TCA was mislabeled; 2) a reportable quantity was missing from a manifest; 3) and the most recent closure cost estimate on file for the facility was from 1987; an updated cost form, revised to reflect inflation, was required (Stuckey 1989).

SECTION 4: ENVIRONMENTAL SETTING

4.1 CULTURAL AND ENVIRONMENTAL SETTING

VWR is located in an industrial area of north-central Wichita, Kansas. Most of the land within a one-half to one mile radius of the facility is used for industrial/commercial business. Residential areas exist one-half mile to the east, south, and west. The nearest residence would be approximately one-half mile to the south.

Chisholm Creek is located approximately 300 to 350 feet north of the facility. Because the creek is located in an industrial area, it is not likely to be used for recreation. The Little Arkansas and Arkansas rivers are west of the VWR facility within a two-mile radius of the site. Several parks are located along the river banks. These rivers are used for other types of recreation such as waterskiing, boating, and fishing. The nearest park is approximately one-half mile southeast of VWR.

There are no known sensitive environments within four miles of the facility. Industrial, commercial, residential, and agricultural land use occurs within a four-mile radius.

4.2 TOPOGRAPHY AND DRAINAGE

The nearest surface water feature is Chisholm Creek which lies 300 to 350 feet north of the facility property line. The creek lies outside the 100-year floodplain boundary, and thus should not pose a flooding threat to the facility. The surface elevation of the creek is 1,300 feet. The surface elevation of the site is 1,310 feet.

The site topography is generally flat, exhibiting a maximum slope of approximately 1 percent (USGS 1982). Surface drainage from the asphalt yard area will flow from the north to the southeast. The drainage ultimately flows into a storm sever located along the south property line (MCC 1983).

4.3 SOILS

The soils at the VWR site are of the Elandco Series (USDA 1979). The Elandco Series lies on a nearly level, and occasionally to frequently flooded landscape. In Wichita, these soils are protected from flooding by the Wichita-Valley Center floodway. Elandco soils are deep, well drained and moderately permeable (0.6 to 2.0 inches/hour). The surface layer of this series is a silt loam. These soils are formed in silty, alluvial sediments on 0 to 3 percent slopes and are highly erodible by fluvial and eolian processes (USDA 1979).

4.4 STRATIGRAPHY

The VWR site is situated in the Arkansas River lowlands section of the Central Lowlands physiographic province. The topography consists of the extremely flat, broad, Arkansas River Valley and the gently rolling slopes that rise to the uplands adjacent to the valley (Lane 1965).

The bedrock that underlies the VWR site area belongs to the Permian-age Wellington Formation, which consists of approximately 550 feet of gray and blue shale interbedded with thin beds of maroon shale, impure limestone, gypsum, and anhydrite. The thick Hutchinson Salt Member is present near the middle of the Wellington Formation in western Sedgwick County (Lane 1965).

The Wellington Formation is unconformably overlain by the Pleistocene-age Ogallala Formation, which consists of approximately 150 feet of lenticular beds of calcareous, gray to pink-tan silt and clay, fine to coarse sand, and fine to coarse gravel. These deposits are of alluvial origin. The Ogallala Formation is overlain unconformably by approximately 400 feet of deposits representing at least four major depositional cycles of the Pleistocene Series; the Kansan, Nebraskan, Illinoisan, and Wisconsinan glaciations. The deposits consist of unconsolidated clay, silt, sand, and gravel. The present soil horizons overlie these Pleistocene-age deposits (Figure 4-1)(Lane 1965).

4.5 GROUND WATER

The potable water supply for the city of Wichita, Kansas, is obtained from three well fields located in Sedgwick and Harvey counties. These well fields tap the prolific aquifer, locally called the "equus

System	Series	Subseries	Stratigraphic units used in this report	Maximum thickness, feet	Physical character	Water supply
Neogene	Pleistocene	Upper Pleistocene	Dune sand (Recent)	5	Composed of fine to medium, silty sand.	Lies above the water table and thus yields no water to wells.
			Alluvium and terrace deposits (Wisconsinan to Recent)	45	Composed of fine to coarse sand and fine to very coarse arkosic gravel containing only minor amounts of silt and clay that grade upward into clayey silt. Clay balls up to one foot in diameter are common in the sand and gravel.	Comprises the most widely used aquifer in the County and yields large supplies of very hard water to many wells. Well yields up to 2,000 gpm can be developed locally. Adjacent to the Arkansas River the water is too highly mineralized for many uses.
			Colluvium (Illinoian to Recent)	30	A heterogeneous mixture of silt, clay, sand, gravel, and bedrock fragments deposited by slope processes.	Generally above the water table and thus yields no water to wells. Where deposits are thick and contain sand and gravel lenses, wells yielding a few gpm may be possible but would be subject to failure in dry years.
			Loess (Illinoian to Recent)	74	Wind-deposited tan to pink-tan, calcareous silt, containing zones of caliche nodules and some sandy zones.	Generally above water table, but locally the basal part is saturated and sandy zones may yield some water to wells.
			Terrace deposits (Illinoian)	75	Composed of fine to coarse sand and fine to coarse arkosic gravel that grades upward into sandy silt. Sand and gravel beds locally contain silt and clay lenses, and clay balls up to one foot in diameter are common.	Well yields of 500 gpm of good quality water are generally available from the deposits, and locally yields up to 1,000 gpm can be obtained.
		Lower Pleistocene	Undifferentiated deposits (Nebraskan and Kansan)	157	Composed of light tan to light gray, commonly sandy, silt and clay, fine to coarse sand, and fine to coarse arkosic gravel. Locally contains a lenticular bed of volcanic ash, the Pearlette ash bed of late Kansan age.	Yield large quantities of good quality water to wells in the Arkansas Valley that are screened in multiple porous zones and penetrate the complete section of unconsolidated rocks. The water is highly mineralized locally near the Arkansas River. Where present in the uplands west of the Arkansas Valley, well yields up to 50 gpm are possible locally.
	Pliocene		Ogallala(?) Formation	150 ±	Composed of lenticular beds of calcareous, gray to pink-tan silt and clay, fine to coarse sand, and fine to coarse gravel. The sediments reflect two sources; arkosic sand and gravel beds derived from the west are interfingered in the northern part of the County with sand and gravel beds composed of gray to tan quartz and limestone derived from Cretaceous rocks to the north. In subsurface only.	Contributes large supplies of good quality water to many municipal, irrigation, and industrial wells screened in multiple porous zones and penetrates the complete section of unconsolidated rocks.
Permian	Lower Permian		Ninnescah Shale	175 ±	Composed of alternating beds of brownish-red silty shale and siltstone, and a few thin beds of gray-green silty shale in lower part. Some gypsum is present as thin, cross-cutting and intersecting vein fillings.	Yields small quantities of water to many stock and domestic wells in the western part of the County. Water obtained from the weathered zone in the formation is generally of good quality. Water from deeper zones is generally highly mineralized but usable.
			Wellington Formation	550 ±	Calcareous gray and blue shale containing several thin beds of impure limestone and thin beds of gypsum and anhydrite. Some beds of maroon and gray-green shale near top of Formation. The thick Hutchinson Salt Member is present near the middle of the Formation in the western part of the County.	Yields small quantities of highly mineralized water to many stock and domestic wells east of the Arkansas River valley and in south-central part of County. Moderately large water supplies of as much as 350 gpm are available from solution zones in gypsum beds near east County line. The water is highly mineralized but usable.

Figure 4-1: Generalized Geologic Section

Generalized Section of Geologic Formations In Sedgwick County, Kansas and Their Water Bearing Properties.

Van Waters & Rogers (VWR)

Wichita, Kansas

Prepared by Lee Robertson
Ecology & Environment/FIT June 1990

Waste Site Tracking #: KS0283
Source: LANE 1965

beds," which includes all of the unconsolidated water-bearing deposits of Sedgwick County. These deposits are composed principally of Pleistocene-age sediments and yield up to 55 million gallons of water per day (MGD). Figure 4-1 outlines the water-bearing properties of the strata in Sedgwick County (Lane 1965).

The configuration of the water table in the vicinity of the site is a subdued version of the surface topography. The ground water in the bedrock is under artesian conditions in certain areas and its relationship to the piezometric surface in the unconsolidated deposits is unknown (Lane 1965).

The water table in the Arkansas Valley has a generally uniform southeasterly slope of about 7 feet per mile. Locally, however, the slope varies from 5 to 10 feet per mile. Ground water movement is in the direction of the water table slope or at right angles to the piezometric contours. In the valley the ground water moves toward the Little Arkansas River, and toward the Arkansas River below the confluence of these two rivers. In some areas, and at various depths, the ground water movement may be slightly different than the water table gradient as a result of localized conditions. However, the resultant direction of ground water movement is to the southeast (Lane 1965).

The majority of the City of Wichita drinking water comes from a well field approximately 25 miles northwest of Wichita where wells are finished in the equus beds, and from Cheney Reservoir located 21 miles west of Wichita. Wichita also has several wells approximately 2 1/2 miles southwest of the VWR site. These wells are used only in times of high water demand when the main well field and Cheney Reservoir cannot meet the demand. Yields range from a few gallons per minute (gpm) up to 2,000 gpm and come mainly from the unconsolidated Neogene deposits. The ground water is moderately hard to very hard and in some areas contains high concentrations of dissolved iron and salts. Due to extensive pumping at the Wichita well fields, especially of the equus beds, the ground water contours may be altered. The ground water elevation at the VWR site is approximately 1,290 feet above mean sea level or 20 feet below the ground surface (Lane 1965).

SECTION 5: DESCRIPTION OF INDIVIDUAL SOLID WASTE MANAGEMENT UNITS

5.1 HAZARDOUS WASTE DRUM STORAGE AREA

5.1.1 Information Summary

The hazardous waste drum storage area (Appendix A; Photos 1 through 3) consists of a 41.5-foot by 12.1-foot concrete pad with a 3.5-inch concrete dike around the west, south, and east perimeters. The north perimeter of the storage area is the VWR warehouse. The storage area appears to be in good condition. The concrete pad was poured in 1970 or 1971; however, hazardous waste handling activities began at a later time (Schmid 1990). The concrete dike was poured on March 20, 1987 (MCC 1984; Goossen 1987; E & E/FIT 1990). MCC and VWR have used this area at least since they notified EPA of hazardous waste activity under RCRA in August 1980 (Butter 1980). In the past, MCC and now VWR have picked up and stored customers' spent solvents in this hazardous waste drum storage area until a load of approximately 60 drums had been accumulated. VWR also stores accumulated solvent rinses, generated through repackaging of bulk products, in this area. Currently VWR picks up and transports customers' spent solvents directly to HRI, a solvent recycling company in Wichita (E & E/FIT 1990). Only accumulated solvent rinses generated by the repackaging of bulk products are currently stored in this area (Sims 1990).

The drum storage area has a design capacity of 96 drums or approximately 5,184 gallons. The designed containment capacity of the storage area, including the displacement caused by the floor pallets, is 926 gallons. This is within the 10 percent required under RCRA (MCC 1984a). Information concerning the wastes transported and stored in the drum storage area, including quantity transported or stored per month, is provided in Table 5-1. This information is from the February 2, 1989, compliance inspection and is current (Stuckey 1989; E & E/FIT 1990). All the wastes detailed in Table 5-1, with the exception of trichloroethene, are generated by VWR customers. Waste trichloroethene is generated by the VWR repackaging process.

At the time of the E & E/FIT Visual Site Inspection, VWR had two drums of n-propanol, one drum of mixed toluene/ xylene, one drum of trichloroethene, and one drum of methylene chloride (dichloromethane) in the Hazardous Waste Drum Storage Area for a total of five drums (Appendix A; Photos 2 and 3).

Table 5-1
Hazardous Wastes Handled by VWR

Waste Description	RCRA No.	Average Quantity Handled in Drums per Month
Dichloromethane	F002	13
1,1,1-Trichloroethane	F001	29
Trichloroethene	F001	2
Acetone/Cyclosolve	F002	23
Tetrahydrofuran/Cyclohexanone	F003	1
Xylene, paint	F003	1
Toluene, Methylethyl Ketone	F005	65
Freon TMS	F002	1
Fluorocarbon TMC	F002	1
Xylene/Mineral Spirits	F003	2
Naphtha	D001	15
1,1,1-TCA (30%)/Mineral Spirits (70%)	F001	5

The containment feature of the Hazardous Waste Drum Storage Area does not allow for precipitation run-on to enter, but accumulation can occur. VWR evaluates the presence of precipitation and other liquids accumulated in the containment area based on layering, discoloration, foreign matter, and odor. If the liquid in the containment area is determined not to be contaminated, a portable pump is placed in the southeast corner of the storage area. The liquid (water) will flow into the paved area in a westerly direction to within 10 feet of the fence line. It will then flow southeasterly across the yard to a municipal storm sewer located along the south property line. This drainage flow path is dictated by the on-site topography (Sims 1990). If the liquid appears to be contaminated, it will be sampled and analyzed by a laboratory for RCRA-listed and characteristic waste. If the liquid is found by analyses to be clean, it will be pumped out as described above. If it is contaminated, it will be pumped into drums or absorbed by an industrial absorbent and properly disposed (MCC 1984b).

VWR visually inspects the concrete pad daily for cracks. This is a RCRA-regulated unit.

At the time of the E & E/FIT VSI on May 15, 1990, a small amount of water due to precipitation was present in the drum storage area. The hazardous waste drum storage area is in good condition and the drums stored in the area were also were in good condition. The likelihood of a release from this unit is very minimal.

5.1.2 Further Information Needs

No information is required at this time.

5.2 ELEMENTARY NEUTRALIZATION TANK

5.2.1 Information Summary

This unit is an in-ground tank (Appendix A; Photo 10) used for the accumulation of various mineral acids and caustics which result from the rinsing and refilling of reusable/returnable sulfuric, hydrochloric, and phosphoric acid, caustic soda, and bleach containers (Nisler 1981a). The tank is located in the southeastern part of the blacktopped area of the facility (Figure 2-2). The tank was constructed in 1976 (Schmid 1990).

The tank is made of concrete and has a 65-mL thick replaceable blanket-like polyvinyl chloride (PVC) liner. According to VWR, the tank has always been used with a liner (Schmid 1990). This liner is changed periodically to prevent the contents of the tank from contacting the concrete wall of the tank. The spent PVC liners are triple rinsed, cut up, and placed in poly-drums. The tank has no outlets through its concrete walls. It has a design capacity of 1,500 gallons and is fully covered by a wooden top (Nisler 1981a). During the May 1990 VSI, VWR removed the top of the tank, revealing the liner. The concrete below the liner could not be seen. The portions of the unit that were visible appeared to be in good condition.

The likelihood of a release from this unit is high, if cracks are present in the concrete of the tank and its contents are allowed to contact the concrete. However, the tank has always been used with the liner, thus reducing the likelihood of damage to the concrete resulting

from the contact with corrosive materials. Therefore, the likelihood of a release from this unit is low.

The effluent generated by the rinsing and refilling process is pumped directly into the tank and is held until 8 to 10 inches of freeboard remains. The pH of this effluent initially ranges from 2 to 12 and is neutralized to between 6 and 7. After neutralization, the waste is pumped out from the top by means of a portable pump into the local sanitary sewer. This waste is considered hazardous prior to neutralization because it has the characteristic of corrosivity, a D002 waste (Nisler 1981a). VWR generates approximately 900 gallons of rinsing/refilling effluent every two weeks (KDHE 1989). VWR does not regularly inspect the concrete of the tank. A visual inspection is performed when the liner is changed, but it is not known how thorough this inspection is. This unit is a SWMU, but it is not regulated under RCRA because elementary neutralization units are exempted.

5.2.2 Further Information Needs

No information is required at this time.

5.3 SATELLITE ACCUMULATION AREA

5.3.1 Information Summary

VWR maintains a small satellite accumulation area directly to the east of the Chemical Repackaging and Drum Rinsing Building (Appendix A; Photo 12). VWR drums solvent rinsate generated from the rinsing and refilling of reusable solvent drums. At the time of the VSI on May 15, 1990, VWR had two 55-gallon (green) drums in this area. One drum contained waste isopropyl alcohol, a D001, flammable characteristic waste. The other drum contained waste trichloroethene, an F001 waste. VWR stores only two drums at a time in this area (Sims 1990). None of the VWR representatives were sure the length of time that a drum might remain in this area (Sims 1990; Linos 1990). These drums are moved to the hazardous waste storage area, manifested, and transported off site to HRI for recycling (E & E/FIT 1990). This area has no containment. This unit is a SWMU, but it is not regulated under RCRA.

5.3.2 Further Information Needs

No information is required at this time.

5.4 WASTE LINER STORAGE AREA

5.4.1 Information Summary

This storage area is located south of the Satellite Accumulation Area (Figure 2-2). This unit consists of two poly-drums used to store the spent liners from the in-ground neutralization tank. The liner in the in-ground tank is periodically changed. After the liner is removed, it is triple rinsed, cut up, and placed in the poly-drums. One liner fills approximately two drums. No more than one liner (two drums) is stored on site at a time. The poly-drums are transported to HRI and are ultimately disposed in a hazardous waste landfill. There is no containment for this unit, but because the liners are triple rinsed before storage, the likelihood of a release from this unit is very low. This unit is a SWMU because it handles solid waste, but it is not regulated under RCRA.

5.4.2 Further Information Needs

No information is required at this time.

SECTION 6: SUMMARY

The E & E/FIT was tasked under the U.S. EPA's EPI program to conduct a background review and VSI of the VWR site located in Wichita, Kansas. The VSI was conducted on May 15, 1990, in coordination with RCRA and company officials.

VWR is a distributor of organic and inorganic chemicals for industrial use. The major chemicals handled by VWR include solvents, corrosives, and caustics. Only a limited amount of repackaging occurs at this facility. Most chemicals are distributed in the form in which they are received.

In the past, as a service to some of its customers, VWR also picked up and temporarily stored spent solvent waste streams. Once a complete shipment of 60 drums was accumulated, the load was transported off site to a recycling facility. Currently most of the wastes VWR picks up from its customers are transported directly to a recycling facility and are not stored on site.

VWR generates some waste caustic and corrosive waste as well as some solvent waste from its repackaging operations. The caustic and corrosive waste flows into an in-ground tank where it is eventually neutralized and pumped into the sanitary sewer. The solvent waste is drummed, manifested, and transported off site for recycling. VWR plans to discontinue repackaging operations in the near future.

During the May 15, 1990, VSI, no evidence of spillage, improper waste management practices, or other problems were observed. The VWR facility and its operations appeared to be very clean. VWR is currently regulated under RCRA and has been since the facility notified EPA of hazardous waste activity under RCRA on August 18, 1980. The facility began operations on October 1, 1959, as the McKesson Chemical Company. On October 31, 1986, MCC was sold to VWR, a division of the Univar Corporation. VWR has continued similar operations at the facility.

A RCRA Part B permit was prepared by MCC in 1983, and was approved by EPA in August 1984 and by KDHE in September 1984. The permits are

effective until September 1994. KDHE is the lead agency for the facility and performs annual RCRA compliance inspections.

SECTION 7: BIBLIOGRAPHY

Boskey, John W., Environmental Engineer, U.S. EPA Region VII, April 4, 1985, Report of Joint RCRA Compliance Inspection at the McKesson Chemical Company (MCC), Wichita, Kansas.

Butter, G.N., Technical Director, McKesson Chemical Company, August 18, 1980, Letter to U.S. EPA Region VII containing RCRA part A permit.

Clark, Brenda, Hazardous Waste Section, Bureau of Waste Management, Kansas Department of Health and Environment, Topeka, Kansas, December 1, 1986, Letter to Dianah Darmon Senior Counsel/Attorney, Law Department, McKesson Chemical Company, San Francisco, California.

Dona, R.B., Chief, Field Investigation Section, U.S. EPA Region VII, July 5, 1983, Memorandum to Michael J. Sanderson, Chief, Air and Waste Management Branch, U.S. EPA Region VII.

Ecology and Environment, Inc., Field Investigation Team, May 15, 1990, Visual Site Inspection of the VWR facility, Wichita, Kansas.

Flournoy, Karen, U.S. EPA Region VII, November 7, 1983, Memorandum of Site Visit to the McKesson Chemical Company, Wichita, Kansas.

Flournoy, Karen, U.S. EPA Region VII, March 2, 1984a, Telephone Conversation, Thomas Nisler, McKesson Chemical Company.

Flournoy, Karen, U.S. EPA Region VII, March 27, 1984b, Notes from meeting with McKesson Chemical Representatives.

Goossen, Thomas, VWR, March 25, 1987, Letter to Dale T. Stucky, Kansas Department of Health and Environment.

Kamath, Viveck, Hazardous Waste Management Section, Bureau of Environmental Sanitation, KDHE, and David A. Wagoner, Director, Air and Waste Management Division U.S. EPA Region VII, September 13, 1982, Letter to Scott Helmke, McKesson Chemical Company.

Kansas Department of Health and Environment, November 1983, Part B Application Inspection Report.

Lane, Charles W. and Don E. Miller, 1965, Geohydrology of Sedgwick County, Kansas, State Geological Survey Bulletin 176, United States Geological Survey and the Kansas Geological Survey, Lawrence, Kansas.

Linos, Mark, Operations Manager, July 30, 1990a, Personal Communication with Anne Melia, E & E/FIT.

Linos, Mark, September 17, 1990b, Telephone Conversation with Anne Melia, E & E/FIT.

Matthews, Mark. U.S. EPA Region VII, May 31, 1990, Personal Communication, Anne Melia, E & E/FIT.

McKesson Chemical Company, May 11, 1983, EPA RCRA Part B Permit, Initial Filing.

McKesson Chemical Company, March 16, 1984a, EPA RCRA Part B Permit, Revision 1.

McKesson Chemical Company, April 13, 1984b, EPA RCRA Part B Permit, Revision 2.

McKesson Chemical Company, April 16, 1984c, EPA RCRA Part B Permit, Revision 3.

Minor, M.A., Regional Vice President, McKesson Chemical Company, November 18, 1980, Letter and Updated Part A Permit to U.S. EPA Region VII.

Morby, Robert L., Chief Waste Management Branch, Air Waste Management Division, U.S. EPA Region VII, August 4, 1982, Letter to Scott Helmke, McKesson Chemical Company.

Murphy, Dennis R., Manager, Bureau of Waste Management, KDHE, August 24, 1984, Letter to Scott Helmke, McKesson Chemical Company.

Nisler, Thomas, Regional Warehouse Manager, McKesson Chemical Company, July 13, 1981a, Letter to U.S. EPA Region VII.

Nisler, Thomas, July 17, 1981b, Letter to Lynn Kenny, U.S. EPA Region VII.

Nisler, Thomas, March 15, 1984a, Letter to Karen Flournoy, U.S. EPA Region VII.

Nisler, Thomas, April 13, 1984b, Letter to Karen Flournoy, U.S. EPA Region VII.

Rogers, Janel, Hazardous Waste Section, Bureau of Waste Management KDHE, Topeka, Letter to Bob Hickman, VWR, Oakbrook, Illinois.

Sanderson, Michael J., Chief, RCRA Branch, U.S. EPA Region VII, Letter to Mr. Mark Hooper, President D.S.W., Inc., Seattle, Washington.

Schmid, Susan, Director of Regulatory Affairs, VWR Seattle, Washington, July 25, 1990, Letter to Lyndell Harrington, EPA RCRA.

Sims, Glenn, Branch Manager, VWR, July 26, 1990, Telephone Conversation with Anne Melia, E & E/FIT.

Stuckey, Dale T., Field Services Section, Bureau of Environmental Sanitation, KDHE Wichita, September 13, 1983, Letter to Scott Helmke, McKesson Chemical Company.

Stuckey, Dale T., Field Services Section, Bureau of Waste Management, KDHE Wichita, October 8, 1984a, Letter to Scott Helmke, McKesson Chemical Company.

Stuckey, Dale T., Investigation and Enforcement Section, Bureau of Waste Management, KDHE Wichita, November 28, 1984b, Letter to Alex Maslow, Operations Manager, McKesson Chemical Company.

Stuckey, Dale T., March 28, 1985, Letter to Alex Maslow, Operations Manager, McKesson Chemical Company.

Stuckey, Dale T., April 21, 1986, Letter to Marc Linos, Service Center Operations Manager, McKesson Chemical Company.

Stuckey, Dale T., February 5, 1987a, Letter to Marc Linos, Operations Manager, VWR.

Stuckey, Dale T., April 10, 1987b, Letter to Marc Linos, Operations Manager, VWR.

Stuckey, Dale T., February 10, 1988, Letter to Marc Linos, Operations Manager, VWR.

Stuckey, Dale T., February 13, 1989, Letter to Marc Linos, Operations Manager, VWR.

Thompson, Robert C., Graham and James, Seattle, Washington, October 31, 1986, Letter to Janel Rogers, Hazardous Waste Section, KDHE, Topeka.

U.S. Department of Agriculture, 1979 Soil Survey of Sedgwick County, Kansas, Washington, D.C.

U.S. Geological Survey, 1982, 7.5 Minute Topographic Map, Wichita East Quadrangle, Sedgwick County, Kansas, Washington, D.C.

Univar Corporation, 1986, Annual Report, Seattle, Washington, D.C.

Wagoner, David A., Director, Air and Waste Management Division, U.S. EPA Region VII, September 7, 1982, Letter to Scott Helmke, McKesson Chemical Company, Wichita, Kansas.

Wagoner, David A., February 1, 1984a, Letter to Thomas Nisler, McKesson Chemical Company, Oakbrook, Illinois.

Wagoner, David A., April 6, 1984b, Letter to Thomas Nisler, McKesson Chemical Company, Oakbrook, Illinois.

Wagoner, David A., April 24, 1984c, Letter to Thomas Nisler, Regional Warehouse Manager, McKesson Chemical Company.

Wagoner, David A., July 10, 1984d, Letter to Thomas Nisler, McKesson Chemical Company, Oakbrook, Illinois.

APPENDIX A

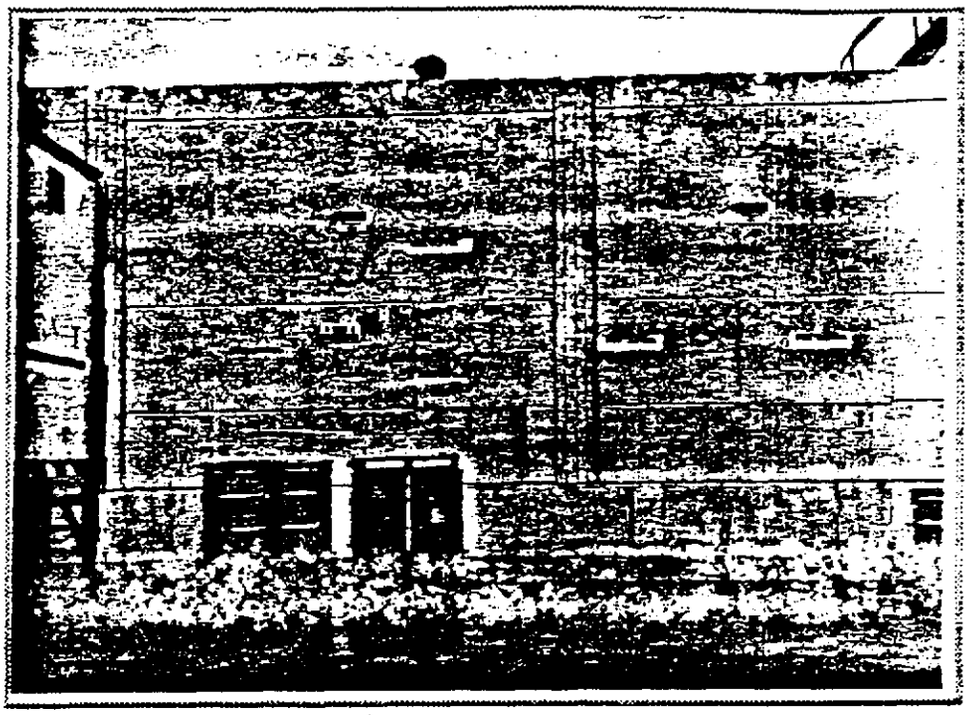
SITE PHOTOGRAPHS

ecology and environment, inc.

PHOTOGRAPHIC RECORD

SITE NAME: VWR
SITE LOCATION: Wichita, KS
TDD/PAN#: F-07-9001-010/ FKS0283RA

No.: 1
Subject
Hazardous waste drum storage area.



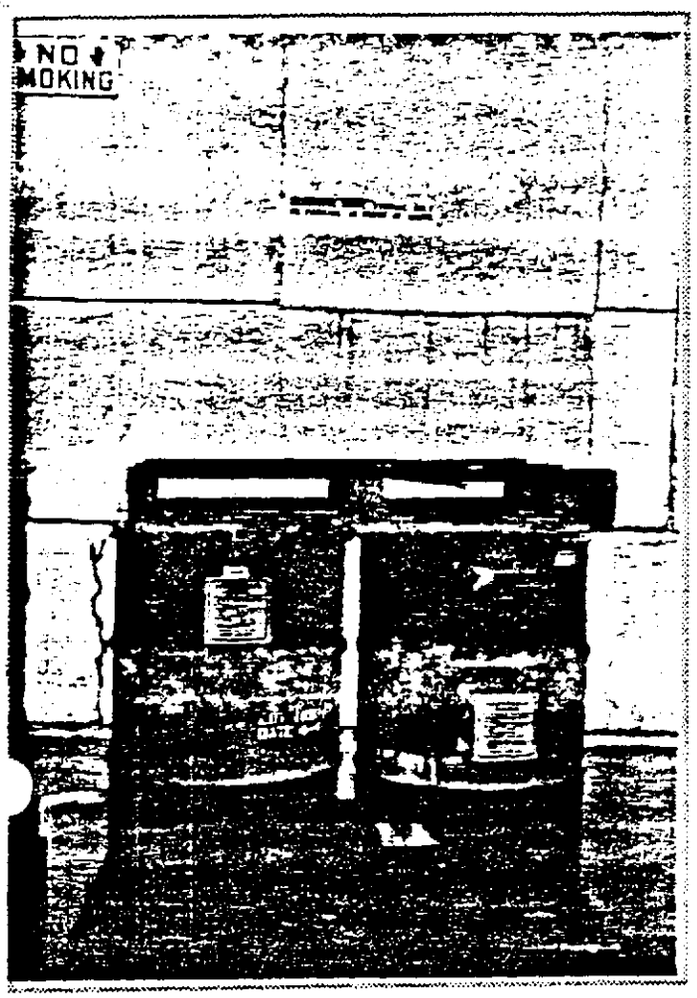
Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 12:45 hrs.
Direction
North

No.: 2
Subject
Drums in hazardous waste storage area
(2 drums of waste N-propanol
1 drum of waste toluene/xylene)

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 12:47 hrs.
Direction
North

ecology and environment, inc.

PHOTOGRAPHIC RECORD



SITE NAME: VWR
SITE LOCATION: Wichita, KS
TDD/PAN#: F-07-9001-010/ FKS0283RA

No.: 3
Subject

Drums in hazardous waste storage area
(1 drum of trichloroethene
1 drum of methylene chloride)

Photographer

P. Roberts
Witness

A. Melia
Date/Time

05/15/90 12:49 hrs.
Direction

North

No.: 4
Subject

Empty drum storage.

Photographer

P. Roberts
Witness

A. Melia
Date/Time

05/15/90 12:52 hrs.
Direction

Northwest

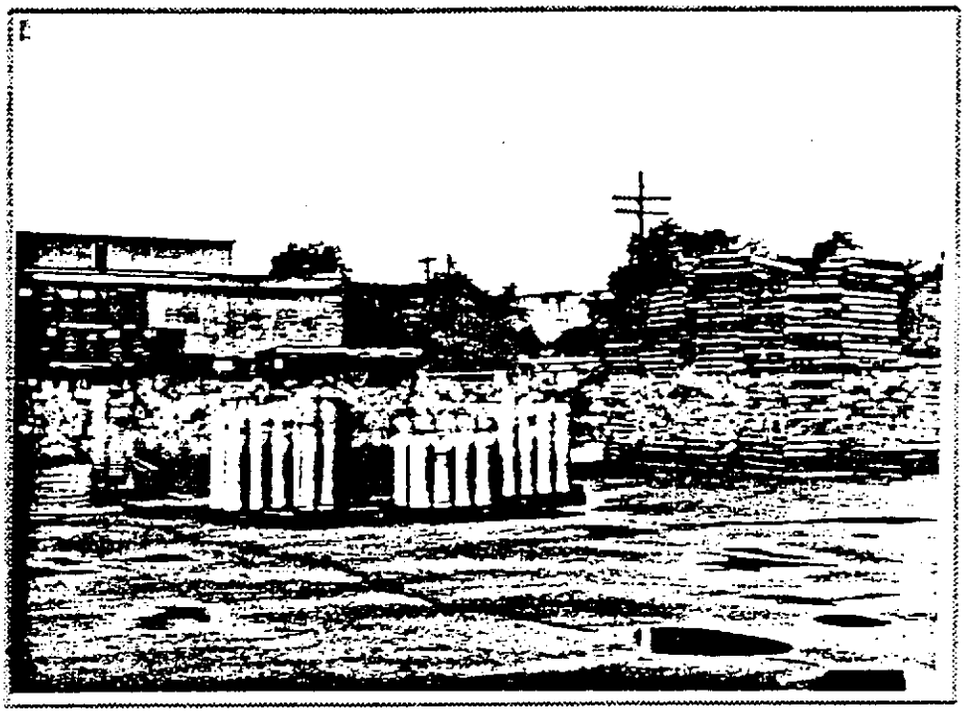
ecology and environment, inc.

PHOTOGRAPHIC RECORD

SITE NAME: VWR
SITE LOCATION: Wichita, KS
TDD/PAN#: F-07-9001-010/ FKS0283RA

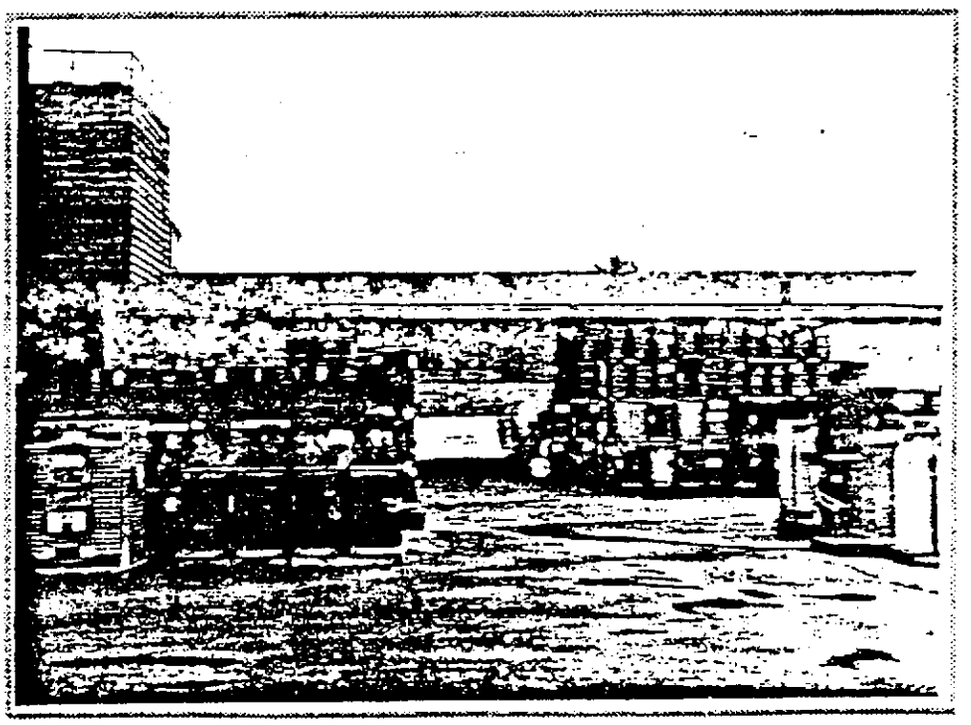
No.: 5
Subject
Compressed gas storage.

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:05 hrs.
Direction
Southwest



No.: 6
Subject
Flammable and corrosive product storage.

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:10 hrs.
Direction
South



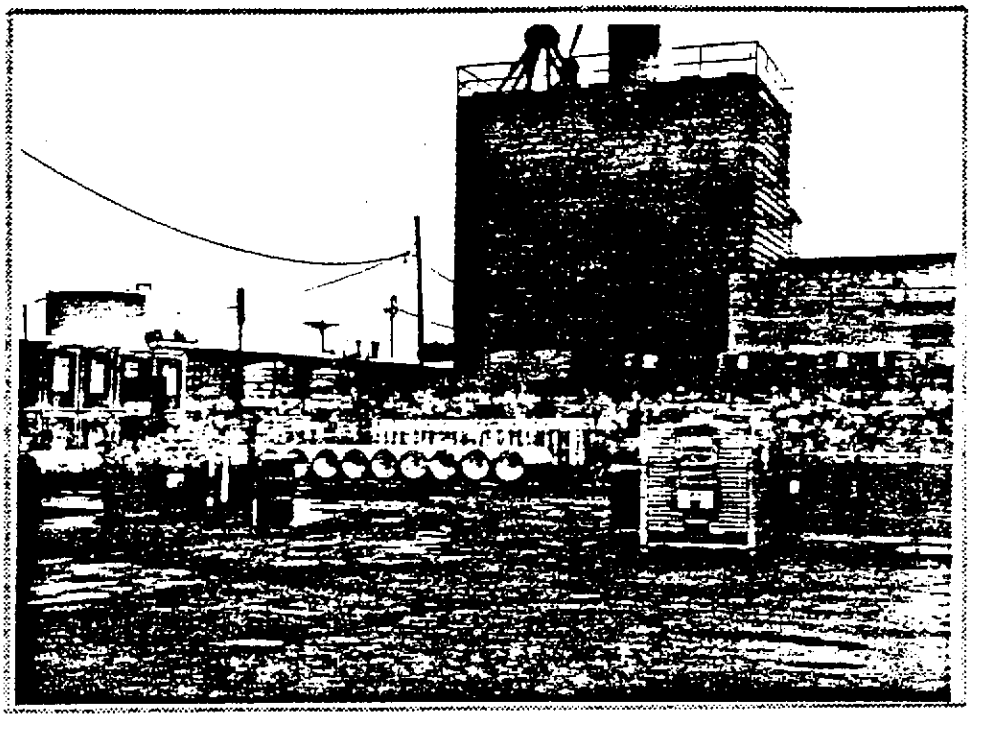
ecology and environment, inc.

PHOTOGRAPHIC RECORD

SITE NAME: VWR
SITE LOCATION: Wichita, KS
TDD/PAN#: F-07-9001-010/ FKS0283RA

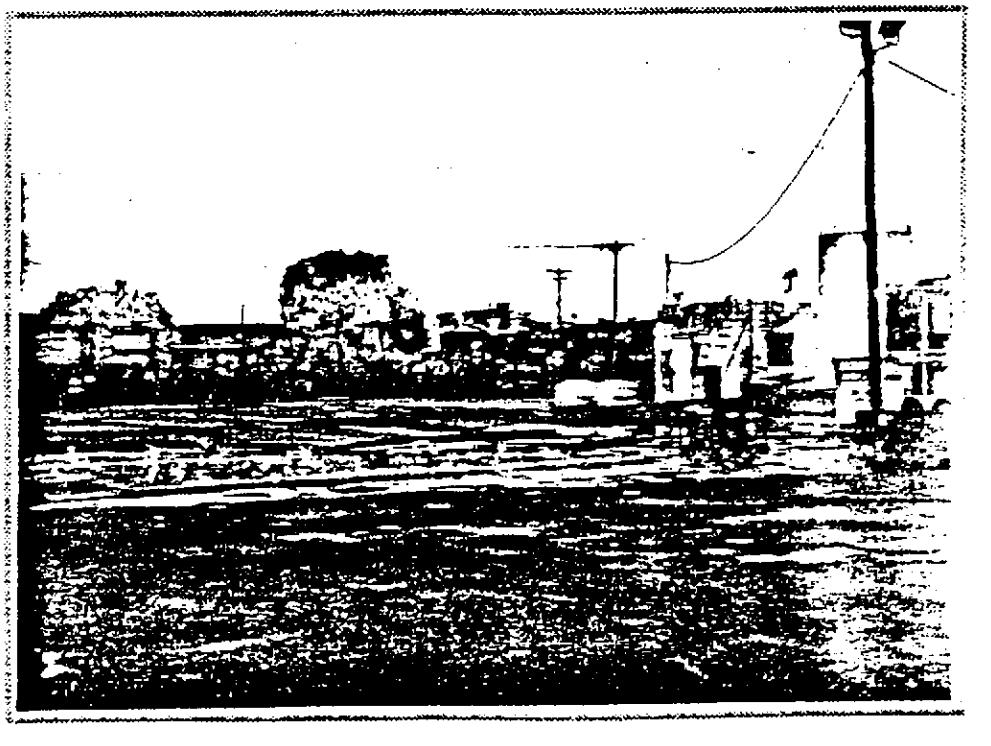
No.: 7
Subject
Product and compressed gas storage.

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:12 hrs.
Direction
Southeast



No.: 8
Subject
Repackaged product storage.

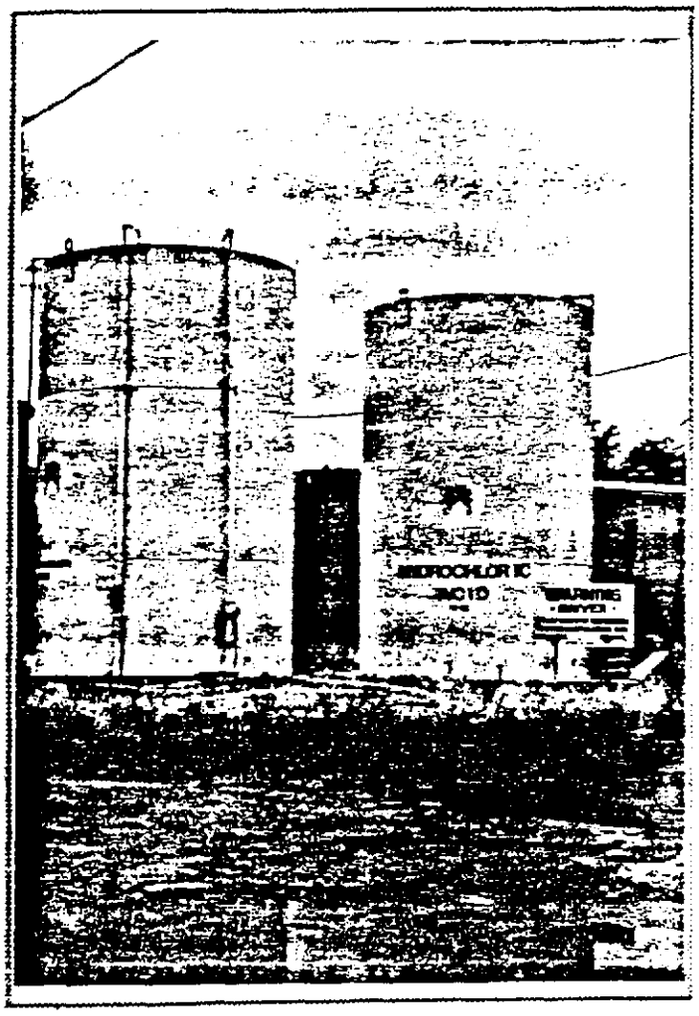
Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:20 hrs.
Direction
East



ecology and environment, inc.

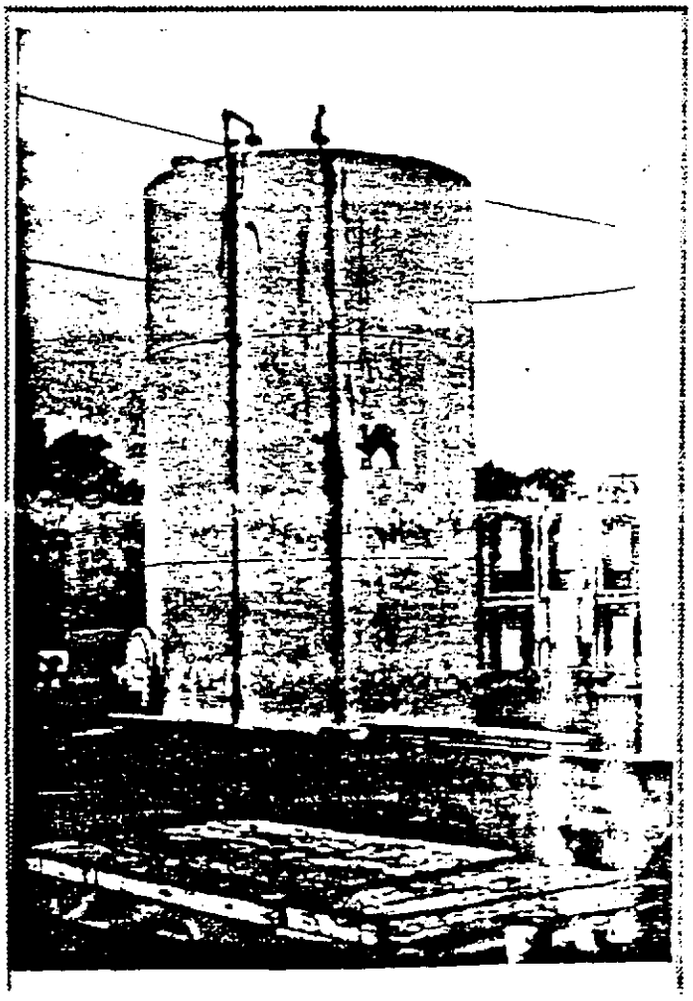
PHOTOGRAPHIC RECORD

SITE NAME: VWR
SITE LOCATION: Wichita, KS
TDD/PAN#: F-07-9001-010/ FKS0283RA



No.: 9
Subject
Bulk product storage.

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:25 hrs.
Direction
South

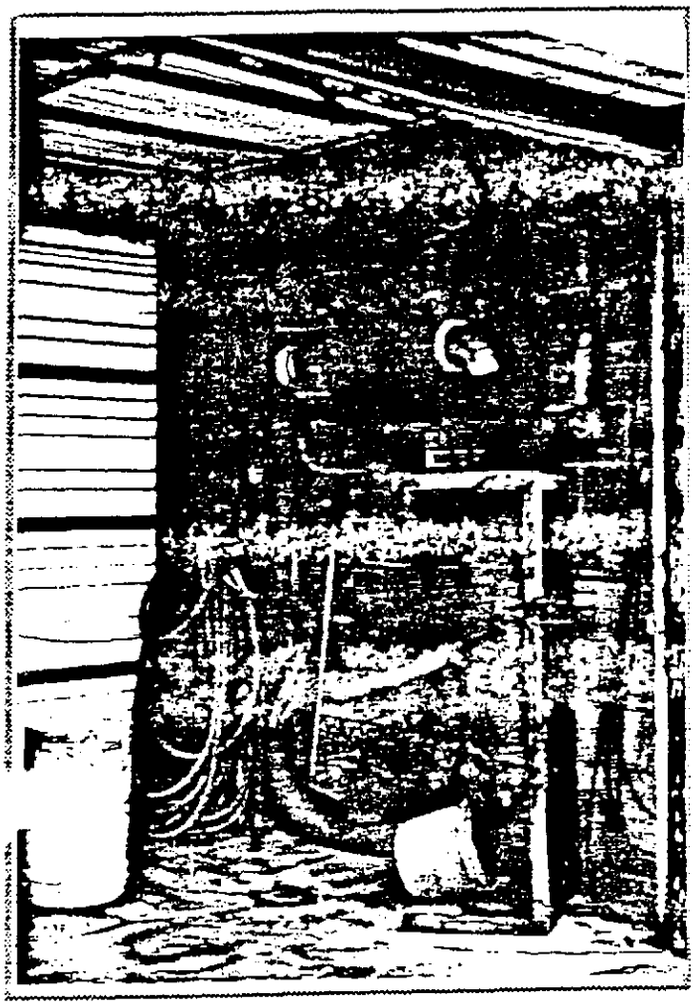


No.: 10
Subject
Elementary neutralization tank.

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:27 hrs.
Direction
North

ecology and environment, inc.

PHOTOGRAPHIC RECORD



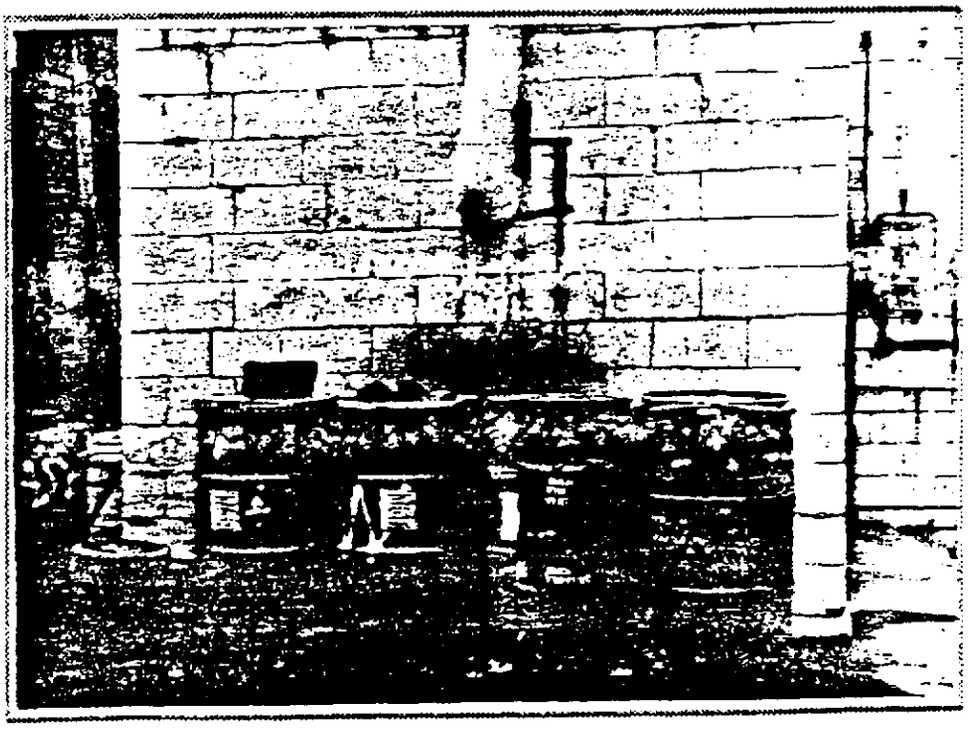
SITE NAME: VWR
SITE LOCATION: Wichita, KS
TDD/PAN#: F-07-9001-010/ FKS0283RA

No.: 11
Subject
Repackaging area building.

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:30 hrs.
Direction

No.: 12
Subject
Satallite accumulation area.

Photographer
P. Roberts
Witness
A. Melia
Date/Time
05/15/90 13:33 hrs.
Direction
West



APPENDIX B

EPA PRELIMINARY ASSESSMENT FORM 2070-12

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D000809715

. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
VWR (Van Waters & Rogers)	2041 N. Mosely				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Wichita	KS	67201	Sedgwick	SG	
09 COORDINATES LATITUDE	LONGITUDE				
37° 43' 15" N	097° 19' 38" W				

10 DIRECTIONS TO SITE (Starting from nearest public road)

The site is located on Mosely approximately one half block south of 21st Street.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)		
Univar Corporation	1600 Norton Building		
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Seattle	WA	98101	(206)447-5911
07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)		
VWR	2041 N. Mosely		
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
Wichita	KS	67201	(316)267-6292

13 TYPE OF OWNERSHIP (Check one)

X A. PRIVATE ___ B. FEDERAL: _____ (Agency name) ___ C. STATE ___ D. COUNTY ___ E. MUNICIPAL

___ F. OTHER: _____ (Specify) ___ G. UNKNOWN

OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

X A. RCRA 3001 DATE RECEIVED: 08/18/80 (MO/DAY/YR) ___ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: (MO/DAY/YR) ___ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

X YES DATE 05/15/90 (MO/DAY/YR)

___ NO

BY (Check all that apply)

X A. EPA X B. EPA CONTRACTOR X C. STATE ___ D. OTHER CONTRACTOR

___ E. LOCAL HEALTH OFFICIAL ___ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): Ecology and Environment, Inc.

02 SITE STATUS (CHECK ONE)	03 YEARS OF OPERATION	
X A. ACTIVE ___ B. INACTIVE ___ C. UNKNOWN	10/01/59 (BEGINNING YEAR)	Unknown (ENDING YEAR) ___ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

The facility stores and transports waste solvents such as trichloroethene, trichloroethane, xylene, and mineral spirits.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Very little or no potential hazard to the population or environment is posed by this facility.

V. PRIORITY ASSESSMENT

1 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous conditions and Incidents)

___ A. HIGH (Inspection required promptly) ___ B. MEDIUM (Inspection required) X C. LOW (Inspect on time available basis) ___ D. NONE (No further action needed. Complete current disposition form)

VI. INFORMATION AVAILABLE FROM

CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Mark Matthews	EPA RCRA	(913)551-7635

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Anne Melia		E & E/FIT	(913)432-9961	10/01/90 (MO/DAY/YR)

EPA FORM 2070-12 (7-81)

VWR

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE KS	02 SITE NUMBER D000809715

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

___A. SOLID ___E. SLURRY
___B. POWDER, FINES _X_F. LIQUID
___C. SLUDGE ___G. GAS
___D. OTHER _____ (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS 7

03 WASTE CHARACTERISTICS (Check all that apply)

_X_A. TOXIC ___E. SOLUBLE _X_I. HIGHLY VOLATILE
_X_B. CORROSIVE ___F. INFECTIOUS ___J. EXPLOSIVE
___C. RADIOACTIVE _X_G. FLAMMABLE ___K. REACTIVE
___D. PERSISTENT ___H. IGNITABLE ___L. INCOMPATIBLE
___M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	167	Drums	55-gallon drums per month
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	900	gallons	waste generated every two weeks
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Dichloromethane	75-09-2	55-gallon drum/recycled		
SOL	1,1,1-Trichloroethane	71-55-6	55-gallon drum/recycled		
	Trichloroethene	79-01-6	55-gallon drum/recycled		
SOL	Acetone	67-64-1	55-gallon drum/recycled		
SOL	Tetrahydrofuran	109-99-9	55-gallon drum/recycled		
SOL	Cyclohexanone	108-94-1	55-gallon drum/recycled		
SOL	Xylene	1330-20-7	55-gallon drum/recycled		
SOL	Methyl Ethyl Ketone	78-93-3	55-gallon drum/recycled		
SOL	Mineral Spirits	8030-30-6	55-gallon drum/recycled		
SOL	Naptha	8030-30-6	55-gallon drum/recycled		
ACD	Hydrochloric Acid	7647-01-0	55-gallon drum/recycled		
ACD	Sulfuric Acid	7664-93-9	55-gallon drum/recycled		
ACD	Phosphoric Acid	7664-38-2	55-gallon drum/recycled		
BAS	Sodium Hydroxide	1310-73-2	55-gallon drum/recycled		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE: Stuckey, Dale T., February 2, 1989 RCRA Compliance Inspection.
E & E/FIT May 15, 1990, Visual Site Inspection.

VWR

EPA

POTENTIAL HAZARDOUS WASTE SITE

PRELIMINARY ASSESSMENT

PART 3 – DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE KS | 02 SITE NUMBER D000809715

. HAZARDOUS CONDITIONS AND INCIDENTS

01 ___ A. GROUNDWATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known – not likely.

01 ___ B. SURFACE WATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known – not likely.

01 ___ C. CONTAMINATION OF AIR — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known.

01 ___ D. FIRE/EXPLOSIVE CONDITIONS — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known.

01 ___ E. DIRECT CONTACT — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known.

01 ___ F. CONTAMINATION OF SOIL — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

None known.

01 ___ G. DRINKING WATER CONTAMINATION — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known, not likely.

01 ___ H. WORKER EXPOSURE/INJURY — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known.

01 ___ I. POPULATION EXPOSURE/INJURY — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None known.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	D000809715

II. HAZARDOUS CONDITIONS AND INCIDENTS (CONTINUED)

01 ___ J. DAMAGE TO FLORA — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known - not likely.

01 ___ K. DAMAGE TO FAUNA — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

None known - not likely.

01 ___ L. CONTAMINATION OF FOOD CHAIN — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known - not likely.

01 ___ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None observed.

01 ___ N. DAMAGE TO OFFSITE PROPERTY — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known.

01 ___ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known.

01 ___ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ___ OBSERVED (DATE: _____) ___ POTENTIAL ___ ALLEGED

04 NARRATIVE DESCRIPTION

None known.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None known.

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

VWR is a distributer of organic and inorganic chemicals for industrial use. They repackage a limited quantity of chemicals and transport hazardous wastes to their customers.

SOURCES OF INFORMATION (Cite specific references. e.g., state files, sample analysis, reports)

EPA and KDHE Site Files.
E & E/FIT, May 15, 1990, Visual Site Inspection.

APPENDIX C

WASTE CHARACTERISTICS DATA SHEETS

Acetone

Acetone is a colorless, volatile, liquid with a sweetish odor. It is used as an intermediate for other ketones, paint, and cellulose acetate solvent. Also known as 2-propanone, acetone is often used as a solvent to clean precision equipment, and to extract substances from animal and plant tissues (ITTI 1979).

The solubility of acetone is 2,300,000 mg/l and it has a vapor pressure of 231.5 Torr at 25°C (ITII 1979). Transport and fate information is not available for acetone; however, based on its characteristics it can be expected to be fairly biodegradable. This compound is likely to volatilize, and migrate freely in ground and surface water.

Exposure to acetone may cause conjunctivitis, corneal erosion, headache, weariness, gastritis, nausea, vomiting, lethargy, and paralysis (ITII 1979). No Maximum Contaminant Level (MCL) has been established for acetone.

Bibliography

The International Technical Information Institute, 1979, Toxic and Hazardous Industrial Chemicals Safety Manual, Tokyo, Japan.

WASTE CHARACTERISTICS (12/89)

Methylene Chloride

Methylene chloride, also referred to as dichloromethane, is a colorless, volatile liquid, with a penetrating odor similar to that of ether. This compound is not flammable. Methylene chloride is used in paint removers, degreasing and cleaning fluids; as a solvent for cellulose acetate; in extraction fluids; as a blowing agent; and in dewaxing processes. It also is used in refrigeration, and as a fumigant (ITII 1979). Methylene chloride has been identified as a contaminant in petroleum products and wastes.

At 20°C, the solubility of methylene chloride has been measured in the range of 13,200 to 20,000 milligrams per liter (mg/l). This compound has a vapor pressure of 362.4 Torr and a log octanol/water partition coefficient of 1.25 (EPA 1979).

The primary environmental fate of methylene chloride is volatilization; photolysis and hydrolysis are not significant. Methylene chloride is photodissociated in the stratosphere. In the troposphere it is attacked by hydroxyl radicals. Adsorption onto soil and sediment is possible, though the significance of this migration pathway is not known. Based on its log octanol/water partition coefficient, methylene chloride is not likely to bioaccumulate in organisms. It is thought that methylene chloride can be biodegraded by properly acclimatized microorganisms (EPA 1979).

Human exposure to methylene chloride can cause irritation to the eyes and respiratory tract; headache, dizziness, and stupor; nausea and vomiting; anemia; skin inflammation and burns; and unconsciousness (ITII 1979). There is no maximum contaminant level (MCL) for methylene chloride in drinking water. The aquatic freshwater chronic lowest observed effect level (LOEL) for methylene chloride is 9,650 µg/l, indicating that it is not extremely toxic to aquatic life (EPA 1986).

Bibliography

The International Technical Information Institute, 1979, Toxic and Hazardous Industrial Chemicals Safety Manual, Tokyo, Japan.

U.S. Environmental Protection Agency, 1979, Water-Related Fate of 129 Priority Pollutants, Vol. 2, Washington, D.C.

U.S. Environmental Protection Agency, 1986, "Quality Criteria for Water".

WASTE CHARACTERISTICS (2/90)
Xylene

Xylene exists in the form of three isomers: ortho-xylene and meta-xylene are colorless, flammable liquids; para-xylene exists as colorless plates and prisms. Commercial xylene contains various amounts of the three isomers, with the meta-isomer occurring in the highest concentration of the three. Xylene is used as a solvent. It is a constituent in paint, lacquers, dyes, adhesives, cements, cleaning fluids, insecticides; and aviation fuel; and is a feedstock in the production of xylidines, benzoic acid, phthalic anhydride, isophthalic and terephthalic acids and their esters which are employed in the manufacture of plastic materials and synthetic textile fabrics. The compound also is used in pharmaceutical synthesis (Sittig 1985; ITII 1979; Windholz 1976). Xylene is found as a contaminant in ethylbenzene, toluene, trimethylbenzene, phenol, thiophene, pyridine, and other non-aromatic hydrocarbons. Common synonyms for xylene include xylol and dimethyl benzene (Sittig 1985).

No information concerning environmental fate and transport pathways for xylene is readily available. The following chart details vapor pressures (V.P.), water solubilities (SOL) and log octanol/water partition coefficients (log P) for the three xylene isomers.

Physical Property Data for Xylenes

isomer	V.P. (Torr, 25°C)	SOL (mg/l, 25°C)	Log P
ortho-	10	175	2.95
meta-	10	130	3.26
para-	10	198	3.15
mixed(commercial)	10	198	3.26

Source: EPA 1986

Some environmental fate and transport processes can be postulated using these data. The vapor pressure of 10 measured for all isomers indicates that volatilization of xylene should be a significant aquatic fate. The Log P values ranging from 2.95 to 3.15 indicate that xylene

Bibliography

Arthur D. Little, March 1981, An Exposure and Risk Assessment for Trichloroethene, Final Draft Report, prepared for the U.S. Environmental Protection Agency Office of Water and Wastewater, Washington, D.C.

Demarco, Jack, 1983, "History of Treatment of Volatile Organic Chemicals in Water," in Occurrence and Removal of Volatile Organic Chemicals from Drinking Water, AWWA Research Foundation, Denver, Colorado.

The International Technical Information Institute, 1979, Toxic and Hazardous Industrial Chemicals Safety Manual, Tokyo, Japan.

Kleopfer, Robert D, Diane M. Easley, Bernard B. Hass Jr., and Trudy G. Delhi, 1985, "Anaerobic Degradation of Trichloroethylene in Soil," Environmental Science and Technology: 19(3), pp. 277-280.

Parsons, Francis, Paul R. Wood, Jack Demarco, 1984, "Transformations of Tetrachloroethene and Trichloroethene in Microcosms and Groundwater," Journal of the American Water Works Association: 76(3), pp. 56-59.

U.S. Environmental Protection Agency, 1979, Water-Related Fate of 129 Priority Pollutants, Vol. 2, Washington, D.C.

U.S. Environmental Protection Agency, 1986, "Quality Criteria for Water."

U.S. Environmental Protection Agency, July 1987, "EPA Regulatory Status for Chemicals in Drinking Water."

WASTE CHARACTERISTICS (2/90)

Toluene

Toluene is a clear, colorless, flammable liquid with a sweet, slightly pungent odor, similar to that of benzene. Other common synonyms for toluene are toluol and methylbenzene. Toluene is used in the manufacture of toluene diisocyanate, phenol, benzy and benzoyl derivatives, benzoic acid, toluene sulfonates, nitrotoluenes, vinyl toluene, and saccharin; as a solvent for paints and coatings; and is a component of automobile and aviation fuels. Toluene also is encountered during the manufacture of benzene (Sittig 1985).

At 25°C, toluene has a vapor pressure of 28.7 Torr and a water solubility of 534.8 mg/l. Its log octanol/water partition coefficient (log P) is 2.69. The most prevalent photochemical reaction of this compound is dissociation and the formation of the benzyl radical. Toluene is readily oxidized by molecular oxygen in the liquid phase, but the presence of water inhibits this reaction. No data pertinent to the oxidation of toluene in environmental waters is available. No experimental evidence indicates the hydrolysis of toluene in natural waters. Experimental evidence does suggest that volatilization of toluene is expected to be significant based, as does its vapor pressure of 28.7 Torr at 25°C (EPA 1979).

Based on its log P, toluene is expected to sorb to soil and sediment organic matter. Sorption may interfere with volatilization, but the extent to which this occurs is unknown. No direct information is available concerning the bioaccumulation potential of toluene, although it is not expected to bioaccumulate. Some experimental evidence indicates that substances with water solubilities greater than 50 mg/L tend not to bioaccumulate in aquatic organisms. Soil microbial populations are able to utilize toluene as a sole carbon source. Toluene is converted to cresols and catechols and then metabolized to acetic acid and pyruvic acid. Mammals oxidize toluene to benzoic acid which then reacts with clycine to form hippuric acid. Hippuric acid is readily excreted in urine (EPA 1979).

The EPA has proposed a drinking water maximum contaminant level (MCL) of 2,000 µg/l (EPA 1987). The freshwater aquatic acute lowest observed effect level (LOEL) for toluene is 17,500 µg/l (EPA 1986).

Localized exposure to toluene can cause eye, skin, and upper respiratory tract irritation. Continued skin exposure can lead to the removal of skin lipids which produces a dry, fissured dermatitis. Toluene splashed into the eyes may lead to irreversible damage. Systemic exposure effects include central nervous system depression characterized by headache, fatigue, dizziness, muscular weakness, drowsiness, incoordination, and collapse (Sittig 1985).

Sittig, Marshall, 1985, Handbook of Toxic and Hazardous Chemicals and Carcinogens, 2nd. ed., Noyes Publications, Park Ridge, New Jersey.

U.S. Environmental Protection Agency, 1979, Water Related Fate of 129 Priority Pollutants, Vol. 2, Washington, D.C.

U.S. Environmental Protection Agency, 1986, "Quality Criteria for Water."

U.S. Environmental Protection Agency, 1987, "EPA Regulatory Status for Chemicals in Drinking Water."

1,1,1-Trichloroethane

The compound 1,1,1-trichloroethane (1,1,1-TCA) is also known as methyl chloroform. It is used in the manufacture of aerosols, adhesives, textiles, paints, inks, and drain cleaners. Also, 1,1,1-TCA is an excellent solvent for greases, oils, tars, waxes, and organic materials, and is increasingly used in this application to replace trichloroethene. Use restrictions have been placed on trichloroethene because of its toxicity (ITII 1979; Little, Inc. 1982; JRB Assoc. 1982).

At room temperature 1,1,1-TCA is a volatile, colorless liquid. It has a vapor pressure of 96.0 Torr and a water solubility of 480 to 4,400 micrograms per liter (µg/l) at 20°C. The measured log octanol/water partition coefficient for 1,1,1-TCA is 2.17 (EPA 1979). The compound 1,1,1-TCA is produced by three different processes. The main process involves mixing vinyl chloride, hydrogen chloride, a ferric chloride catalyst, ammonia, chlorine, and stabilizers. Vinyl chloride is first converted to 1,1-dichloroethane, then the 1,1-dichloroethane is chlorinated to form 1,1,1-TCA. The second process involves the hydrochlorination of 1,1-dichloroethene in a ferric chloride catalyst. The third process that produces 1,1,1-TCA is the direct chlorination of ethane, which also yields 1,1-dichloroethane, 1,2-dichloroethane, ethyl chloride, 1,1-dichloroethene, vinyl chloride, and 1,1,2-dichloroethane. The vinyl chloride and 1,1-dichloroethene are recycled by catalytic hydrochlorination to 1,1-dichloroethane and 1,1,1-TCA (Little, Inc. 1982; JRB Assoc. 1982).

Volatilization is the major transport mechanism through which 1,1,1-TCA is dispersed throughout the environment. Once it has been volatilized into the atmosphere and troposphere, 1,1,1-TCA can be washed back to the lithosphere and hydrosphere during precipitation events. The atmospheric half-life of 1,1,1-TCA is six to ten years. This allows it to be widely distributed throughout the entire world. In the troposphere and stratosphere 1,1,1-TCA is photooxidized to trichloroacetaldehyde and then to trichloroacetic acid. It is believed that unreacted 1,1,1-TCA that reaches the stratosphere attacks and

depletes the ozone layer. Photolysis and hydrolysis are not significant environmental fate pathways for 1,1,1-TCA in surface water. Hydrolysis is expected, however, to be more important in the ground water environment where volatilization does not occur. The compound 1,1,1-TCA may be adsorbed onto sediments high in organic content. Its measured log octanol/water partition coefficient indicates that it may be bioaccumulated in aquatic life. However, the significance of these pathways is unknown (EPA 1979; Little, Inc. 1982). Under anaerobic conditions, 1,1,1-TCA has been shown to degrade to 1,1-dichloroethane (Demarco 1983).

The freshwater chronic lowest observed effect level (LOEL) for 1,1,1-TCA is 9,400 µg/l, indicating that it is not very toxic to aquatic life (EPA 1986). The maximum contaminant level (MCL) for 1,1,1-TCA in potable water is 200 µg/l (EPA 1987). Human exposure to 1,1,1-TCA can produce conjunctivitis and dermatitis; dizziness and incoordination; mental confusion and drowsiness; and unconsciousness (ITII 1979). Experimental evidence regarding the carcinogenicity of 1,1,1-TCE is conflicting; it is considered to be weakly mutagenic (Little, Inc. 1982).

Bibliography

Arthur D. Little, Inc., July 1982, An Exposure and Risk Assessment for Trichloroethanes, Final Draft Report, prepared for the U.S. Environmental Protection Agency Office of Drinking Water, Washington, D.C.

Demarco, Jack, 1983, "History of Treatment of Volatile Organic Chemicals in Drinking Water," Occurrence and Removal of Volatile Organic Chemicals from Drinking Water, AWWA Research Foundation, Denver, Colorado.

The International Technical Information Institute, 1979, Toxic and Hazardous Industrial Chemicals Safety Manual, Tokyo, Japan.

JRB Associates, Inc., August 1982, Occurrence of 1,1,1-Trichloroethane in Drinking Water, Food, and Air, prepared for the U.S. Environmental Protection Agency Office of Drinking Water, Washington, D.C.

U.S. Environmental Protection Agency, 1979, Water-Related Fate of 129 Priority Pollutants, Vol. 2, Washington, D.C.

U.S. Environmental Protection Agency, 1986, "Quality Criteria for Water."

U.S. Environmental Protection Agency, July 1987, "EPA Regulatory Status for Chemicals in Drinking Water."

Excerpts from Report(s) Prepared by Others

SECOR
International Incorporated

July 10, 2001

Ms. Christine R. Jump
Environmental Geologist
Bureau of Environmental Remediation
Kansas Department of Health and Environment
Forbes Field, Building 740
Topeka, KS 66620-0001

Subject: **VOC Analytical Sampling Results**
Vopak USA Facility
2041 North Mosely, Wichita, Kansas

Dear Ms. Jump:

On behalf of Vopak USA, attached please find copies of the analytical results pertaining to sampling conducted at the above referenced facility on May 23rd and 24th. This sampling was done in accordance with the correspondence from you dated April 10, 2001.

In addition to the results from wells requested by KDHE, we have also attached results from additional wells sampled onsite during the same mobilization. If you should have any questions regarding these results, or need additional information regarding field conditions at the time of sampling, please do not hesitate to contact me at your convenience.

Sincerely,

SECOR International Incorporated

Lynden Peters
Senior Engineer

Copy to: Mr. Darren Brown, CDM w/ attachments
Mr. Tony Pirelli, Vopak USA w/o attachments

Certificate of Analysis

STL Austin
14046 Summit Drive
Austin, Texas 78728

Tel: 512 244 0855
Fax: 512 244 0160
www.stl-inc.com

SEVERN TRENT SERVICES
STL Austin

ANALYTICAL REPORT

PROJECT NO. 003.60001.001

VOPAK

Lot #: I1E250161

Lynden Peters

Secor International, Inc.
120 S. Market Street
Suite 204
Wichita, KS 67202

SEVERN TRENT LABORATORIES, INC.

Chris J. Schepcoff
Project Manager

June 13, 2001

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories

STL Austin is a part of Severn Trent Laboratories, Inc.

EXECUTIVE SUMMARY - Detection Highlights

I1E250161

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MW4S 05/23/01 15:43 001				
1,1-Dichloroethane	5.5	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	7.4	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	84	2.5	ug/L	SW846 8260B
trans-1,2-Dichloroethene	3.2	2.5	ug/L	SW846 8260B
Trichloroethene	82	5.0	ug/L	SW846 8260B
Vinyl chloride	16	10	ug/L	SW846 8260B
MW4D 05/23/01 15:37 002				
1,1-Dichloroethane	5.4	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	6.5	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	76	2.5	ug/L	SW846 8260B
trans-1,2-Dichloroethene	2.5	2.5	ug/L	SW846 8260B
Trichloroethene	110	5.0	ug/L	SW846 8260B
Vinyl chloride	29	10	ug/L	SW846 8260B
MW1S 05/23/01 14:08 003				
cis-1,2-Dichloroethene	50	2.5	ug/L	SW846 8260B
Trichloroethene	25	5.0	ug/L	SW846 8260B
MW1D 05/23/01 14:00 004				
1,1-Dichloroethane	6.1	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	7.2	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	100	2.5	ug/L	SW846 8260B
trans-1,2-Dichloroethene	3.4	2.5	ug/L	SW846 8260B
Trichloroethene	94	5.0	ug/L	SW846 8260B
Vinyl chloride	26	10	ug/L	SW846 8260B
MW8D 05/24/01 12:01 005				
1,1-Dichloroethane	7.4	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	10	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	86	2.5	ug/L	SW846 8260B
trans-1,2-Dichloroethene	3.4	2.5	ug/L	SW846 8260B
Trichloroethene	170	5.0	ug/L	SW846 8260B
Vinyl chloride	30	10	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

I1E250161

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MW8S 05/24/01 11:58 006				
1,1-Dichloroethane	5.7	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	5.0	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	70	2.5	ug/L	SW846 8260B
Trichloroethene	120	5.0	ug/L	SW846 8260B
MW6S 05/24/01 10:48 007				
1,1-Dichloroethane	5.1	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	6.0	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	56	2.5	ug/L	SW846 8260B
Trichloroethene	120	5.0	ug/L	SW846 8260B
Vinyl chloride	11	10	ug/L	SW846 8260B
MW5S 05/24/01 10:14 008				
cis-1,2-Dichloroethene	33	2.5	ug/L	SW846 8260B
Trichloroethene	77	5.0	ug/L	SW846 8260B
MW5D 05/24/01 10:10 009				
1,1-Dichloroethane	7.2	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	9.9	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	84	2.5	ug/L	SW846 8260B
trans-1,2-Dichloroethene	3.1	2.5	ug/L	SW846 8260B
Trichloroethene	170	5.0	ug/L	SW846 8260B
Vinyl chloride	28	10	ug/L	SW846 8260B
MW3S 05/24/01 08:00 010				
Chloroform	5.4	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	3.2	2.5	ug/L	SW846 8260B
Trichloroethene	50	5.0	ug/L	SW846 8260B

SECOR
International Incorporated

DRAFT REMEDIAL INVESTIGATION REPORT
VAN WATERS & ROGERS, INC.
MOSLEY AVENUE FACILITY
WICHITA, KANSAS

Prepared by

SECOR International Incorporated

March 29, 1999

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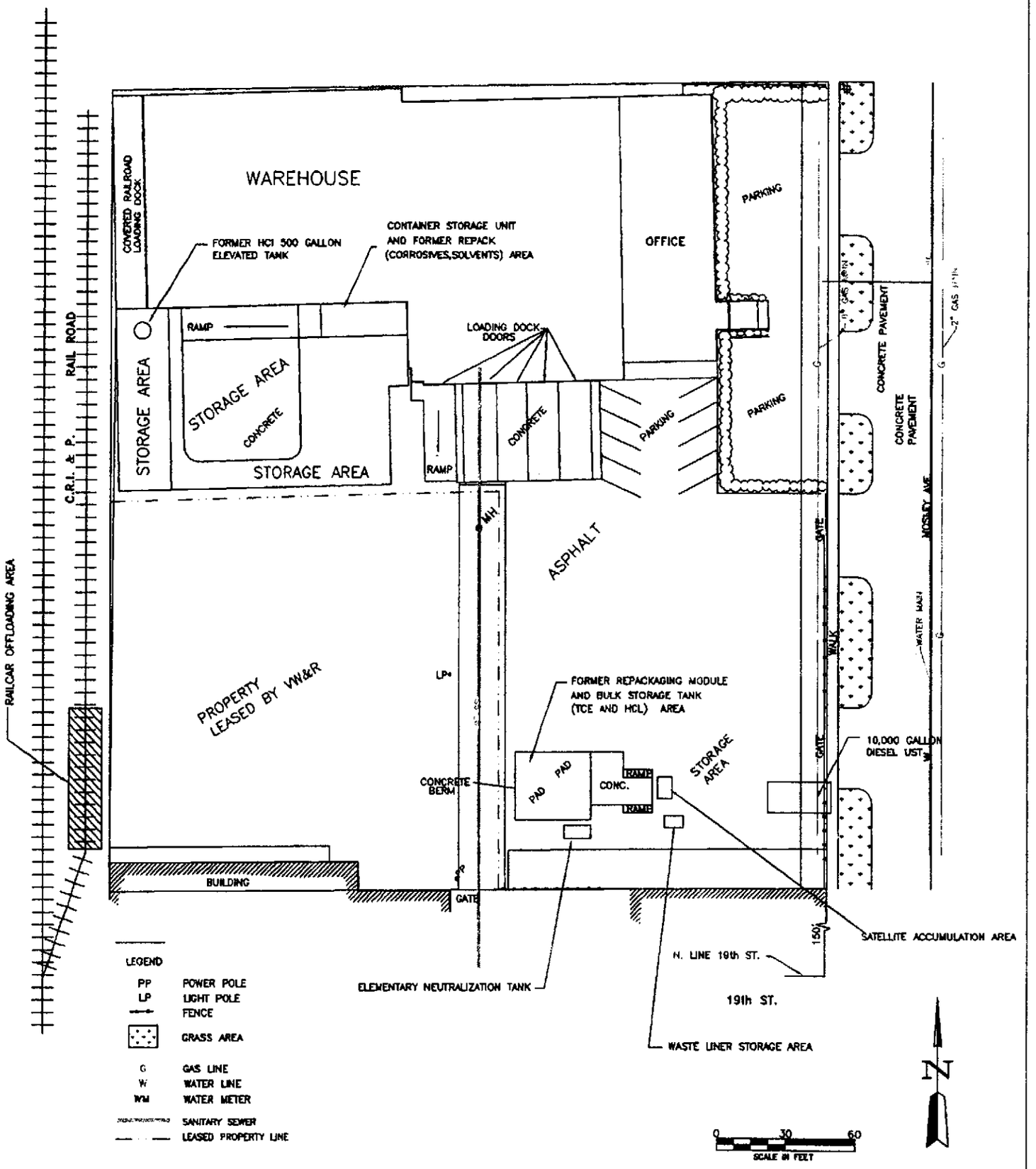

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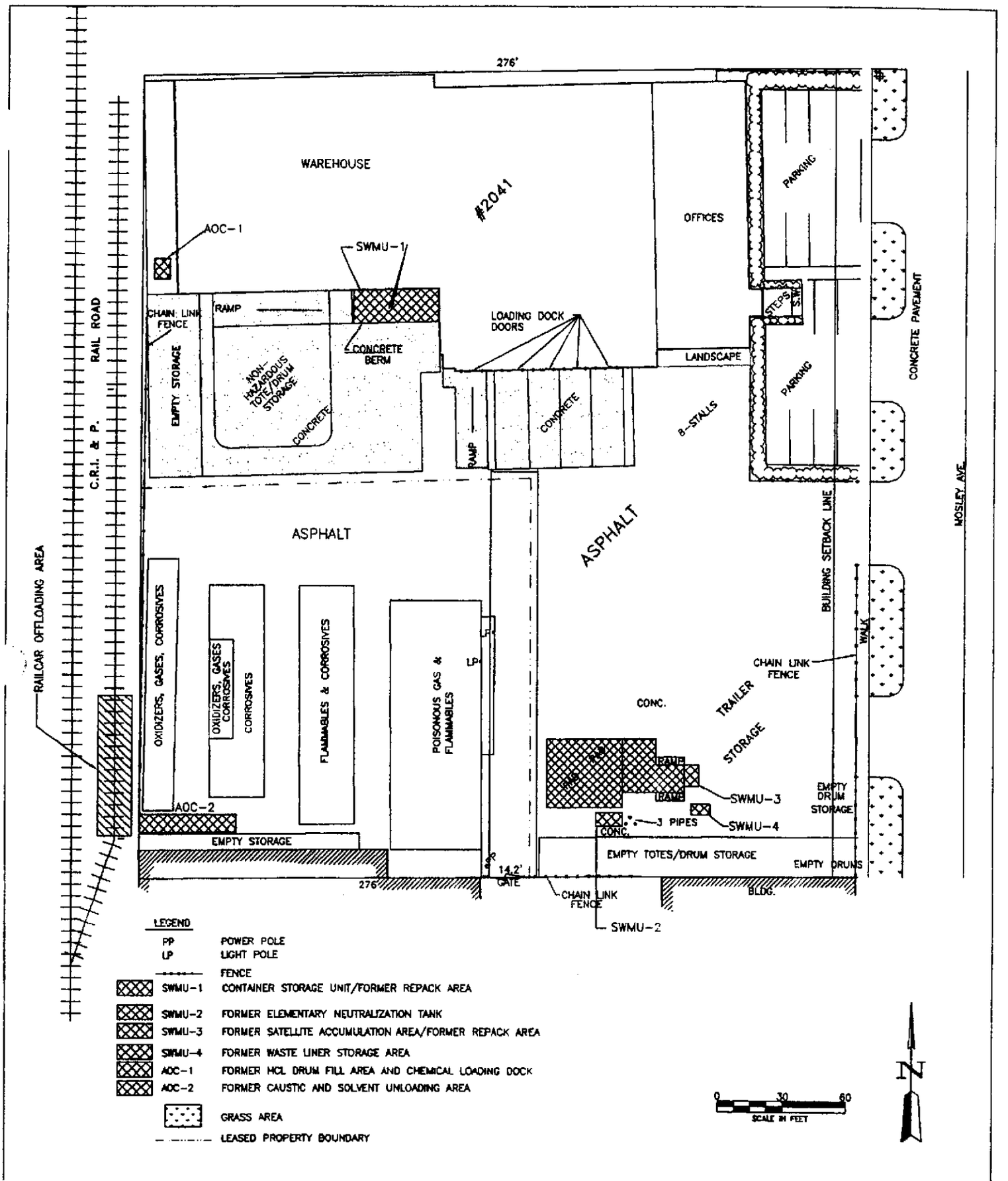
HISTORICAL FACILITY CONFIGURATION

FIGURE 3

SECOR PROJECT #: 60013-001-03 | FILENAME: Vanwtr3b.dwg | DATE: 07/25/97



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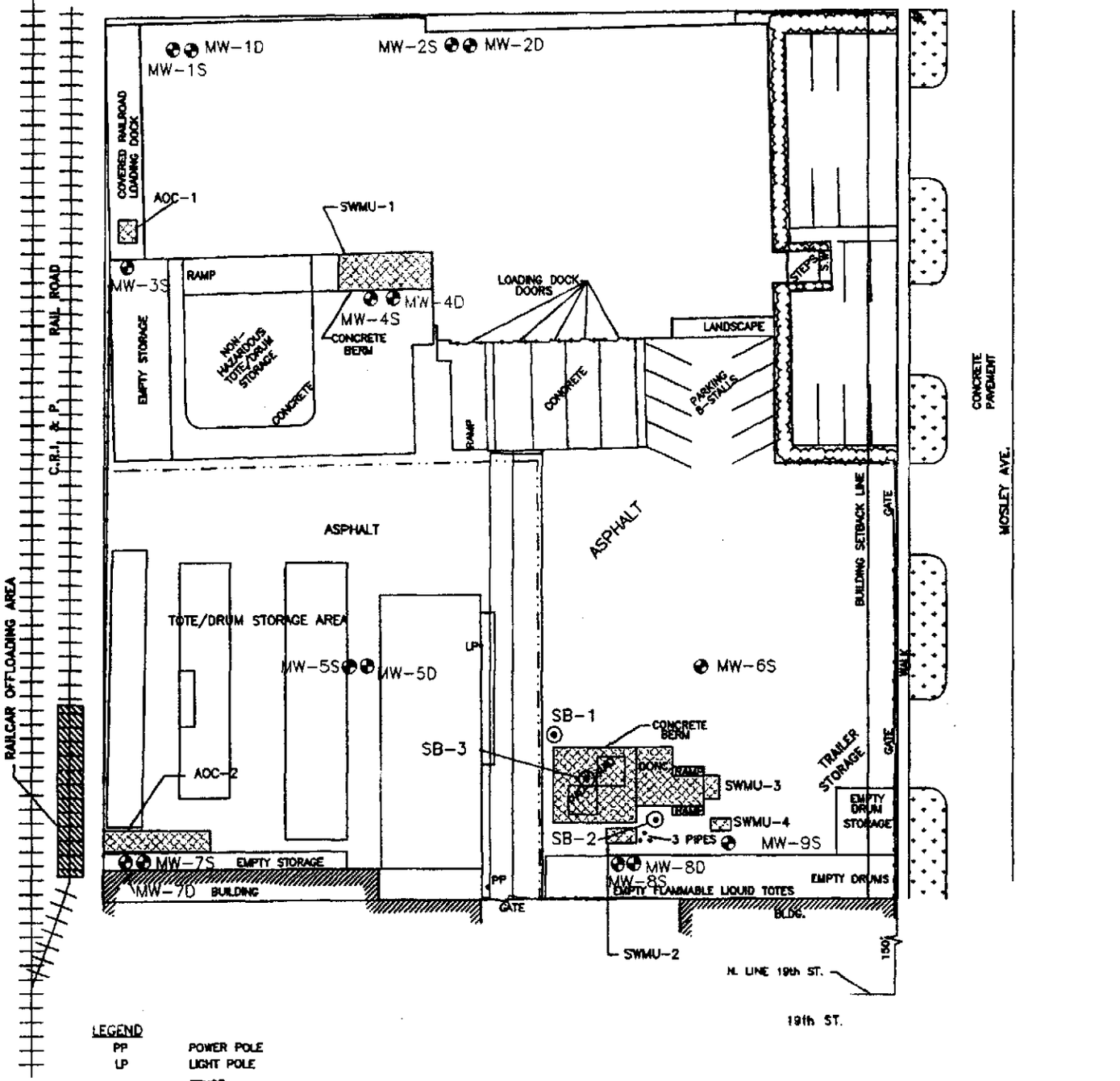
SWMU AND POTENTIAL AOC
LOCATION MAP

SECOR PROJECT #: 60013-001-03 | FILENAME: Vanwtr3b.dwg | DATE: 07/25/97

FIGURE
4



LEGEND

PP	POWER POLE
LP	LIGHT POLE
	FENCE
SWMU-1	CONTAINER STORAGE UNIT/FORMER REPACK AREA
SWMU-2	FORMER ELEMENTARY NEUTRALIZATION TANK
SWMU-3	FORMER SATELLITE ACCUMULATION AREA/FORMER REPACK AREA
SWMU-4	FORMER WASTE LINER STORAGE AREA
AOC-1	FORMER HCL DRUM FILL AREA AND CHEMICAL LOADING DOCK
AOC-2	FORMER CAUSTIC AND SOLVENT UNLOADING AREA
	SOIL SAMPLE LOCATIONS
	MONITORING WELL LOCATIONS

N

0 30 60
SCALE IN FEET

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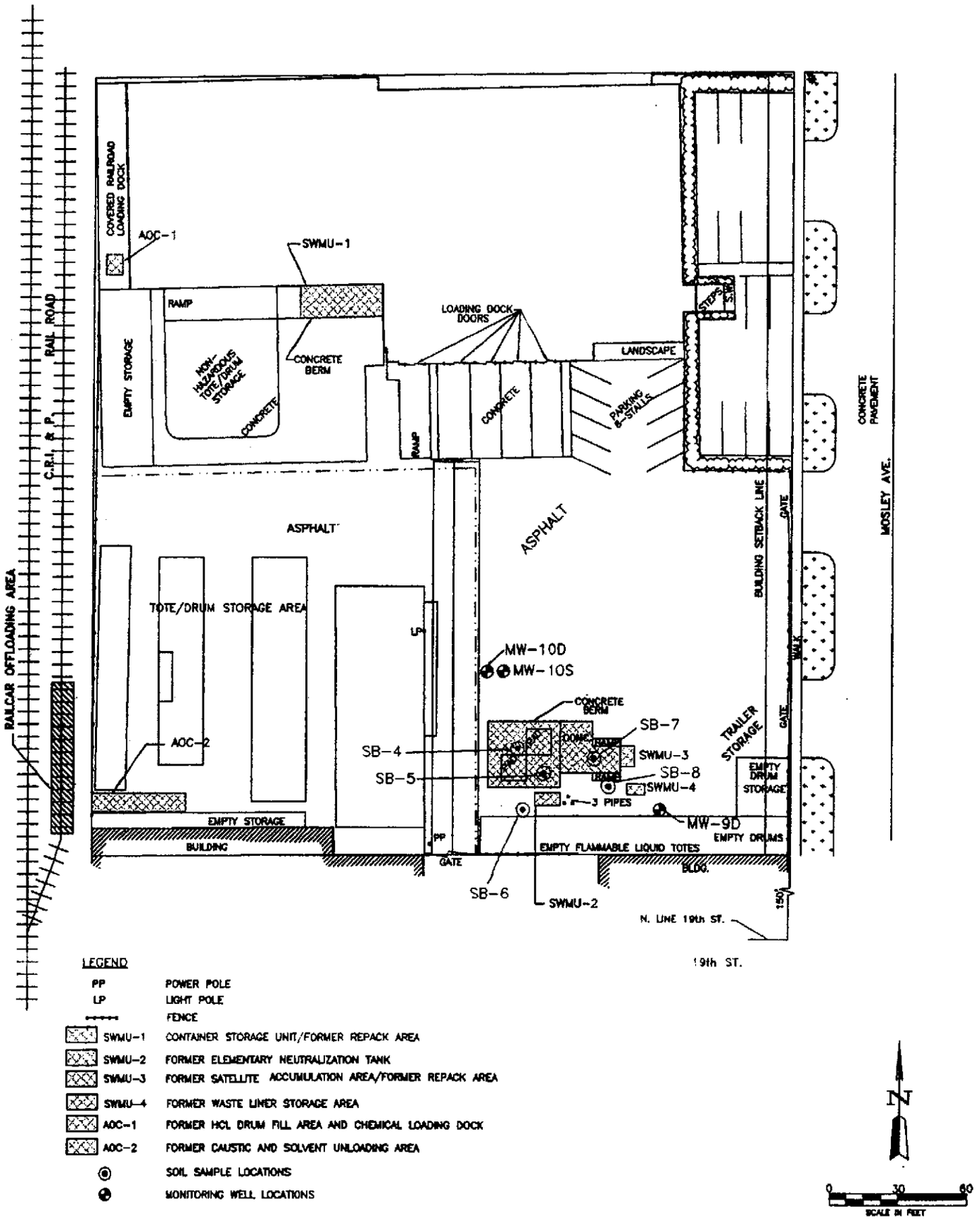
PHASE I SOIL BORING/ MONITORING WELL LOCATION MAP

FIGURE 9

SECOR PROJECT #: 60013-001-03 | FILENAME: Vanwtr3a.dwg | DATE: 12/07/98



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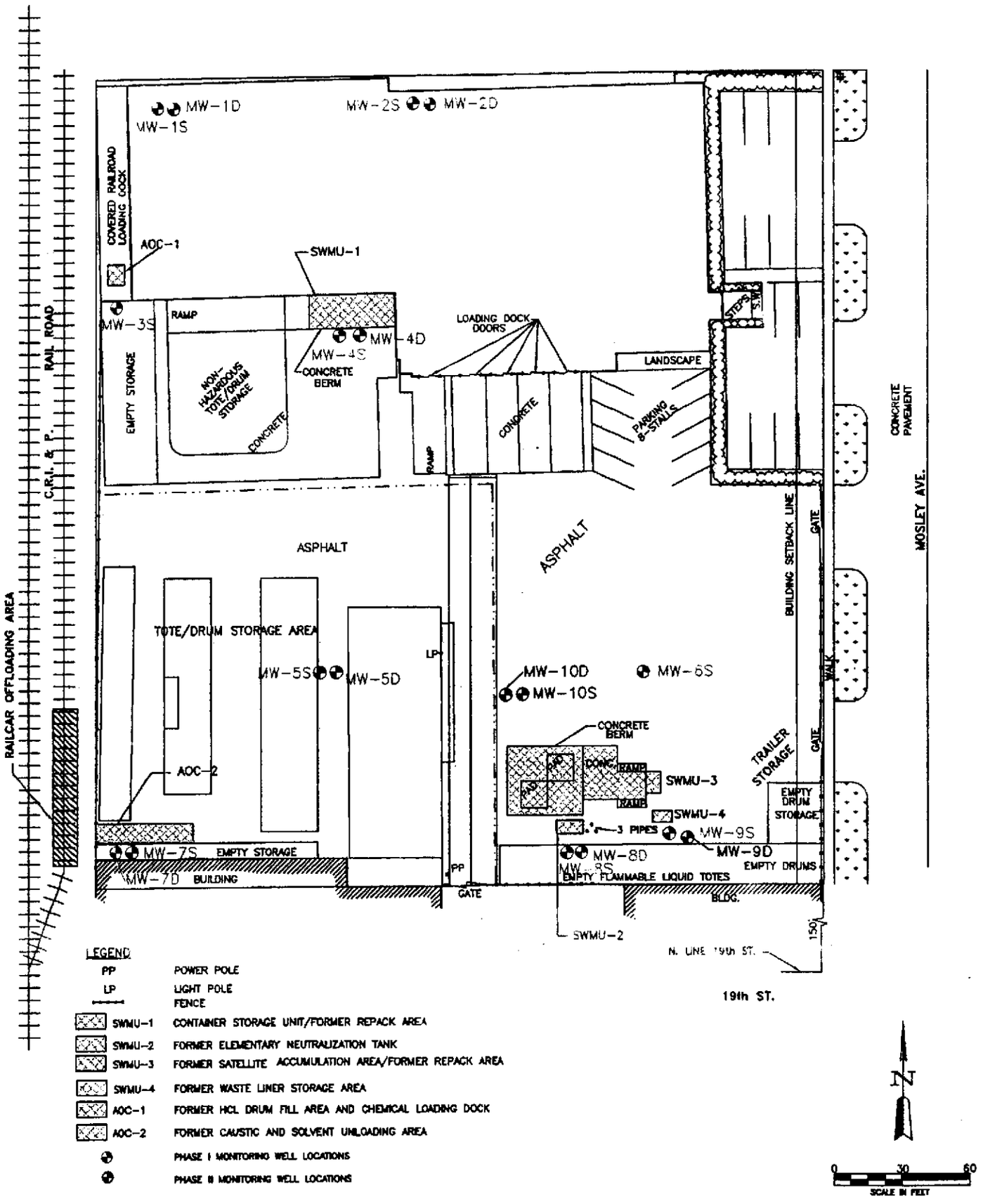
PHASE II SOIL BORING/ MONITORING WELL LOCATION MAP

FIGURE 10

SECOR PROJECT #: 60013-001-03 | FILENAME: Vanwtr3a.dwg | DATE: 12/07/98



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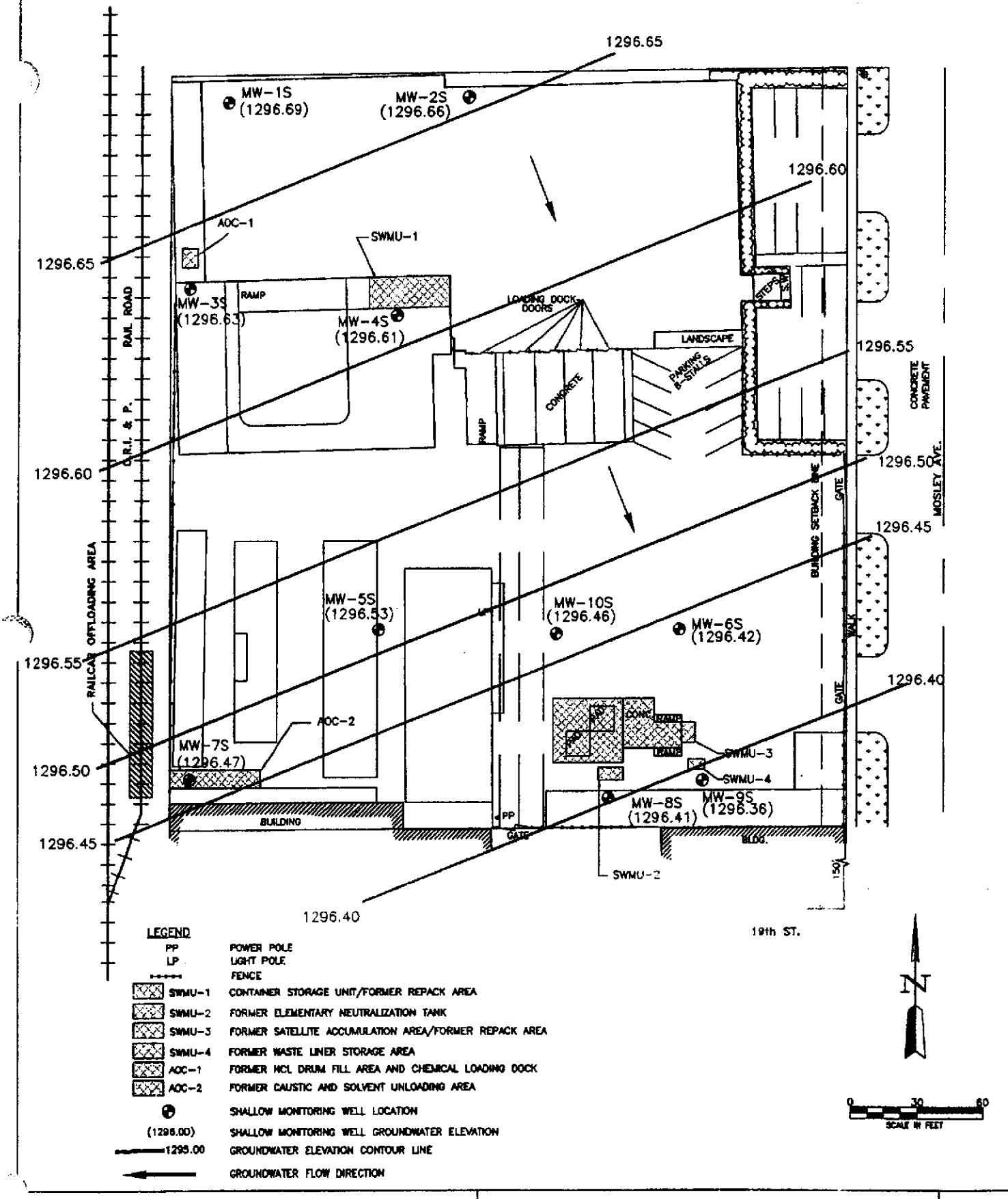
PHASE I AND PHASE II MONITORING WELL LOCATION MAP

SECOR PROJECT #: 60013-001-03 | FILENAME: Vanwtr3a.dwg | DATE: 12/07/98

FIGURE 14



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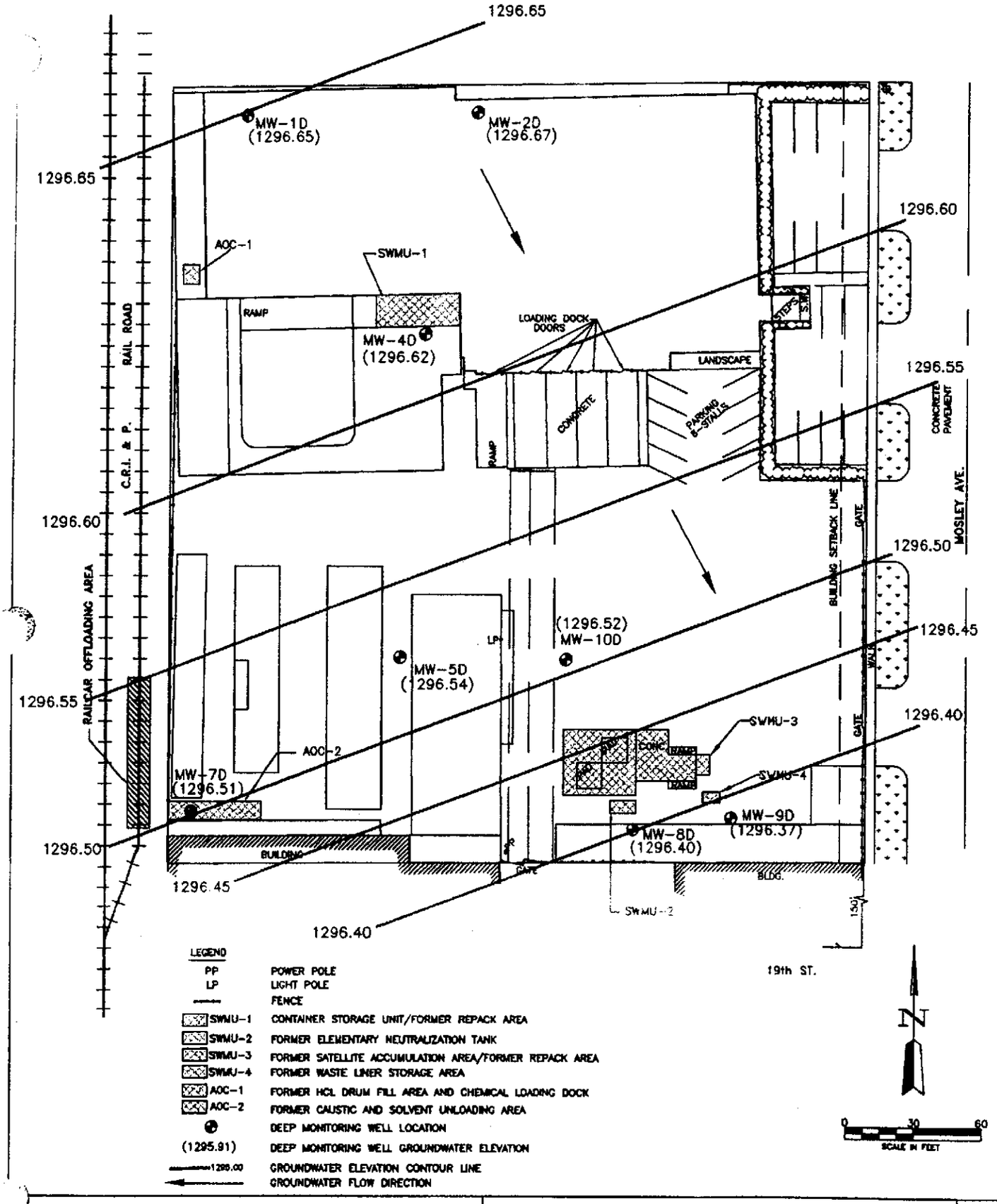
MOSLEY AVENUE, WICHITA, KANSAS

SHALLOW GROUNDWATER ELEVATION CONTOUR MAP
OCTOBER 1998

SECOR PROJECT #: 60013-001-03 | FILENAME: SHALLOWCONTOUR.dwg | DATE: 12/07/98

FIGURE
16



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VAN WATERS & ROGERS
WICHITA, KANSAS

DEEP GROUNDWATER ELEVATION CONTOUR MAP
OCTOBER 1998

FIGURE
18

SECOR PROJECT #: 60013-001-03 | FILENAME: deepcountour.dwg | DATE: 12/07/98

TABLE 6
Phase I Soil Analytical Results
VOCs, TOC, CEC and Corrosivity
Van Waters & Rogers
Mosley Avenue Facility, Wichita, Kansas
SECOR Project No. 60013-001-01

Soil Boring Locations	MW-1	MW-1	MW-2	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	MW-4	MW-5	MW-5	MW-6	MW-6	MW-7	MW-7	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9	SB-1	SB-1	SB-2	SB-2
Depth in feet bgs	7.5-8.5	12.5-13.5	4-5	14-15	18-19	4-5	13-14	4-5	9-10	12.5-13.5	9-10	25-26	4-5	9-10	9-10	20-22	2-3	7-8	13-14	27-29	3-5	7-9	4-5	9-10	3-4	9-10
TCE	ND	ND	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOC	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	ND	ND	NA	NA	619	ND	NA	ND	531	ND	NA	NA	NA	NA	NA	NA
CEC	NA	NA	463	NA	2480	NA	NA	NA	NA	NA	127	780	NA	NA	365	597	NA	898	759	363	NA	NA	NA	NA	NA	NA
Corrosivity (pH)	7.0	7.7	6.8	6.8	NA	7.1	5.2	7.9	8.2	7.7	7.3	7.8	7.8	7.6	NA	NA	7.0	6.6	NA	NA	7.2	7.4	8.0	7.1	6.4	7.4

bgs = Below Ground Surface
TCE = Trichloroethene [in micrograms per kilogram (mg/kg) equivalent to part per billion (ppb)] by USEPA Method 8260
TOC = Total Organic Carbon [in milligrams per kilogram (mg/kg) equivalent to part per million (ppm)] by SMCA Walkley-Bloc Method
CEC = Cation Exchange Capacity in mg/kg by USEPA Method 9081
Corrosivity = Equivalent to pH unitless by USEPA Method 9045
ND = Not Detected Above Analytical Detection Limit
NA = Not Analyzed For

TABLE 7
Phase II Soil Analytical Results
VOCs and Corrosivity
Van Waters & Rogers
Mosley Avenue Facility, Wichita, Kansas
SECOR Project No. 60013-001-01

Sample Locations	MW-9	MW-9	MW-10	MW-10	SB-4	SB-4	SB-5	SB-5	SB-6	SB-6	SB-7	SB-7	SB-8	SB-8
Depth in feet bgs	12-13	17-18	7-8	17-18	6-7	11-12	7-8	11-12	7-8	9-10	5-6	12-13	6-7	12-13
TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Corrosivity	6.8	6.9	6.4	7.2	6.5	5.8	6.3	6.2	6.7	6.5	5.6	6.3	6.2	6.6

bgs = Below Ground Surface
Corrosivity = Equivalent to pH unitless by USEPA Method 9045
TCE = Trichloroethene
VOC results by USEPA Method 8260.
ND = Not Detected Above Analytical Detection Limit

TABLE 8
Phase I Groundwater Analytical Results - VOCs
Shallow Wells
Van Waters & Rogers
Mosley Avenue Facility, Wichita, Kansas
SECOR Project No. 60013-001-01

DRAFT

Monitoring Well Locations	MW-1S	MW-2S	MW-3	MW-4S	MW-5S	MW-6	MW-7S	MW-8S	MW-9S	Trip Blank-1	Dup-1 (MW-5S)	Trip Blank-2	Field Blank-1	Field Blank-2
1,1-DCA	5.7	ND	ND	ND	ND	5.0	ND	5.2	9.5	ND	ND	ND	ND	ND
1,1-DCE	13	ND	ND	ND	ND	ND	7.8	8.5	20	ND	ND	ND	ND	ND
Cis-1,2-DCE	78	ND	25	24	18	33	29	52	87	ND	19	ND	ND	ND
Trans-1,2-DCE	ND	ND	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND
PCE	ND	ND	ND	6.0	ND	6.9	ND	ND	~~230~~ <5	ND LM	ND	ND	ND	ND
TCE	140	ND	130	63	110	92	120	190	~~ND 730~~	ND	110	ND	ND	ND
Vinyl Chloride	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	22	ND	ND	10	ND	ND	22	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	60	ND	ND
TOC	3.3	NA	NA	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH	6.9	6.9	6.7	7.1	7.2	6.7	7.2	6.8	6.8	NA	6.8	NA	NA	NA

1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
Cis-1,2-DCE = Cis-1,2-Dichloroethene
Trans-1,2-DCE = Trans-1,2-Dichloroethene
PCE = Tetrachloroethene

TCE = Trichloroethene
ND = Not Detected Above Analytical Detection Limit
NA = Not Analyzed For
TOC = Total Organic Carbon
All values expressed in micrograms per liter [equivalent to parts per billion (ppb)] except pH.

260 E ACCORDING TO LIM

TABLE 9
Phase II Groundwater Analytical Results - VOCs
Shallow Wells
Van Waters & Rogers
Mosley Avenue Facility, Wichita, Kansas
SECOR Project No. 60013-001-01

Monitoring Well Locations	MW-1S	MW-2S	MW-3	MW-4S	MW-5S	MW-6	MW-7S	MW-8S	MW-9S	MW-10S	Field Blank	Trip 1 Blank-1	Trip Blank-2
1,1-DCA	5.7	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND
1,1-DCE	13	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	ND	ND
Cis-1,2-DCE	130	ND	7.4	27	31	30	22	57	92	62	ND	ND	ND
Trans-1,2-DCE	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCE	ND	ND	ND	11	ND	8.8	ND	ND	ND	5.9	ND	ND	ND
TCE	150	ND	110	62	130	82	100	180	270	120	ND	ND	ND
Vinyl Chloride	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	17	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
Cis-1,2-DCE = Cis-1,2-Dichloroethene
Trans-1,2-DCE = Trans-1,2-Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
ND = Not Detected Above Analytical Detection Limit
NA = Not Analyzed For
All values expressed in micrograms per liter [equivalent to parts per billion (ppb)].

TABLE 10
Phase I Groundwater Analytical Results - VOCs
Deep Wells
Van Waters & Rogers
Mosley Avenue Facility, Wichita, Kansas
SECOR Project No. 60013-001-01

Monitoring Well Locations	MW-1D	MW-2D	MW-4D	MW-5D	MW-7D	MW-8D	Field Blank	Trip 1 Blank-1	Trip Blank-2
1,1-DCA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCE	55	52	51	40	43	43	ND	ND	ND
Cis-1,2-DCE	180	160	180	130	140	140	ND	ND	ND
Trans-1,2-DCE	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCE	760	630	670	510	550	700	ND	ND	ND
Vinyl Chloride	82	73	80	65	76	70	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	17	16	60
TOC	NA	NA	NA	NA	NA	5.0	NA	NA	NA
pH	7.2	7.1	6.9	7.1	7.9	8.1	NA	NA	NA

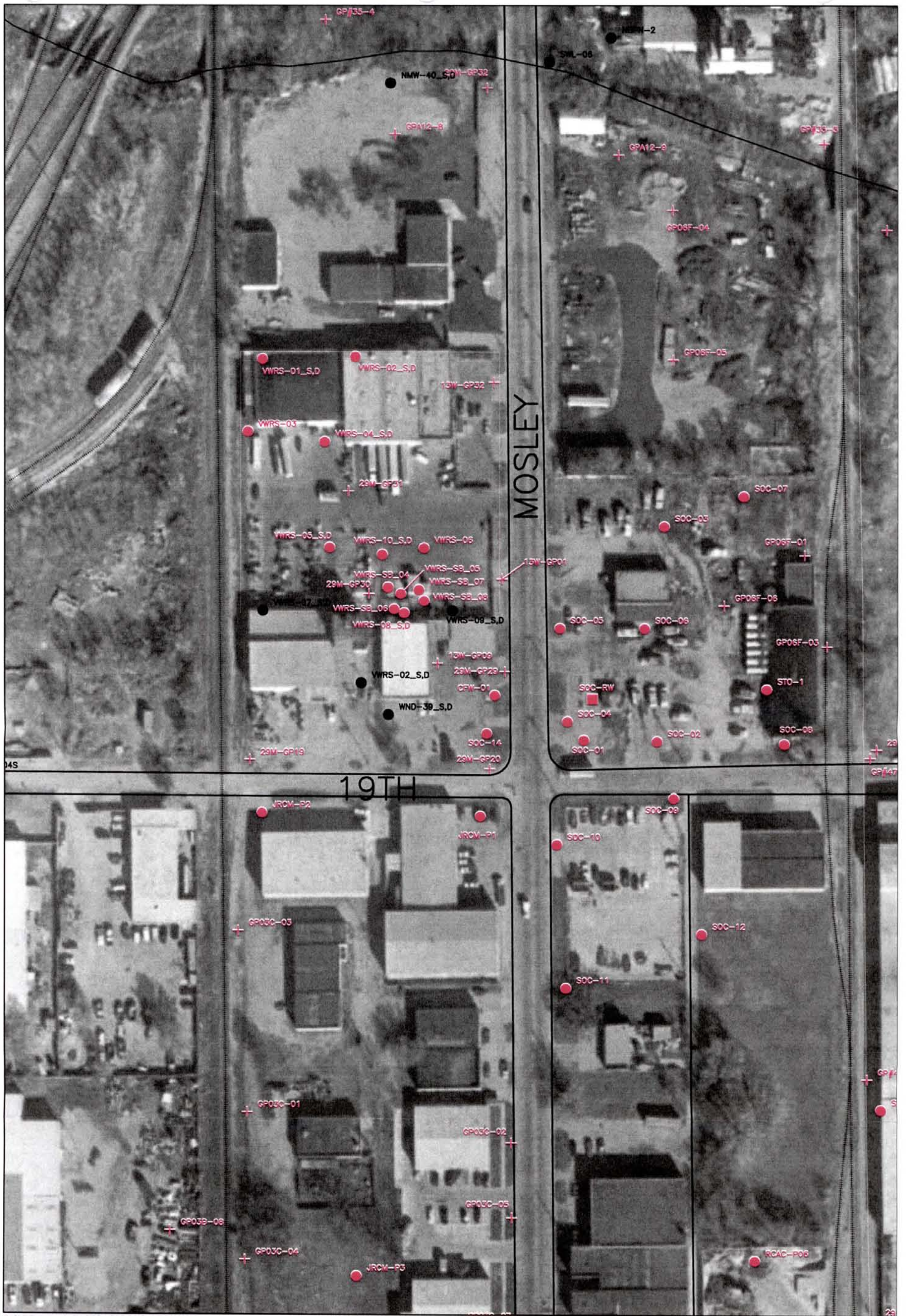
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
Cis-1,2-DCE = Cis-1,2-Dichloroethene
Trans-1,2-DCE = Trans-1,2-Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
ND = Not Detected Above Analytical Detection Limit
NA = Not Analyzed For
TOC = Total Organic Carbon
All values expressed in micrograms per liter [equivalent to parts per billion (ppb)] except pH.

TABLE 11
Phase II Groundwater Analytical Results - VOCs
Deep Wells
Van Waters & Rogers
Mosley Avenue Facility, Wichita, Kansas
SECOR Project No. 60013-001-01

Monitoring Well Locations	MW-1D	MW-2D	MW-4D	MW-5D	MW-7D	MW-8D	MW-9D	MW-10D	Field Blank	Trip 1 Blank-1	Trip Blank-2	Dup-1 (MW-4D)
1,1-DCA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-DCE	34	39	ND	19	ND	26	18	10	ND	ND	ND	25
Cis-1,2-DCE	190	160	150	88	100	110	92	55	ND	ND	ND	150
Trans-1,2-DCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCE	530	660	440	350	420	450	290	160	ND	ND	ND	450
Vinyl Chloride	86	96	63	40	64	60	49	26	ND	ND	ND	65
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
Cis-1,2-DCE = Cis-1,2-Dichloroethene
Trans-1,2-DCE = Trans-1,2-Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
ND = Not Detected Above Analytical Detection Limit
NA = Not Analyzed For
All values expressed in micrograms per liter [equivalent to parts per billion (ppb)].

Figure(s)
Aerial Photographs and Sample Location Map(s)



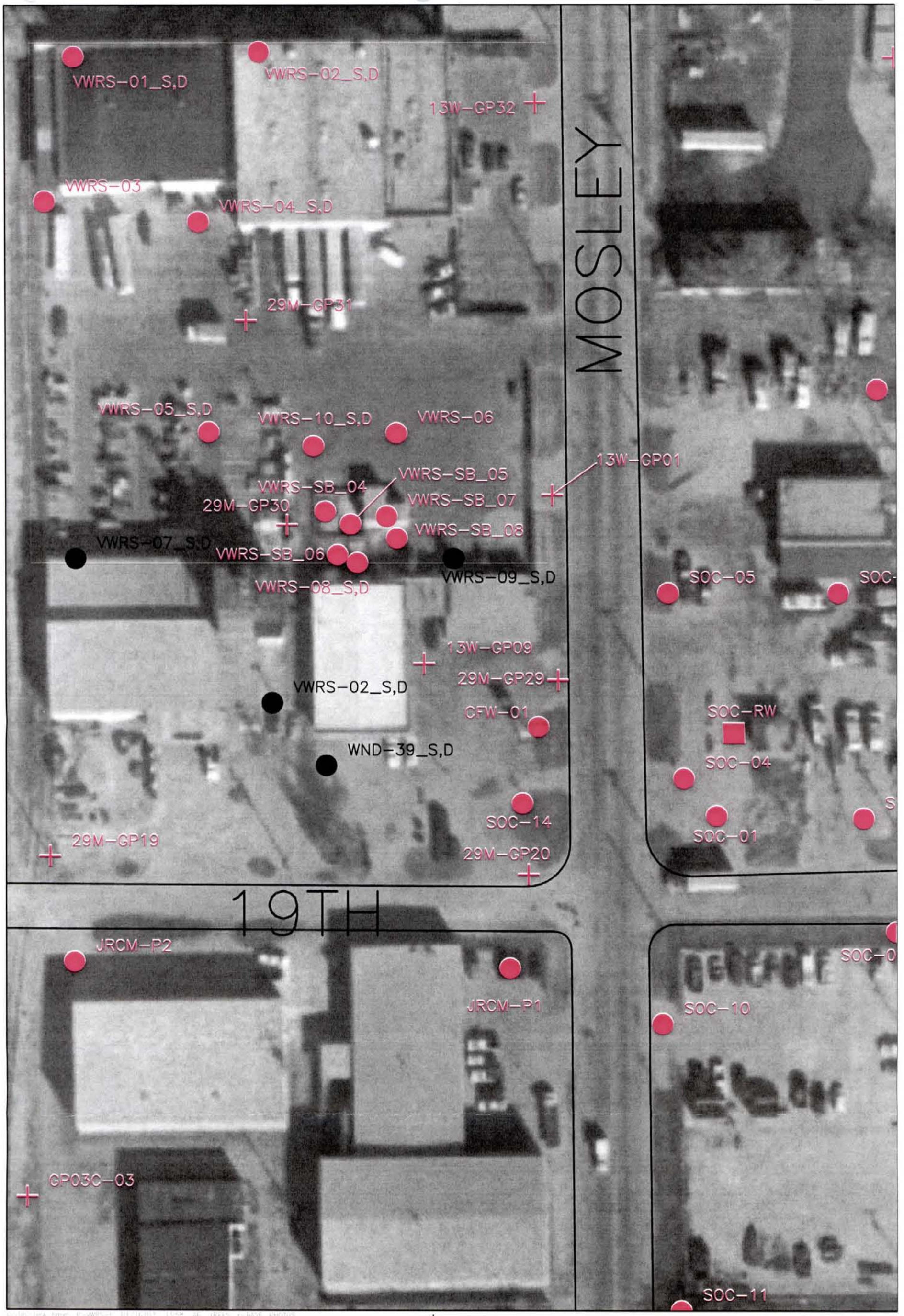
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Van Waters & Rodgers (South)



CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Van Waters & Rodgers (South)

Table(s)
Analytical Data Table(s)

VW&R South Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
WND-39D	D	12/08/97		µg/L	<1	**610**	**120 JS**	**54 JS**	**5**	**12 JS**	**34 JS**	<1	<1	**5.4**	**10.2**
WND-39D	D	05/08/01		µg/L	<1.0	**32**	**13**	**1.8**	<1.0	**2.5**	**1.3**	<1.0	<1.0	<1.0	**5.4**
WND-39S	S	12/08/97		µg/L	<1	**47 JDB**	**7.4 JDB**	<1	<1	<1	<1	<1	<1	<1	**6.4**
WND-39S	S	05/08/01		µg/L	<1.0	**29**	**3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

CDM

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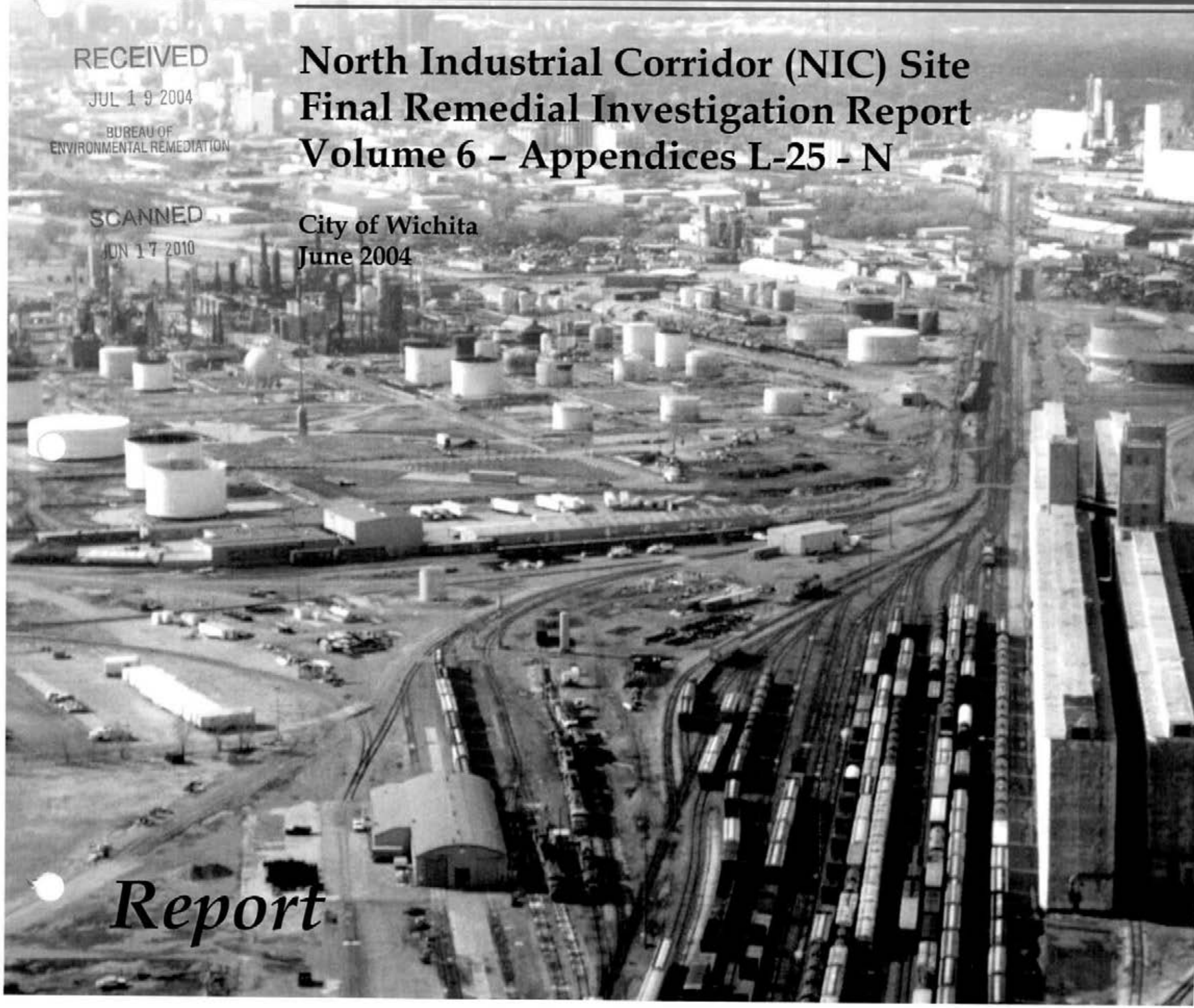
North Industrial Corridor (NIC) Site Final Remedial Investigation Report Volume 6 – Appendices L-25 - N

City of Wichita
June 2004



Report

Volume 6
Appendices L-25 – N

Appendix L-25 Via Christi Medical Center, St. Francis Campus
Appendix L-26 Waco Handi-Wash Facility
Appendix L-27 Western Uniform Facility
Appendix L-28 Wichita Brass & Aluminum
Appendix L-29 Wichita Terminal Elevator
Appendix L-30 11th and State
Appendix L-31 Sample Location Maps for Suspect Source Areas (as identified in Section 9.5)
Appendix M BER ARARs Policy and RSK Manual
Appendix N EDR Leaking Underground Storage Tank Report, December 2003

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Appendix L-25
Via Christi Medical Center, St. Francis Campus

PRP Evaluation Summary

Via Christi Medical Center, St. Francis Campus

929 North St. Francis

Identified Source Area PRP and Work Plan Addendum Map ID - NA

Contaminants of Concern – 1,1,1-TCA and its degradation products, methylene chloride and its degradation products, lead, arsenic and petroleum hydrocarbons

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Via Christi Medical Center, St. Francis Campus

The Via Christi Medical Center, St. Francis Campus (VCM) is a large facility encompassing an area of approximately 20 city blocks bounded by 11th Street on the north, Broadway Avenue on the west, Santa Fe Avenue on the east and Pine Street on the south.

Between 1995 and 1998 a Remedial Site Evaluation (RSE) was performed at the VCM complex by Allied Environmental Consultants, Inc.(AEC). The RSE consisted of historical and regulatory research, personnel interviews, onsite reconnaissance, and two phases of soil and soil sampling (AEC 2000 and AEC 1998). The RSE identified a variety of conditions of environmental concern. These included:

- Painting and material recycling operations on properties acquired for expansion of the VCM complex
- Reports alleging spillage, dumping and burial of waste
- The identification of tanks, and septic systems
- The discovery of buried drums and other debris while developing portions of the complex

Past remedial activities at the site were also summarized.

To integrate data collected at the VCM facility into the NIC database, the identity of groundwater sampling locations referred to in the VCM RCE investigation has been modified to provide the facility identifier and to correlate the sample location as noted in the facility's investigation. In the case of VCM, this nomenclature is implemented as such: the VCM investigation's sample location 1-1, collected by Geoprobe methods, is

referred to as VCM-GP1-1. Samples collected during the NIC investigation conducted by the City of Wichita are identified by the prefix "GPA", "GP#", or "GP02E". Monitoring well identities are modified by dropping the "MW" prefix and replacing it with VCM. Shallow monitoring well MW-2B would be renamed VCM-2_B by this convention. Samples collected during the 13th and Washington Investigation (KDHE 1993) are identified by the prefix "13W" followed by the sample location number.

1,1,1-TCA Contamination

Groundwater sampling data collected during the VCM RSE investigation show that a low level source of 1,1,1- Trichloroethane (TCA) exists on the VCM property as indicated by the presence of 1,1,1-TCA and its degradation products of 1,1- Dichloroethane (DCA), an chloroethane (CA) at concentrations higher than were observed at the upgradient boundary of the property. 1,1,1-TCA, 1,1-DCA and CA were each reported in shallow groundwater samples collected from the VCM property at up to 12 µg/L (location GP-8-3), 6.4 µg/L (location GP-0-5S) and 29 µg/L (location GP-8-3), respectively. These compounds were also respectively reported in the deep groundwater samples from the VCM property at 19 µg/L (location GP-8-1), 5.1 and concentrations (location GP-1-1) and 50 µg/L (location GP-8-1). None of these compounds was detected in any of the samples collected at the upgradient boundary of the VCM complex. 1,1- Dichloroethene (DCE), which is also a degradation product of 1,1,1-TCA, was also detected in the deep groundwater on the VCM property at up to 2.6 µg/L (location GP-6-12). However, it was also present in some of the deep groundwater samples collected near the upgradient boundary of the VCM complex (locations GP-3-4 and GP-3-7 at 1.4 µg/L and 1.6 µg/L, respectively). The observed concentrations of 1,1,1-TCA, and 1,2-DCA are below the respective MCL of 200 µg/L and 430 µg/L for these compounds. An MCL has not been established for CA.

Methylene Chloride Contamination

Groundwater sampling data collected during the VCM RSE investigation show that a low level source of methylene chloride (MeCl) exists on the VCM property as indicated by the presence of MeCl and its degradation product of chloromethane (CM) at concentrations higher than were observed at the upgradient boundary of the property. MeCl was reported at concentration above the MCL of 5.0 µg/L in two shallow groundwater samples collected from the VCM property at 6.1 µg/L and 11 µg/L (locationsGP-6-3 and GP-8-3, respectively) and in three deep groundwater Samples at 5.2 µg/L, 5.7 µg/L and 18 µg/L (locations GP-2-7, GP-6-7 and GP-8-1, respectively) and 29 µg/L (location GP-8-3), respectively. MeCl was also reported in three soil samples at concentrations exceeding KDHE' s Tier 2 Standard for the Soil to Groundwater Pathway of 0.03 mg/kg. These were the 11- to 12-foot depth at GP-5-3 (1.0 mg/kg), the 10- to 12-foot depth at GP-8-3 (0.335 mg/kg) and the 10- to 12-foot depth at GP-8-6 (0.14 mg/kg). Each of these samples also exceeded KDHE' s Tier 2 Standard for the Soil to groundwater pathway of 0.110 mg/kg for (CM), which was reported at 2.9, 1.5 and 0.4 mg/kg, respectively.

Lead Contamination

Data collected during the VCM RSE investigation show that the VCM property is a source of lead contamination in soil. Lead was detected above the KDHE Tier 2 Risk based Residential Soil Pathway of 400 mg/kg in three samples. These were the 1- to 2-foot depth at GP-5-6A, the 4- to 5-foot depth at GP-5-13 and the 1- to 2-foot depth at GP-5-14, which had reported concentrations of lead at 709 mg/kg, 15,039 mg/kg and 441 mg/kg, respectively. Lead was also reported in many of the unfiltered groundwater samples at concentrations above the 15 µg/L MCL. However, none of the filtered samples contained lead above the MCL. KDHE has not established a standard for the soil to groundwater pathway for lead.

Arsenic Contamination

Data collected during the VCM RSE investigation show that the VCM property is a source of arsenic contamination in soil. Arsenic was detected above the KDHE Tier 2 Risk based Residential Soil Pathway of 11 mg/kg in three samples. These were the 5-foot depth at GP-1-01, the 7-foot depth at GP-1-02 and the 7-foot depth at GP-1-03, which had reported concentrations of arsenic at 32.6 mg/kg, 21 mg/kg and 16.5 mg/kg, respectively. The sample from GP-01-1 also exceeded KDHE Tier 2 Standard for the Soil to Groundwater Pathway of 29 mg/kg. Arsenic was also reported in one unfiltered groundwater sample at a concentration above the 50 µg/L MCL. However, none of the filtered samples contained arsenic above the MCL.

Petroleum Hydrocarbon Contamination

Data collected during the VCM RSE investigation show that the VCM property is a source of groundwater contamination from a variety of petroleum compounds. These are benzene, naphthalene, n-propylbenzene (n-PB), 1,2,4-trimethylbenzene, (TMB) and 1,3,5-TMB. Benzene was reported above the MCL of 5 µg/L in one shallow groundwater sample (GP-0-05S at 22.8 µg/L). Naphthalene was reported above the MCL of 100 µg/L in two shallow groundwater samples (GP-0-05S at 618 µg/L and GP-5-3AS at 595 µg/L) and one deep groundwater sample (GP-5-3AD at 271 µg/L). MCLs have not been established for n-PB, 1,2,4-TMB and 1,3,5-TMB. However each of these compounds was detected in groundwater at concentrations that exceed the EPA Region 9 Preliminary remediation Goal for residential tap water of 61 µg/L, 12 µg/L and 12 µg/L, respectively. This occurred in two shallow groundwater samples (GP0-0-05S at 170 µg/L and GP-5-3AS at 230 µg/L) and one deep groundwater sample (GP-5-3AD at 352 µg/L) for n-PB; in one shallow groundwater sample (GP-5-3AS at 1,280 µg/L) and one deep groundwater sample (GP-5-3AD at 645 µg/L) for 1,2,4-TMB; and in one shallow groundwater sample (GP-5-3AS at 147 µg/L) and one deep groundwater sample (GP-5-3AD at 21.5 µg/L) for 1,3,5-TMB.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south in the north half of the facility and to the south-southwest and southwest in the southern half of the facility. Between June 1990 and May 1991 dewatering operations to permit construction of building

foundations and basements were performed in the area of 8th Street between Emporia and Santa Fe Streets. It is likely these operations temporarily altered groundwater flow patterns. Groundwater continues to be extracted at a reported rate of approximately 155 gallons per minute from a water control sump located near the southeast corner of St. Francis and 8th Street in the Medical Office Building. The August 2001 water level data do not indicate a significant alteration of ground water flow pattern in the area associated with this well. However, data in the area are sparse and the well likely affects local contaminant movement within at least the area of the block.

References

AEC 2000, *Final Phase 2 RSE and Addendum-Project Summary Report, Via Christi Regional Medical Center, St. Francis Campus, Wichita*, Allied Environmental Consultants, Inc. Wichita, Kansas, May 8, 2000.

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas*, Camp Dresser & McKee Inc., Wichita, Kansas.

AEC 1998, *Draft Phase 2 RSE- Project Summary Report, Via Christi Regional Medical Center, St. Francis Campus, Wichita*, Allied Environmental Consultants, Inc. Wichita, Kansas, April 13, 2000.

KDHE 1993, *Expanded Site Investigation, 13th and Washington Site, Wichita, Kansas, CERCLIS Identification Number KSD984988456*, Kansas Department of Health and Environment, Bureau of Environmental Remediation, Pre-Remedial Unit/Remediation Section, September, 1993.

Polk Directory Review and RCRA Information Summary

Potential source at property known as: 929 N. St. Francis
624 E. 9th N.

Current Owner/Business: Via Christi Regional Medical Center Inc.

Contact Person: Richard Stockton, CHSP

Mailing Address: Suite 195
1035 N. Emporia
Wichita, KS 67214

Phone Number:

Other information:

Potential source at property known as: 929 N. St. Francis (Parking Lot)

Current Owner/Business: St. Francis Hospital Etal

Contact Person: Richard Stockton, CHSP

Mailing Address: Suite 195
1035 N. Emporia
Wichita, KS 67214

Phone Number:

Other information:

Potential source at property known as: "Commons Areas & Facilities of the Heritage Plaza Condominium (Tax ID # B14422)

Current Owner/Business: Heritage Plaza
Suite 200
818 N. Emporia
Wichita, KS 67214

Contact Person: Richard Stockton, CHSP

Mailing Address: Suite 195
1035 N. Emporia
Wichita, KS 67214

Phone Number:

Other information:

Potential source at property known as: 808 N. Emporia
959 N. Emporia

Current Owner/Business: Via Christi Property Services Inc.

Contact Person: Richard Stockton, CHSP

Mailing Address: Suite 195
1035 N. Emporia
Wichita, KS 67214

Phone Number:

Other information:

Name of Company:	Via Christi St. Francis
Name and/or Contact Person:	
Street Address of Company:	**929 N. St. Francis**
City, State, and Zip Code:	
Regarding the Following Property:	929 N. St. Francis
Phone Number of Contact:	
History:	Please refer to the attached site history provided by Allied Environmental Consulting. For additional information, please refer to Via Christi's Phase II, which has been previously submitted to KDHE.

RCRA Info:

Property Address: 800 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Gene's Service Station
1953-Gene's Service Station
1951-Gene's Service Station
1949-Eddie's Service Station
1946-Golden Rule Service Station
1943-Golden Rule Service Station

Property Address: 806 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Private Residence
1977-Private Residence
1974-Private Residence
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Not Listed
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 808 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-vacant
1977-vacant
1974-vacant
1973-vacant
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-No Return
1963-No Return
1961-Private Residence-Shoppe The Gifts
1959-Private Residence-Shoppe The Gifts
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-vacant
1946-Private Residence
1943-Private Residence

Property Address: 816 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Private Residence
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 820 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 822 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 824 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 612 EAST MURDOCK STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Johnson Blacksmith Shop
1946-Johnson Dabner B Blacksmith
1943-Johnson Dabner B Blacksmith

Property Address: 614 EAST MURDOCK STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Reaearcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Kamen Industrial Building Materials
1967-Kaman Industrial Building Materials
1965-Kaman Industrial Building Materials
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Smed J Liquor Store
1949-Kamen Iron and Metal
1946-Not Listed
1943-Not Listed

Property Address: 618 EAST MURDOCK STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Kaman Iron and Metal
1963-Kaman Iron and Metal
1961-Not Listed as 618 E. Murdock but should be Kaman Iron and Metal
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Kaman Iron and Metal
1951-Kaman Iron and Metal
1949-Kaman Iron and Metal
1946-Kaman Iron and Metal
1943-Kaman Iron and Metal

Property Address: 622 EAST MURDOCK STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-vacant
1981-Kamen Iron & Metal Co.
1979-Kamen Iron & Metal Co.
1977-Kamen Iron & Metal Co.
1974-vacant
1973-vacant
1971-Surplus Mart General Mdse.
1969-vacant
1967-Halstead Auto Parts
1965-vacant
1963-Not Listed
1961-Kaman Indr. & Building Material Inc.
1959-Kaman Indr. & Building Material Inc.
1957-Jackson-Walker Fuel and Material Co.
1955-Jackson-Walker Fuel and Material Co.
1953-Jackson-Walker Fuel and Material Co.
1951-Jackson-Walker Fuel and Material Co.
1949-Jackson-Walker Fuel and Material Co.
1946-Jackson-Walker Fuel and Material Co.
1943-Jackson-Walker Fuel and material Co.

Property Address: 1000 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-vacant
1971-vacant
1969-vacant
1967-vacant
1965-vacant
1963-Private Residence & Pennington's Cofry
1961-Private Residence & Pennington's Cofry
1959-Private Residence & Pennington's Confectionery
1957-Private Residence & Pennington's Cconfectionery
1955-Private Residence & Pennington's Confectionery
1953-Private Residence & Pennington's Confectionery
1951-Private Residence & Pennington's Confectionery
1949-Private Residence & Pennington's Confectionery
1946-Private Residence & Pennington's Cafe
1943-Private Residence & Pennington's Cafe

Property Address: 1002 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-vacant
1971-vacant
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-vacant
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-vacant

Property Address: 1004 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 1016 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Smith Bros Rug & Carpet Cleaning Co.
1973-Smith Bros Rug & Carpet Cleaning Co.
1971-Smith Bros Rug & Carpet Cleaning Co.
1969-Smith Bros Rug & Carpet Cleaning Co.
1967-Smith Bros Rug & Carpet Cleaning Co. No Return
1965-Smith Bros Rug & Carpet Cleaning Co.
1963-Smith Bros Rug & Carpet Cleaning Co.
1961-Smith Bros Rug & Carpet Cleaning Co.
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1020 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source; Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Smith Bros Rug & Cleaning Co.
1973-vacant
1971-vacant
1969-Private Residence-Smith Lawrence
1967-Not Listed
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1024 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Private Residence
1973-vacant
1971-Private Residence
1969-vacant
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-vacant
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1026 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Private Residence
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Not Listed
1943-Not Listed

Property Address: 1028 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-vacant
1971-vacant
1969-No Return
1967-Private Residence
1965-vacant
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residnece
1949-Private Residence
1946-Private Residnece
1943-Private Residence

Property Address: 1034 NORTH ST, FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not LIsted
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 1038 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-vacant
1973-vacant
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residnece
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1040 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Private Residence
1973-vacant
1971-No Return
1969-Private Residence
1967-vacant
1965-vacant
1963-Private Residence
1961-Private Residence
1959-vacant
1957-Not Listed
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Not Listed

Property Address: 1041 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1042 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-vacant
1971-vacant
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1050 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Private Residence
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1052 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-vacant
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Not Listed
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1054 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-vacant
1973-vacant
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1056 NORTH ST. FRANCIS STEET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Private Residence
1973-No Return
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1058 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Private Residence
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1067 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 512 EAST NINETH STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-St. Francis RMC
1991-St. Francis RMC
1988-St. Francis RMC
1987-St. Francis RMC
1984-85-St. Francis RMC
1983-St. Francis RMC
1981-St. Francis School of Nursing
1979-St. Francis School of Nursing
1977-St. Francis School of Nursing
1975-St. Francis School of Nursing
1973-St. Francis School of Nursing
1971-St. Francis School of Nursing
1969-St. Francis Nursing School Home and School
1967-St. Francis Nursing School Home and School
1965-St. Francis Nursing School Home and School
1963-St. Francis Nursing School Home and School
1961-St. Francis Nursing School Home and School
1959-St. Francis Nursing School Home
1957-St. Francis Nursing School Home
1955-St. Francis Nursing School Home
1953-St. Francis Nursing School Home
1951-St. Francis Nursing School Home
1949-St. Francis Nursing School Home
1946-St. Francis Nursing School Home
1943-St. Francis Nursing School Home

Property Address: 522 EAST NINETH STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 1006 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listesd
1943-Not Listed

Property Address: 1012 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 1022 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 1030 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-St. Francis Hospital stge & offices
1979-St. Francis Hospital stge & offices
1977-St. Francis Hospital stge & offices
1974-St. Francis Hospital stge & offices
1973-St. Francis Hospital stge & offices
1971-St. Francis Hospital stge & offices
1969-St. Francis Hospital stge & offices
1967-St. Francis Hospital stge & offices
1965-St. Francis Hospital stge & offices
1963-Apartments
1961-Apartments
1959-Apartments
1957-Apartments
1955-Apartments
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1036 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence-furnished rooms
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1040 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1044 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-vacant
1991-Not Listed
1988-Private Residence
1987-Private Residence
1984-85-Private Residence
1983-Private Residence
1981-Private Residence
1979-Private Residence
1977-Private Residence
1974-Private Residence
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-vacant
1963-vacant
1961-Not Listed
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1050 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Hahner Forman & Harness Inc. stge
1965-vacant
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence-furnished rooms
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1056 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1060 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1062 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-No Return
1971-Private Residence-Apartments
1969-Private Residence
1067-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address 1066 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not lIsted
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1100 NORTH EMPORIA AVENUE

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Private Residence
1991-Private Residence
1988-Private Residence
1987-Private Residence
1984-85-Private Residence
1983-Private Residence
1981-Private Residence
1979-Private Residence
1977-Private Residence
1974-Private Residence
1973-Private Residence
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-McCarrier & McFarland Real Estate
1946-Private Residence
1943-Private Residence

Property Address: 1021 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-No Listed
1974-St. Francis Boiler Room
1973-St. Francis Boiler Room
1971-St. Francis Bolier Room
1969-St. Francis Boiler Room
1967-St. Francis Boiler Room
1965-St. Francis Boiler Room
1963-St. Francis Boiler Room
1961-St. Francis Boiler Room
1959-St. Francis Boiler Room
1957-St. Francis Boiler Room
1955-St. Francis Boiler Room
1953-St. Francis Boiler Room
1951-St. Francis Boiler Room
1949-St. Francis Nurses' Home
1946-St. Francis Nurses' Home
1943-Private Residence

Property Address: 1035 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-St. Francis RMC child development
1991-St. Francis RMC child development
1988-St. Francis RMC child development
1987-St. Francis RMC child development
1984-85-St. Francis RMC child development
1983-St. Francis RMC child development
1981-St.Francis Hospital child development Apartments
1979-Apartments
1977-Apartments
1974-Apartments
1973-Apartments
1971-Apartments
1969-Apartments
1967-Apartments
1965-Apartments
1963-Apartments
1961-Apartments
1959-Apartments
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 1041 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1045 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-vacant
1971-Private Residence
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1049 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1051 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-vacant
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1053 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-vacant
1946-Private Residence
1943-Private Residence

Property Address: 1055 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-vacant
1971-vacant
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1057 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not listed
1973-vacant
1971-vacant
1969-Private Residence
1967-Private Residence
1965-Private Residence
1963-Private Residence
1961-Private Residence
1959-Private Residence
1957-Private Residence
1955-Private Residence
1953-Private Residence
1951-Private Residence
1949-Private Residence
1946-Private Residence
1943-Private Residence

Property Address: 1067 NORTH ST. FRANCIS STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 965 NORTH SANTA FE STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 621 EAST NINETH STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 623 EAST NINETH STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Not Listed
1963-Not Listed
1961-Not Listed
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Not Listed
1951-Not Listed
1949-Not Listed
1946-Not Listed
1943-Not Listed

Property Address: 622 EAST MURDOCK STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-vacant
1981-Kamen Iron & Metal Co.
1979-Kamen Iron & Metal Co.
1977-Kamen Iron & Metal Co.
1974-vacant
1973-vacant
1971-Surplus Mart General Mdse.
1969-vacant
1967-Halstead Auto Parts
1965-vacant
1963-Not Listed
1961-Kaman Indr. & Building Material Inc.
1959-Kaman Indr. & Building Material Inc.
1957-Jackson-Walker Fuel and Material Co.
1955-Jackson-Walker Fuel and Material Co.
1953-Jackson-Walker Fuel and Material Co.
1951-Jackson-Walker Fuel and Material Co.
1949-Jackson-Walker Fuel and Material Co.
1946-Jackson-Walker Fuel and Material Co.
1943-Jackson-Walker Fuel and material Co.

Property Address: 618 EAST MURDOCK STREET

Allied Environmental Consultants, Inc.
Project Number: 95734-4
Researcher: Jo Eslinger
Company: Kansas Research
Research Source: Wichita City Directories

1992-Not Listed
1991-Not Listed
1988-Not Listed
1987-Not Listed
1984-85-Not Listed
1983-Not Listed
1981-Not Listed
1979-Not Listed
1977-Not Listed
1974-Not Listed
1973-Not Listed
1971-Not Listed
1969-Not Listed
1967-Not Listed
1965-Kaman Iron and Metal
1963-Kaman Iron and Metal
1961-Not Listed as 618 E. Murdock but should be Kaman Iron and Metal
1959-Not Listed
1957-Not Listed
1955-Not Listed
1953-Kaman Iron and Metal
1951-Kaman Iron and Metal
1949-Kaman Iron and Metal
1946-Kaman Iron and Metal
1943-Kaman Iron and Metal

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -14465 Pin: 125160320100500
Page: 1

Name VIA CHRISTI REGIONAL MEDICAL CENTER INC
Situs 929 N SAINT FRANCIS
WICHITA KS 67214-3821

Tax	
Specials	43,858.79
Total	43,858.79

Phone
Mail SUITE 195
To 1035 N EMPORIA
WICHITA KS 67214

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 134243

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -14465
Page: 2

Pin: 125160320100500
Name: VIA CHRISTI REGIONAL MEDICAL CENTER INC

Legal Description

PT LOT 1 BEG NE COR S 590.38 FT E 147.38 FT S 143 FT W 14.5 FT S 340 FT W 142 FT S 50 FT W 165 FT S 50 FT E 165 FT S TO N LI ST W 50 FT M-L SWLY ALG CUR 225.06 FT N 183.62FT M-L W 150.1 FT TO W LI N 25 FT W 150 FT N 390.16 FT W 40 FT N TO N LI E 379.15 FT SE 99.44 FT E 106.34 FT TO BEG EXC BEG 175 FT S INTSEC OF S LI 9TH ST EXT W & E LI ST. FRANCIS AVE EXT N TH E 150 FT S 125 FT W 150 FT N TO BEG BLOCK 1 ST. FRANCIS REGIONAL MED. CTR. 2ND. EXEMPT NO. 91-7432-TX

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -14466
Pin: 125160320100100
Page: 1

Name VIA CHRISTI REGIONAL MEDICAL CENTER INC
Situs 624 E 9TH ST
WICHITA KS 67214

Tax	377.05
Specials	4.72
Total	381.77

Phone
Mail SUITE 195
To 1035 N EMPORIA
WICHITA KS 67214

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 134259

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -14466
Page: 2

Pin: 125160320100100
Name: VIA CHRISTI REGIONAL MEDICAL CENTER INC

Legal Description
LOT 2 BLOCK 1
ST. FRANCIS REGIONAL MED. CTR. 2ND.EXEMPT NO. 91-7461-TX

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -14465-0009 Pin: 125160320102600
Page: 1

Name ST FRANCIS HOSPITAL ETAL
Situs
KS

Tax	
Specials	5,143.76
Total	5,143.76

Phone
Mail (PARKING LOT)
To 929 N ST. FRANCIS
WICHITA KS 67214-3821

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 134252
USD-259-TD-NIC
Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -14465-0009
Pin: 125160320102600
Page: 2
Name: ST FRANCIS HOSPITAL ETAL

Legal Description

THAT PT LOT 1 BEG E LI AT PT 508 FTS OF S LI LOT 2 BLOCK 1 ST. FRANCIS REG. MED. CTR. ADD. TH W 142 FT S 50 FT W 165 FT S 50 FT E 165 FT S TO N LI ST. FRANCIS AVE. E 40 FT M-L NELY ALG CUR 164.93 FT N TO BEG BLOCK 1 ST. FRANCIS REGIONAL MED. CTR. 2ND. EXEMPT NO. 91-7462-TX

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -14465-0010 Pin: 125160320102500
Page: 1

Name ST FRANCIS HOSPITAL ETAL
Situs
KS

Tax	33,829.80
Specials	75.68
Total	33,905.48

Phone
Mail (PARKING GARAGE)
To 929 N ST. FRANCIS
WICHITA KS 67214-3821

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USO-259-TD-NIC

Levy 116.554
Control 134255

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
View Property Information
RKEMPTON
Function 06 Legal Description Level 01
Key No.: B -14465-0010 Pin: 125160320102500
Page: 2 Name: ST FRANCIS HOSPITAL ETAL

Legal Description
BEG SE COR LOT 1 W 150.1 FT N 301 FT E 150.1 S 301 FT TO BEG
BLOCK 1 ST. FRANCIS REGIONAL MED. CTR. 2ND.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -14422 Pin: 125160320102300
Page: 1

Name ST FRANCIS HOSPITAL
Situs
KS

Tax	
Specials	6.30
Total	6.30

Phone
Mail % HERITAGE PLAZA
To SUITE 200
818 N EMPORIA
WICHITA KS 67214-3726

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 134176
USD-259-TD-NIC
Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -14422
Page: 2

Pin: 125160320102300
Name: ST FRANCIS HOSPITAL

Legal Description

COMMON AREAS & FACILITIES OF THE HERITAGE PLAZA CONDOMINIUM BEING
THAT PT LOT 1 BEG 105 FT N INTERSECOF N LI MURDOCK & E LI EMPORIA AVE.
N 225 FT E 150 FT S 225 FT W TO BEGBLOCK 1
ST FRANCIS REGIONAL MED. CENTER ADD

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -00847 Pin: 125160320102400B
Page: 1

Name VIA CHRISTI PROPERTY SERVICES INC
Situs 808 N EMPORIA
WICHITA KS 67214

Tax	740.82
Specials	6.30
Total	747.12

Phone
Mail To SUITE 195
1035 N EMPORIA
WICHITA KS 67214

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 119394

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -00847
Page: 2

Pin: 125160320102400B
Name: VIA CHRISTI PROPERTY SERVICES INC

Legal Description
LOT 17 EXC THAT PART DED FOR ST. EMPORIA AVE.
MURDOCK GROVE ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -14465-0002 Pin: 125160320101000
Page: 1

Name VIA CHRISTI PROPERTY SERVICES INC
Situs
KS

Tax	802.94
Specials	6.30
Total	809.24

Phone
Mail SUITE 195
To 1035 N EMPORIA
WICHITA KS 67214

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 134245
USD-259-TD-NIC
Add Keys & 8-14465-3A

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
View Property Information
RKEMPTON
Function 06 Legal Description Level 01
Key No.: B -14465-0002 Pin: 125160320101000
Page: 2 Name: VIA CHRISTI PROPERTY SERVICES INC

Legal Description
THAT PT LOT 1 BEG 668.79 FT S OF NWCOR LOT 1 E 159.67 FT S 82.34 FT W 159.87 FT N TO BEG BLOCK 1 ST. FRANCIS REGIONAL MED. CTR. 2ND.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: B -00846
Pin: 125160320102400A
Page: 1

Name VIA CHRISTI PROPERTY SERVICES INC
Situs
KS

Tax	629.39
Specials	6.30
Total	635.69

Phone
Mail SUITE 195
To 1035 N EMPORIA
WICHITA KS 67214

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 119393

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: B -00846
Page: 2

Pin: 125160320102400A
Name: VIA CHRISTI PROPERTY SERVICES INC

Legal Description
LOT 15 EMPORIA AVE.
MURDOCK GROVE ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -14465-003B Pin: 125160320100900
Page: 1

Name VIA CHRISTI PROPERTY SERVICES INC
Situs 959 N EMPORIA ST
WICHITA KS 67214-3730

Tax	10,361.07
Specials	6.30
Total	10,367.37

Phone
Mail SUITE 195
To 1035 N EMPORIA
WICHITA KS 67214

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 134258

Add Keys B-14465-4 & B-14465-2A

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

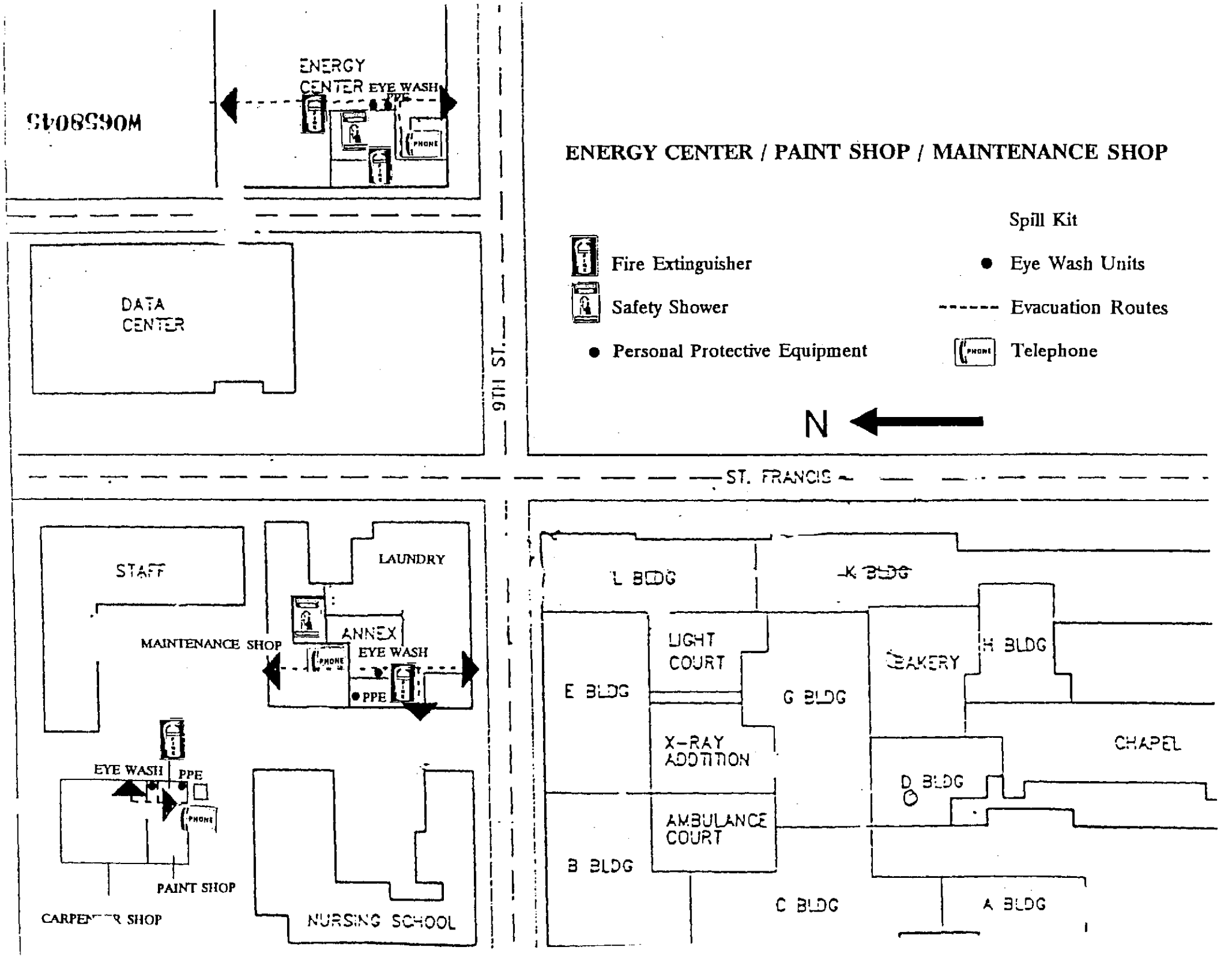
END OF DESC

TXRP0602
View Property Information
RKEMPTON
Function 06 Legal Description Level 01
Key No.: B -14465-003B Pin: 125160320100900
Page: 2 Name: VIA CHRISTI PROPERTY SERVICES INC

Legal Description

BEG 159.67 FT E & 668.79 FT S OF NWCOR LOT 1 E 139.67 FT S 179.96 FT W
299.75 FT TO PT ON E LI TOPEKA AVE N 98 FT E 159.87 FT N 82.34 FT TO
BEG BLOCK 1 ST. FRANCIS REGIONAL MED. CTR. 2ND.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel


ENERGY CENTER / PAINT SHOP / MAINTENANCE SHOP
Fire Extinguisher
Safety Shower
Personal Protective Equipment
Spill Kit
Eye Wash Units
Evacuation Routes
Telephone
N
ENERGY CENTER
EYE WASH
PPE
PHONE
DATA CENTER
9TH ST.
ST. FRANCIS
STAFF
LAUNDRY
ANNEX
MAINTENANCE SHOP
EYE WASH
PPE
EYE WASH
PPE
PAINT SHOP
CARPENTER SHOP
NURSING SCHOOL
L BLDG
K BLDG
LIGHT COURT
E BLDG
G BLDG
BAKERY
H BLDG
X-RAY ADDITION
CHAPEL
D BLDG
AMBULANCE COURT
B BLDG
C BLDG
A BLDG

Sanitary Sewer Permit Application

prepared by

Integrated Solutions

on behalf of

St. Francis Regional Medical Center

W0657883

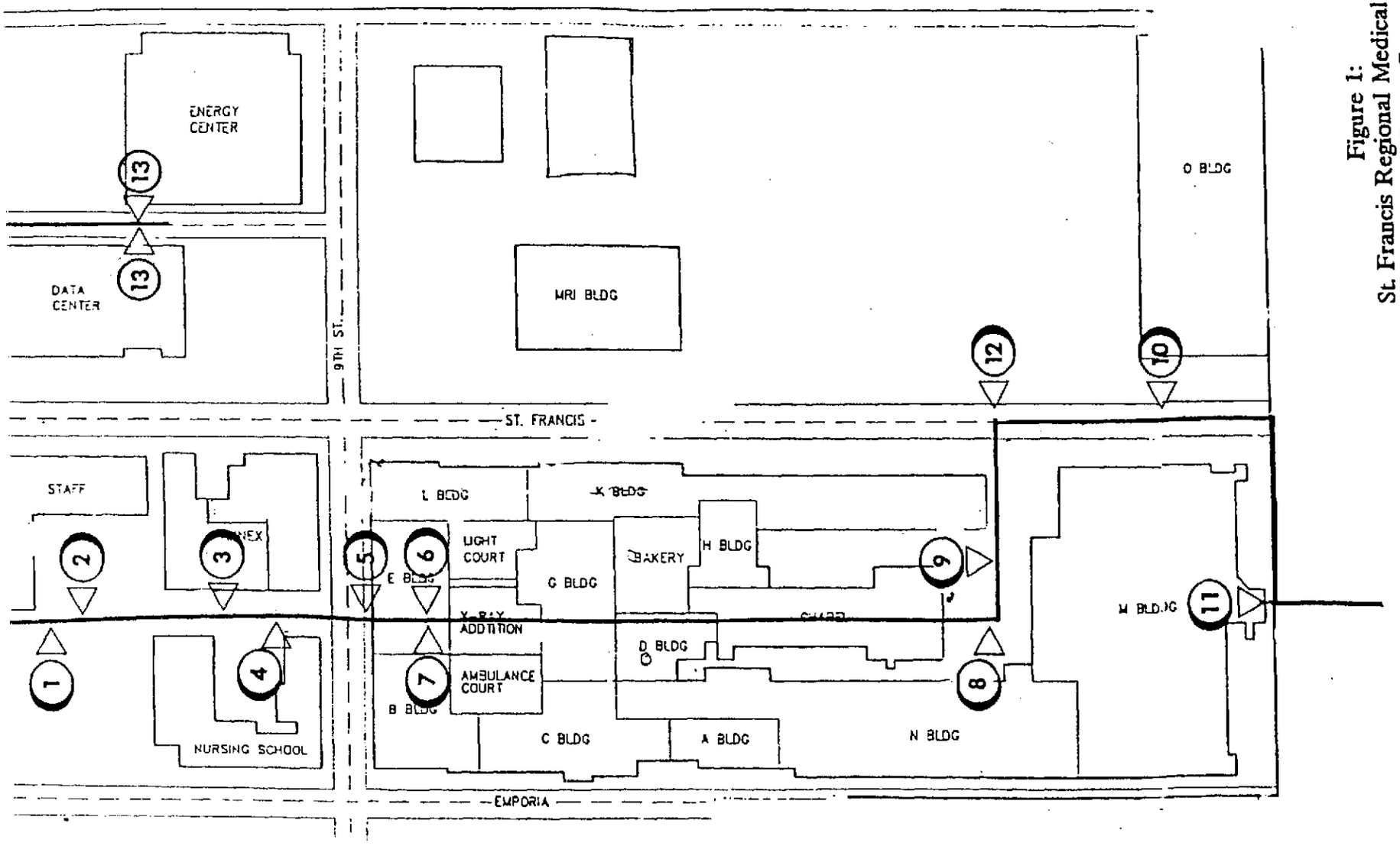


Figure 1:
St. Francis Regional Medical Center
Sanitary Sewer Connections

FIGURE 3

Site Plan

To Be Provided by December 17, 1992
As specified in the City of Wichita's
October 15, 1992 letter.

ATTACHMENT I

Section D - Sewer Information

1. List size, description location, and flow of each facility sewer which connects to the City's sewer system.

Sewer Size	Description Location of Connection or Discharge Point	Average Flow (GPD)
4 inch	Carpenter Shop - Connection (1)	50 - 100
8 inch	Child Development Center - Connection (2)	3,000
8 inch	Annex including Laundry - Connection (3)	40,000
6 inch	School of Nursing - Connection (4)	1,000
8 inch	L Building - Connection (5)	10,000
6 inch	E Building - East side - Connection (6)	8,000
8 inch	E Bldg., West side & B Bldg. - Connection (7)	7,000
10 inch	G Bldg., West side; A Bldg.; C Bldg.; N Bldg. - Connection (8)	20,000
10 inch	G Bldg., East side; H Bldg.; K Bldg. - Connection (9)	8,000
8 inch	O Bldg. - Connection (10)	7,000
12 inch	South Tower - Connection (11)	10,000
12 inch	P Bldg. - Connection (12)	Not in Svc.
4 inch	Data Center (13)	100 - 200
6 inch	Energy Center (13)	10,000

ATTACHMENT II

St. Francis Wastewater Discharge Permit Application
Section E - Wastewater Discharge Information

5. List average wastewater discharge, maxium discharge and type of discharge for each plant process. Include the reference number from the process schematic that corresponds to the process.

No.	Process Description	Avg. Flow (GPD)	Type of Discharges
1.	Carpenter Shop	50-100 gpd	Sink drain
2.	Child Development Center	3,000 gpd	
	Cafeteria	< 500 gpd	Garbage Disposal
3.	Annex		
	Laundry	25,000 gpd	Laundry wastewater
4.	School of Nursing		
	Bathroom facilities	1,000 gpd	Restrooms
5.	L Building	10,000 gpd	
	Radiology	< 300 gpd	Film Processors
	Biohazards Lab	< 300 gpd	Lab Sinks
	General Patient Care		Restroom facilities
6.	E Building, Eastside	8,000 gpd	
	Burn center	<2,500 gpd	Patient Treatment Tanks
	Laboratories	<4,000 gpd	Lab Sinks
	General Patient Care		Restrooms
7.	E Building, Westside	7,000 gpd	
	Bloodbank	<1,000 gpd	Sinks
	Radiology Processers	<1,000 gpd	Film Processors
	General Patient Care		Restrooms
8.	A, C, and Westside of G Building	10,000 gpd	
	Heartstation	<2,000 gpd	Processors
	N Building	10,000 gpd	
	SICU, CICU Patient Care		Restrooms
9.	Eastside of G, H, and K Building	8,000 gpd	
	Patient Care		Restrooms
10.	O Building	7,000 gpd	
	Patient Care		Restrooms
11.	South Tower (M Building)	10,000 gpd	
	Kitchen	< 2,000 gpd	Garbage Disposal
12.	P Building (Not Currently in Service)	Not in Service	
	Laboratories	10,000 gpd (Estimated)	
	Radiology		

W0657907

No.	Process Description	Avg. Flow (GPD)	Max. Flow (GPD)	Type of Discharges
13.	Data Center and Energy Center			
	Boiler Operations	3,000 gpd	5,000	Boiler Water Blowdown
	Cooling Tower Operations	9,000 gpd	12,000	Cooling Water Blowdown
	Water Softeners	1,000 gpd	2,000	Regeneration Cycle Waste

ATTACHMENT III

Energy Center

Chemical	Container Size	Location
Alkaline Liquid (National Chem. Search)	1-55 gal.	Main Floor - Exchangers and Water Supply Pumps (South End)
Liquidchloro (VWR)	1-20 gal.	Main Floor - Exchangers and Water Supply Pumps (South End)
GAX-26 (Microbiocide)	3-55 gal.	Main Floor - Exchangers and Water Supply Pumps (South End)
NM-40 (Certified)	1-35 gal.	Main Floor (North End)
Antifreeze (Universal)	1-55 gal.	Main Floor (North End)
DTE Oil Ex. Heavy	1-55 gal.	Main Floor (North End)
Aqua-Solv (National Chem. Search)	1-30 gal.	Main Floor (North End)
Blue Line (Solvent Degreaser)	1-35 gal.	Main Floor (North End)
ISOIRON-II	1-20 gal.	Main Floor (Center)
Biohazardous Waste	200 boxes	Main Floor (North End)
Hicycle 125 (587-Net)	3-55 gal.	Main Floor (West End)
GAX-26	1-55 gal.	Main Floor (West End)
ISOPLUS (Dubois)	1-55 gal.	Main Floor (West End)
GBC-19 (Dubois)	1-35 gal.	Main Floor (West End)

Energy Center

Chemical	Container Size	Location
Hicycle 125 (Dubois)	3-55 gal.	Basement (East Wall)
Aqua Mag	1-55 gal.	Basement (Center)
Solvent (Petroleum Product)	1-55 gal.	Basement (South End)
Carry Rock Salt	6-50 lb. bags & Hopper	Basement (West Wall)
Hytherm 225 (Dubois)	2-55 gal.	Basement (NW Corner)
ISO PLUS	2-55 gal.	Basement (NW Corner)
ISO MINE PLUS	1-55 gal.	Basement (NW Corner)
Hytherm 150	1-30 gal.	Basement (NW Corner)
GBC-19	2-30 gal.	Basement (North Wall)
ISO GUARD	1-55 gal.	Basement (North Wall)
ISO PLUS	1-55 gal.	Basement (North Wall)

Energy Center drains to basement sumps, which are pumped to sanitary sewer.

Maintenance Shop

Chemical	Container Size	Location
Kustom (Industrial Solvent) (Certified)	1-55 gal.	Equip. Wash Area (West Wall)
Superflux (Derby Refining Co.)	1-55 gal.	Equip. Wash Area (West Wall)
Organic Acid Detergent	1-30 gal.	Equip. Wash Area (West Wall)

Maintenance Shop

Chemical	Container Size	Location
Everbrite (Chem. Search)	1-30 gal.	Equip. Wash Area (West Wall)
Aqua-Sol (Certified)	1-35 gal.	Equip. Wash Area (West Wall)
Protect-O-Lube (Prince Rose Oil Co.)	1-35 gal.	Equip. Wash Area (West Wall)
JT-7 Gear Lube (SAE 85W-140)	1-55 gal.	Equip. Wash Area (West Wall)
Saf-Sol - 20/20 (Waste Drum)	1-55 gal.	Equip. Wash Area (West Wall)
UniLube Super ND 20	1-55 gal.	Equip. Wash Area (West Wall)
Triumph SAE 20 (Derby Refining Co.)	1-55 gal.	Equip. Wash Area (West Wall)
All-Bright (Certified)	3-30 gal.	Equip. Wash Area (West Wall)

Maintenance Shop floor drains to sanitary sewer.

Carpenter Shop

Chemical	Container Size	Location
3812-S Enamel Reducer (Jarvis Paint & Supply)	1-55 gal.	Outside (East Wall)
UNICAL-Mineral Spirits	1-55 gal.	Outside (East Wall)
36-12 S Acrylic Laquer Thinner	1-55 gal.	Outside (East Wall)
Waste Paint Thinner	2-55 gal.	Outside (Storage Shed)
Lab Waste	1-55 gal.	Outside (Storage Shed)

There are no floor drains in the Carpenter Shop

Annex - Laundry

Chemical	Container Size	Location
Builder 300 (Textile Care)	3-55 gal.	Main Floor (East Side)
2276 (Textile Care)	2-30 gal.	Main Floor (East Side)
Tri-Liquid Sour (Textile Care)	1-55 gal.	Main Floor (East Side)
So-White II (Textile Care)	1-30 gal.	Main Floor (East Side)
Kindet (Textile Care)	1-55 gal.	Main Floor (East Side)

Laundry Area drains to sanitary sewer.

Pharmacy

Chemical	Container Size	Location
Ethyl Alcohol USP (Midwest Grain Products Co.)	6-55 gal.	Lower Level (M Bldg.) Pharmacy Alcohol Room

There are no floor drains in the Pharmacy.

Environmental Services

Chemical	Container Size	Location
Glass Clener Concentrate (National American Chemical)	3-55 gal.	Lower Level (M Bldg.) Housekeeping Storeroom

There are no floor drains in environmental services storage areas.

Laboratory

Chemical	Container Size	Location
Alcojet (Alconox, Inc.)	1-20 gal.	4th Fl. North Wing Glassware and Media Preparation

Laboratory

Chemical	Container Size	Location
Xylene (Alconox, Inc.)	4-5 gal.	3rd Fl. North Wing Pathology

There are no floor drains in the laboratories.

Building Services-Ninth Floor
(MSDS's for Building Services-9th Floor chemical storage are contained in Attachment VI-Maintenance Shop)

Chemical	Container Size	Location
Agitene - Parts Cleaning Fluid (Graymills Corporation)	2-55 gal.	M Bldg.
Chem-Aqua 8000 (Chem-Search)	2-55 gal.	M Bldg.
Compound Cleaner - Liquid Phosphoric Acid	1-55 gal.	M Bldg.
Racon 113	1-20 gal.	M Bldg.
NpH-Klenz (Calgon-Vestal)	2-15 gal.	M Bldg.

ATTACHMENT IV

Baseline Monitoring Report

W0657914

WICHITA, KANSAS

DEPARTMENT OF WATER AND WATER POLLUTION CONTROL

INDUSTRIAL WASTE WATER PRETREATMENT PROGRAM
BASELINE MONITORING REPORT

SHADED AREAS FOR OFFICIAL USE ONLY
ALL INFORMATION CONTAINED HEREIN REQUESTED TO BE TYPED

COMPANY NAME: St. Francis Regional Medical Center

FACILITY LOCATION:
ADDRESS 929 N. St. Francis
CITY, ZIP Wichita, KS 67214
PH. NO. (316) 268-5000

MAILING ADDRESS:
P.O. BOX NA
STREET 929 N. Francis
CITY, STATE Wichita, KS 67214

COMPANY REPRESENTATIVE: Wayne A. Smith TITLE: Director of Building Svcs.

EXISTING ENVIRONMENTAL PERMITS (IF ANY):

PERMIT TYPE	CONTROL AUTHORITY	EXPIRATION DATE
Air Emission Permit	Kansas Department of Health and Environment	Open

S.I.C. NO. 8062 CAT. STD. _____ F.R. REF. _____
PRO. POL. / ORD. REF. _____

DESCRIPTION OF MFGR. OPERATIONS: (ATTACH SCHEMATIC PROCESS DIAGRAM WITH BLDG. LOCATION RELATIVE TO CITY STREETS AND SANITARY SEWERS)
St. Francis is a regional medical center which includes numerous support services. These services are emergency care, school, church, radiology, laboratories, food svcs., utility and building maintenance.

FLOW MEASUREMENT:
AVG. WATER CONSUMPTION (GAL/DAY) 140,000
CITY 100 % PRIVATE 0 %
DATA SOURCE City Meter Readings
AVG. WASTE WATER DISCHARGE (GAL/DAY) 110,000
PEAK WASTE WATER DISCHARGE (GAL/HR) 6,500
DATA SOURCE Estimated Flows

MO/YR	TC	GPD
AVE		

DOES THE FACILITY CURRENTLY DISCHARGE TO A PRETREATMENT FACILITY: ___YES X NO
IF YES, IS THE FACILITY CURRENTLY IN OPERATION: X YES ___NO
INDIVIDUAL RESPONSIBLE FOR OPERATION AND MAINTENANCE _____
BRIEF DESCRIPTION OF FACILITY St. Francis is in the process of installing a neutralization facility and grease trap.

W0657915

Rec'd 1-19-93

Outfall 001

MEASUREMENT OF POLLUTANTS:

CERTIFIED LABORATORY

INDUSTRY NAME St. Francis Regional Medical Center

NAME M.D. Chemical & Testing

SAMPLE LOCATION Outfall 001 (up gradient) 10th St. and Alley (West of St. Francis Street)

ADDRESS P.O. Box 67094 Forbes Field, Bldg. 281 Topeka, KS 66667

TYPE OF SAMPLE 24 Hour - Composite & Grab

REPRESENTATIVE Farrell Dallen

CERTIFICATION NO. E-135

DATE 11 24 92

TIME 4:30pm

REGULATED POLLUTANT	STANDARD	MEASURED		STD. METHOD
pH (Units)		6.64		EPA 150.1
Oil & Grease		53.5 mg/l		EPA 413.1
BOD		396 mg/l		EPA 405.1
TSS		833 mg/l		EPA 160.2
Copper		0.48 mg/l		EPA 219.1
Nickel		0.04 mg/l		EPA 249.1
Cadmium		ND (0.01)		EPA 213.1
Chromium		ND (0.04)		EPA 218.1
Lead		0.14 mg/l		EPA 239.1
Mercury		ND (0.005)		EPA 245.1
Zinc		0.62 mg/l		EPA 289.1
Silver		ND (0.02)		EPA 272.1
Phenols *		0.042 mg/l		EPA 420.1
Volatile Organic Compounds (See Attachment)				

NOTE: ALL POLLUTANT CONCENTRATIONS TO BE EXPRESSED IN MILLIGRAMS PER LITER UNLESS DESIGNATED OTHERWISE. ALL ANALYSIS TO BE PERFORMED IN ACCORDANCE WITH THE TECHNIQUES PRESCRIBED IN 40 CFR PART 136 AND AMENDMENTS THERETO.

COMMENTS * Phenol analyses were conducted by GTEL Laboratories, 4211 W. May, Wichita, KS 67209, Terry Loches

CERTIFIED STATEMENT:

I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ATTACHMENTS. I ACKNOWLEDGE THAT THIS INFORMATION IS TRUE, ACCURATE AND COMPLETE. BASED UPON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION CONTAINED HEREIN. I ALSO UNDERSTAND THAT ANY ACT OF FALSIFYING INFORMATION IS A VIOLATION OF SECTION 17.20.300 OF THE CODE OF THE CITY OF WICHITA, KANSAS, PUNISHABLE BY A FINE OF NOT MORE THAN $1,000 OR BY IMPRISONMENT FOR NOT MORE THAN SIX(6) MONTHS, OR BOTH.

Wayne A. Smyth 2/3/93

SIGNATURE OF AUTHORIZED REPRESENTATIVE DATE

SIGNATURE OF QUALIFIED PROFESSIONAL DATE

W0657916

OUTFALL 001
VOLATILE ORGANIC ANALYSES
(November 24, 1992)

COMPOUND	Measured Results (ug/l)	Detection Limit (ug/l)	Std. Method
2-Chloroethyl vinyl ether	ND	0.5	EPA 624
Vinyl Chloride	ND	0.5	EPA 624
Trichlorofluromethane (Freon II)	ND	0.5	EPA 624
1,1-Dichloroethylene	ND	0.5	EPA 624
Dichloromethane	ND	0.5	EPA 624
Trans 1,2-Dichloroethylene	ND	0.5	EPA 624
1,1-Dichloroethane	ND	0.5	EPA 624
Trichloromethane	5.4	0.5	EPA 624
1,1,1-Trichloroethane	ND	0.5	EPA 624
Tetrachloromethane	ND	0.5	EPA 624
Benzene	ND	0.5	EPA 624
1,2-Dichloroethane	ND	0.5	EPA 624
Trichloroethylene	ND	0.5	EPA 624
1,2-Dichloropropane	ND	0.5	EPA 624
Bromodichloromethane	ND	0.5	EPA 624
Trans 1,3 Dichloropropene	ND	0.5	EPA 624
Toluene	11.6	0.5	EPA 624
Cis 1,3-Dichloropropene	ND	0.5	EPA 624
1,1,2-Trichloroethane	ND	0.5	EPA 624
Tetrachloroethylene	1.9	0.5	EPA 624
Dibromochloromethane	ND	0.5	EPA 624
Chlorobenzene	ND	0.5	EPA 624
Ethylbenzene	0.9	0.5	EPA 624
Bromoform	ND	0.5	EPA 624
1,1,2,2-Tetrachloroethane	ND	0.5	EPA 624
1,3/1,4-Xylene	2.9	0.5	EPA 624
1,2-Xylene	2.4	0.5	EPA 624
1,3-Dichlorobenzene	ND	0.5	EPA 624
1,4-Dichlorobenzene	11.1	0.5	EPA 624
1,2-Dichlorobenzene	ND	0.5	EPA 624

Outfall 002

MEASUREMENT OF POLLUTANTS:

CERTIFIED LABORATORY

INDUSTRY NAME St. Francis Regional Medical Center

SAMPLE LOCATION Outfall 002 (down gradient) Immediately South of St. Francis St., Building M

TYPE OF SAMPLE 24 Hr. - Composite & Grab

NAME M.D. Chemical & Testing

ADDRESS P.O. Box 67094
Forbes Field, Bldg. 281
Topeka, KS 66667

REPRESENTATIVE Farrell Dallen

CERTIFICATION NO. #E-135

DATE 11 24 92

TIME 5:00pm

REGULATED POLLUTANT	STANDARD	MEASURED	STD. METHOD
pH (Units)		7.22	EPA 150.1
Oil & Grease		32.0 mg/l	EPA 413.1
BOD		390 mg/l	EPA 405.1
TSS		383 mg/l	EPA 160.2
Copper		0.09 mg/l	EPA 219.1
Nickel		ND (0.03)	EPA 249.1
Cadmium		ND (0.01)	EPA 213.1
Chromium		ND (0.04)	EPA 218.1
Lead		ND (0.04)	EPA 239.1
Mercury		ND (0.005)	EPA 245.1
Zinc		0.32 mg/l	EPA 289.1
Silver		ND (0.01)	EPA 272.1
Phenols *		0.043 mg/l	EPA 420.1
Volatile Organic Compounds (See Attachment)			

NOTE: ALL POLLUTANT CONCENTRATIONS TO BE EXPRESSED IN MILLIGRAMS PER LITER UNLESS DESIGNATED OTHERWISE. ALL ANALYSIS TO BE PERFORMED IN ACCORDANCE WITH THE TECHNIQUES PRESCRIBED IN 40 CFR PART 136 AND AMENDMENTS THERETO.

COMMENTS * Phenol analyses were conducted by GTEL Laboratories, 4211 W. May, Wichita, Kansas 67209, Terry Loches

CERTIFIED STATEMENT:

I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ATTACHMENTS. I ACKNOWLEDGE THAT THIS INFORMATION IS TRUE, ACCURATE AND COMPLETE. BASED UPON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION CONTAINED HEREIN. I ALSO UNDERSTAND THAT ANY ACT OF FALSIFYING INFORMATION IS A VIOLATION OF SECTION 17.20.300 OF THE CODE OF THE CITY OF WICHITA, KANSAS, PUNISHABLE BY A FINE OF NOT MORE THAN $1,000 OR BY IMPRISONMENT FOR NOT MORE THAN SIX(6) MONTHS, OR BOTH.

Wayne A. Smith 2/3/93

SIGNATURE OF AUTHORIZED REPRESENTATIVE DATE

SIGNATURE OF QUALIFIED PROFESSIONAL DATE

W0657918

OUTFALL 002
VOLATILE ORGANIC ANALYSES
(November 24, 1992)

COMPOUND	Measured Results (ug/l)	Detection Limit (ug/l)	Std. Method
2-Chloroethyl vinyl ether	ND	0.5	EPA 624
Vinyl Chloride	ND	0.5	EPA 624
Trichlorofluromethane (Freon II)	ND	0.5	EPA 624
1,1-Dichloroethylene	ND	0.5	EPA 624
Dichloromethane	ND	0.5	EPA 624
Trans 1,2-Dichloroethylene	ND	0.5	EPA 624
1,1-Dichloroethane	ND	0.5	EPA 624
Trichloromethane	8.6	0.5	EPA 624
1,1,1-Trichloroethane	ND	0.5	EPA 624
Tetrachloromethane	ND	0.5	EPA 624
Benzene	ND	0.5	EPA 624
1,2-Dichloroethane	ND	0.5	EPA 624
Trichloroethylene	ND	0.5	EPA 624
1,2-Dichloropropane	ND	0.5	EPA 624
Bromodichloromethane	ND	0.5	EPA 624
Trans 1,3 Dichloropropene	ND	0.5	EPA 624
Toluene	3.7	0.5	EPA 624
Cis 1,3-Dichloropropene	ND	0.5	EPA 624
1,1,2-Trichloroethane	ND	0.5	EPA 624
Tetrachloroethylene	ND	0.5	EPA 624
Dibromochloromethane	ND	0.5	EPA 624
Chlorobenzene	ND	0.5	EPA 624
Ethylbenzene	18.7	0.5	EPA 624
Bromoform	ND	0.5	EPA 624
1,1,2,2-Tetrachloroethane	ND	0.5	EPA 624
1,3/1,4-Xylene	55.9	0.5	EPA 624
1,2-Xylene	19.5	0.5	EPA 624
1,3-Dichlorobenzene	ND	0.5	EPA 624
1,4-Dichlorobenzene	1.7	0.5	EPA 624
1,2-Dichlorobenzene	ND	0.5	EPA 624

ATTACHMENT VI

MATERIAL SAFETY DATA SHEETS
for
MAINTENANCE SHOP
(partial list)

MSDS-MaintShop

W06579-12

MATERIAL SAFETY DATA SHEET COMMEND AEROSOL PAGE 01

0007303-3103	-3475	-5075	DATE OF ISSUE 12/13/85	SUPERSEDES 09/01/85

SECTION I - GENERAL INFORMATION

CHEMICAL NAME & SYNONYMS: N.A.
TRADE NAME & SYNONYMS: COMMEND AEROSOL

CHEMICAL FAMILY: AEROSOL PETROLEUM LUBRICANT
FORMULA: X --MIXTURE

MANUFACTURERS NAME
CERTIFIED LABS. DIV. OF NCH CORP

ADDRESS NUMBER STREET, CITY, STATE & ZIP CODE
BOX 152170
IRVING TEXAS 75015

PREPARED BY: REVISED LAB/T.S. CHEMIST
PRODUCT CODE NUMBER: 5075
EMERGENCY TELEPHONE NUMBER: 214-438-1301

SECTION II- HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS AS THE PRODUCT MIXTURE HAS NOT BEEN TESTED AS A WHOLE

CHEMICAL NAME (INGREDIENTS)	HAZARD	TLV	PEL	CAS#
1,1,1-TRICHLOROETHANE	IRRITANT	350PPM	350PPM	71-55-6
ALIPHATIC PETROLEUM DISTILLATE	COMBUST	300PPM	300PPM	8032-32-4
PROPANE	ASPHYXIANT	N/E	1000PPM	74-98-6
ISOBUTANE	FLAMM	N/E	N/E	75-28-5

SECTION IIA - NON-HAZARDOUS INGREDIENTS

NON-HAZARDOUS INGREDIENT NAMES AND CAS NUMBERS ARE PROTECTED UNDER RJ TRADE

COMMEND AEROSOL Commend Heros

(CONTINUED) SECTION IIA - NON-HAZARDOUS INGREDIENTS PAGE 02

SECRET REGISTRY # 609383-0063P

SECTION III - PHYSICAL DATA

BOILING PT (FAHRENHEIT): N/S SPEC GRAVITY (H2O=1): 0.75

VAPOR PRESSURE (MM HG): 185 COLOR: BLUE GREEN

VAPOR DENSITY (AIR=1): 8.3 ODOR: SOLVENT ODOR

PH @ 100%: N/A CLARITY: OPAQUE

PERCENT VOLATILE BY VOLUME (%): 70 EVAPORATION RATE: 0 (BU AC = 1)

SOLUBILITY IN WATER: NEGLIGIBLE

VISCOSITY: VISCOUS

SECTION IV - FIRE AND EXPLOSION HAZARD

FLASH POINT (METHOD USED): 133 F CCC
FLAMMABLE LIMITS: N/A LEL: N/A UEL:

EXTINGUISHING MEDIA "ALCOHOL"
--FOAM X --FOAM X --CO2 X --CHEMICAL DRY --SPRAY WATER --OTHER

SPECIAL FIRE FIGHTING PROCEDURES
SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACE PIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE

UNUSUAL FIRE & EXPLOSION HAZARDS
SPRAY WATER ON AEROSOL CONTAINERS TO COOL THEM TO AVOID RUPTURING OF THE CONTAINERS

LEVEL 2 AEROSOL (NFPA 30B)

NFPA HAZARD RATING (0=INSIGNIFICANT, 1=SLIGHT, 2=MODERATE, 3=HIGH, 4=EXTREME)
1 --HEALTH 2 --FLAMMABILITY 0 --REACTIVITY W --SPECIAL

SECTION V - HEALTH HAZARD DATA

COMMEND AEROSOL

(CONTINUED) SECTION V - HEALTH HAZARD DATA PAGE 03

THRESHOLD LIMIT VALUE

NOT ESTABLISHED FOR MIXTURE SEE SECTION II

COMMEND AEROSOL

(CONTINUED) SECTION VI - TOXICITY INFORMATION PAGE 04

ORL-RAT LD50 300G/KG 1
ORL-RAT LD50 200G/KG 2
THIS INGREDIENT MAY CONTAIN CONTAMINANTS WHICH ARE LISTED BY CALIFORNIA PROPOSITION 65 AS CARCINOGENS

THRESHOLD LIMIT VALUE

NOT ESTABLISHED FOR MIXTURE SEE SECTION II

EFFECTS OF OVEREXPOSURE

- ACUTE - (SHORT TERM EXPOSURE)

CAN LEAD TO CENTRAL NERVOUS SYTEM DEPRESSION WITH EFFECTS OF HEADACHE, DIZZINESS, AND NAUSEA AND LOSS OF CONSCIOUSNESS EYE IRRITANT DEFATS SKIN WHICH CAN LEAD TO IRRITATION. INHALATION MAY BE SLIGHTLY IRRITATING TO MUCOUS MEMBRANE INGESTION MAY RESULT IN VOMITING. ASPIRATION MUST BE AVOIDED TO AVOID PNEUMONITIS

- CHRONIC - (LONG TERM EXPOSURE)

MARKED IRRITATION OF SKIN AND EYE UPON CHRONIC OVEREXPOSURE AS WELL AS TO LIVER AND KIDNEY DAMAGES. TARGET ORGANS: LIVER AND KIDNEY

PRIMARY ROUTE OF ENTRY X -- INHALATION -- INGESTION X -- ABSORPTION

EMERGENCY & FIRST AID PROCEDURES

INHALATION

REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION

EYE CONTACT

FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION

SKIN CONTACT

WASH WITH SOAP AND WATER. IF IRRITATION DEVELOPS, SEEK MEDICAL ATTENTION

INGESTION

DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION

NOTES TO PHYSICIAN

N/A

SECTION VI - TOXICITY INFORMATION

PRODUCT CONTAINS CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN BY

IARC	NTP	OSHA	ACGIH	OTHER
--YES	--YES	--YES	--YES	--YES
X --NO	X --NO	X --NO	X --NO	X --NO

1,1,1-TRICHLOROETHANE
ORL-HMN TDLO 870MG/KG TFX:CN 2
INH-HMN TCLO 9200PPM/MIN TEXICSN 2
ORL-RAT LD50 10 300MG/KG :
ALIPHATIC PETROLEUM DISTILLATE
UNK-MAN LDLO 1176MG/KG 3

ORL-RAT LD50 [illegible]MG/KG 3
ORL-RAB LD50 [illegible]MG/KG 3
THIS INGREDIENT MAY CONTAIN CONTAMINANTS WHICH ARE LISTED BY CALIFORNIA PROPOSITION 65 AS CARCINOGENS

SECTION VII - REACTIVITY DATA

STABILITY: X --STABLE --UNSTABLE CONDITIONS TO AVOID

N/A

INCOMPATIBILITY (MATERIALS TO AVOID)

OPEN FLAME STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS

CARBON MONOXIDE

	WILL NOT	MAY	CONDITIONS TO AVOID
HAZARDOUS	X --OCCUR	--OCCUR	

POLYMERIZATION

SECTION VIII - SPILL OR LEAK PROCEDURES

STEPS TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

ELIMINATE ALL SOURCES OF IGNITION. SMALL SPILLS: TAKE UP WITH ABSORBANT AND PLACE IN LABELED CONTAINER FOR DISPOSAL. LARGE SPILL: EVACUATE AREA OF UNPROTECTED PERSONNEL. STOP LEAK & CONTAIN SPILL. REMOVE VIA VACUUM TRUCKS. TAKE UP REMAINDER WITH ABSORBANT AND PLACE IN LABELED CONTAINER FOR DISPOSAL. DO NOT FLUSH TO SEWER. AEROSOL PACKAGE. SPILL IS UNLIKELY

WASTE DISPOSAL METHOD

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE OR FEDERAL REGULATIONS CONCERNING HEALTH AND POLLUTION

NEUTRALIZING AGENT

N/A

SECTION IX - SPECIAL PROTECTION INFORMATION

REQUIRED VENTILATION

GENERAL EXHAUST IS ADEQUATE UNDER NORMAL CIRCUMSTANCES

W0657951

RESPIRATORY PROTECTION
TYPICAL USE DOES NOT REQUIRE RESPIRATOR HOWEVER IN EMERGENCY SITUATIONS WHERE EXPOSURE EXCEEDS OSHA STANDARDS 10LN 5000PPM/5000PPM/SAP/SCBAF

PROTECTIVE GLOVES
PVC GLOVES IF REPEATED OR PROLONGED SKIN CONTACT OCCURS

EYE PROTECTION
CHEMICAL GOGGLES SHOULD BE WORN

OTHER PROTECTION
N/A

SECTION X - STORAGE AND HANDLING INFORMATION

STORAGE TEMPERATURE	INDOOR	HEATED	REFRIGERATED	OUTDOOR
120 F --MAX	32 F --MIN	X		

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING
STORE AT MODERATE TEMPERATURES

OTHER PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN. READ ENTIRE LABEL BEFORE USING PRODUCT

SECTION XI - REGULATORY INFORMATION

CHEMICAL NAME	C.A.S. NUMBER	UPPER % LIMIT
1,1,1-TRICHLOROETHANE	71-55-6	50

THOSE INGREDIENTS LISTED ABOVE ARE SUBJECT TO THE REPORTING REQUIREMENTS OF 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372

IF UE (USE EXEMPTION) APPEARS UNDER UPPER % LIMIT, END USERS ARE EXEMPT FROM NOTIFICATION BECAUSE THE PRODUCT IS USED AND LABELED FOR ROUTINE JANITORIAL WORK, OR THE PRODUCT IS USED AND LABELED FOR FACILITY GROUNDS MAINTENANCE (SUCH AS FERTILIZERS AND HERBICIDES), OR THE PRODUCT IS USED AND LABELED FOR MAINTAINING MOTOR VEHICLES

SECTION XII - TRANSPORTATION - (FOR FUTURE USE)

APPLICABLE REGULATIONS
--49 CFR --IMCO --TARIFF 6 B --IATA --MILITARY AIR (AFR 71-4)

SHIPPING NAME

HAZARD CLASS ID NUMBER REPORT QTY

LABELS LIMITED QTY

UNIT CONTAINER

DOT SPS CONTAINER NET EXPLOSIVE WT

AEROSOL PROPELLANTED

SECTION XIII - REFERENCES

1. THRESHOLD LIMIT VALUE FOR CHEMICAL SUBSTANCES IN THE WORK ENVIRONMENT, 2ND EDITION, ACGIH, 1988
2. VENDOR'S MSDS
3. DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, 6TH EDITION N. IRVING SAX

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION, HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF

CERTIFIED LABS, DIV OF MCH CORP ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE CAUSED BY THE USE, STORAGE OR DISPOSAL OF THE PRODUCT IN A MANNER NOT RECOMMENDED ON THE PRODUCT LABEL. USERS ASSUME ALL RISKS ASSOCIATED WITH SUCH UNRECOMMENDED USE, STORAGE, OR DISPOSAL OF THE PRODUCT

000300-0103 -3425 -0010	DATE OF ISSUE 03/06/90	SUPERSEDES 07/06/94

SECTION I - GENERAL INFORMATION

CHEMICAL NAME & SYNONYMS
N/A

TRADE NAME & SYNONYMS
SAF-SOL

CHEMICAL FAMILY
ALIPHATIC/CHLORINATED SOLVENT

FORMULA
X --MIXTURE

MANUFACTURER'S NAME
CERTIFIED LABS DIV OF NCH CORP

ADDRESS (NUMBER, STREET, CITY, STATE & ZIP CODE)
BOX 153178
IRVING, TEXAS 75015

PREPARED BY	PRODUCT CODE NUMBER	EMERGENCY TELEPHONE NUMBER
KELLY BARNHART & CHEMNET	0010	214-438-1281

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS AS THE PRODUCT MIXTURE HAS NOT BEEN TESTED AS A WHOLE

CHEMICAL NAME (INGREDIENTS)	HAZARD	TLV*	PEL*	CAS#
ALIPHATIC PETROLEUM DISTILLATE	COMB	300PPM	300PPM	8032-32-4
PERCHLOROETHYLENE	CARC	50PPM	25PPM	127-18-4
METHYLENE CHLORIDE	SUSP CARC	50PPM	500PPM	75-09-2

SECTION III - PHYSICAL DATA

BOILING PT (FAHRENHEIT) 113 SPEC GRAVITY (H2O=1) 1.030

VAPOR PRESSURE (MM HG) 66 COLOR WATER WHITE

VAPOR DENSITY (AIR=1) 1 ODOR CHLORINATED SOLVENT

PH @ 100% N/A CLARITY TRANSPARENT

PERCENT VOLATILE BY VOLUME (%) 100 EVAPORATION RATE 8.10 (BU AC = 1.1)

SOLUBILITY IN WATER NEGLIGIBLE

VISCOSITY NON-VISCOUS

SECTION IV - FIRE AND EXPLOSION HAZARD

FLASH POINT (METHOD USED) 100 F C.O.C.

FLAMMABLE LIMITS N/A LEL N/A UEL

EXTINGUISHING MEDIA "ALCOHOL"
X --FOAM --FOAM X --CO2 DRY X --CHEMICAL WATER --SPRAY --OTHER

SPECIAL FIRE FIGHTING PROCEDURES
AS WITH ALL FIRES INVOLVING SOLVENTS, PROTECTIVE EQUIPMENT SHOULD BE WORN INCLUDING SELF-CONTAINED BREATHING APPARATUS TO PROTECT FROM ACRID SMOKE AND HAZARDOUS DECOMPOSITION PRODUCTS.

UNUSUAL FIRE & EXPLOSION HAZARDS

UNDER CERTAIN CONDITIONS PHOSGENE CAN BE FORMED (TEMPERATURES IN EXCESS OF 1600 F.)

NFPA HAZARD RATING (0=INSIGNIFICANT, 1=SLIGHT, 2=MODERATE, 3=HIGH, 4=EXTREME)
3 --HEALTH 2 --FLAMMABILITY 0 --REACTIVITY W --SPECIAL

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

NOT ESTABLISHED FOR MIXTURE SEE SECTION II

EFFECTS OF OVEREXPOSURE

- ACUTE - (SHORT TERM EXPOSURE)

CAN LEAD TO CENTRAL NERVOUS SYSTEM DEPRESSION, HEADACHE, DIZZINESS, NAUSEA AND LOSS OF CONSCIOUSNESS. WILL DEFAT SKIN AND CAUSE IRRITATION CAUSING TEARING AND REDNESS.

CHRONIC EFFECTS OF OVEREXPOSURE CENTRAL NERVOUS DEPRESSION OF SYSTEM.

KIDNEY DAMAGE, DERMATITIS AND POSSIBLY CANCER
SYSTEMIC & OTHER EFFECTS PERCHLOROETHYLENE HAS CAUSED LIVER AND KIDNEY TOXIC EFFECTS IN CHRONICALLY OVEREXPOSED EXPERIMENTAL ANIMALS
CARCINOGENICITY THREE STUDIES HAVE BEEN CONDUCTED TO ASSESS THE CARCINOGENIC POTENTIAL OF PERCHLOROETHYLENE IN LABORATORY ANIMALS. SEE SECTION VI--CHRONIC EFFECTS OF OVEREXPOSURE

- CHRONIC - (LONG TERM EXPOSURE)

SYSTEMIC & OTHER EFFECTS (CONT) IN ONE STUDY RATS AND MICE WERE EXPOSED BY GAVAGE (FORCE-FED) AT LEVELS OF 500 AND 1000MG/KG/DAY INCREASED INCIDENCE OF LIVER TUMORS WERE OBSERVED IN MICE THE RESULTS OF THE RAT STUDY WERE INCONCLUSIVE DUE TO AN EXCESS IN ANIMAL DEATHS THE SECOND STUDY INVOLVED RATS EXPOSED TO CONCENTRATIONS UP TO 500 PPM VIA INHALATION, SIX HOURS PER DAY 5 DAYS PER WEEK FOR ONE YEAR THE ANIMALS WERE OBSERVED UNTIL THE TIME OF DEATH OR UNTIL THE 21ST MONTH AND STUDIES INDICATE NO STATISTICALLY SIGNIFICANT INCREASE IN TUMORS THE SIGNIFICANCE OF THE 2ND STUDY HAS BEEN IN QUESTION, SINCE EXPOSURE LASTED FOR ONLY ONE YEAR A THIRD STUDY CONDUCTED FOR THE NATIONAL TOXICOLOGY PROGRAM (NTP) INVOLVED EXPOSURE OF MICE TO 100, OR 200 PPM AND RATS TO 200 AND 400 PPM FOR SIX HOURS PER DAY, 5 DAYS PER WEEK FOR 2 YEARS SEE SECTION VI--TOXICITY INFO

PRIMARY ROUTE OF ENTRY X -- INHALATION -- INGESTION X -- ABSORPTION

EMERGENCY & FIRST AID PROCEDURES

INHALATION
MOVE TO FRESH AIR AND TREAT SYMPTOMATICALLY GIVE OXYGEN IF BREATHING IS DIFFICULT GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPS GET MEDICAL HELP

EYE CONTACT
FLUSH WITH WATER FOR 5-6 MINUTES, HOLDING EYELIDS OPEN OCCASIONALLY FOR MAXIMUM BENEFIT SEE A PHYSICIAN IF IRRITATION PERSISTS

SKIN CONTACT
WASH WITH SOAP AND WATER. APPLY AN EMOLLIENT RICH CREAM. SEE A PHYSICIAN IF IRRITATION PERSISTS

INGESTION
DO NOT INDUCE VOMITING EVEN IF VOMITING OCCURS IF IT OCCURS, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO LUNGS GET MEDICAL ATTENTION IMMEDIATELY

NOTES TO PHYSICIAN
DEPENDING ON THE AMOUNT INGESTED AND RETAINED AS WELL AS THE TOXICITY OF THE PRODUCT GASTRIC LAVAGE SHOULD BE CONSIDERED KEEP PATIENT'S HEAD BELOW HIPS TO PREVENT PULMONARY ASPIRATION IF COMATOSE, A CUFFED ENDOTRACHEAL TUBE WILL PREVENT ASPIRATION CONSULT A POISON CONTROL CENTER

SECTION VI - TOXICITY INFORMATION

PRODUCT CONTAINS CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN BY

IARC	NTP	OSHA	ACGIH	OTHER
X --YES	--YES	--YES	--YES	--YES
--NO	X --NO	X --NO	X --NO	X --NO

PERCHLOROETHYLENE
TERATOGENESIS
INL-RAT 300 PPM/7HR 1

CARCINOGENESIS
ORL-MOUSE 500 MG/KG 8 1
ORL-RAT LD50: 8100 MG/KG 3
INL-HUMAN TCLO 50PPM/7H EYE 3
INL-MAN TCLO 200 PPM/3H EYE 1

METHYLENE CHLORIDE
CARCINOGENESIS
ORL-MOUSE 700MG/KG LIFETIME 3
INL-RAT 500MG/KG LIFETIME 3
INL-HUMAN TCLO 500PPM/1D-TPX CSN 3
INL-HUMAN TCLO 500PPM/10M-TPX BLD 3

ALIPHATIC PETROLEUM DISTILLATE
INL-HUMAN TCLO 600MG/M3/5H 3
EYE-HUMAN TCLO. 800PPM/15H 3
LNG-MAN LDLO. 147GM/KG 3
* SEE SECTION XIII

SYSTEMIC & OTHER EFFECTS (CONT.)
INCREASED INCIDENCE OF LIVER TUMORS WERE OBSERVED IN MICE IN RATS AN INCREASE IN A RARE KIDNEY TUMOR WAS OBSERVED IN THE MALE RAT AND BOTH MALES AND FEMALES HAD AN INCREASED INCIDENCE OF MONONUCLEAR CELL LEUKEMIA. THE INTERNATIONAL AGENCY FOR CANCER RESEARCH CONSIDERS LIVER TUMORS IN MICE AS LIMITED EVIDENCE OF ANIMAL CARCINOGENICITY
SEE SECTION XIII

SECTION VII - REACTIVITY DATA

	X --STABLE	--UNSTABLE	CONDITIONS TO AVOID
STABILITY			

OPEN FLAMES

INCOMPATIBILITY (MATERIALS TO AVOID)
STRONG ALKALIES, ACIDS, SELECTED AMINES, AND ALUMINUM (WHEN IN THE PRESENCE OF WATER AND CLOSE CONTACT UNDER PRESSURE)

HAZARDOUS DECOMPOSITION PRODUCTS
CAN AT DECOMPOSITION TEMPERATURE RELEASE CARBON DIOXIDE, CARBON MONOXIDE, HYDROGEN CHLORIDE AND PHOSGENE

	WILL NOT	MAY	CONDITIONS TO AVOID
HAZARDOUS	X --OCCUR	--OCCUR	

POLYMERIZATION N/A

SECTION VIII - SPILL OR LEAK PROCEDURES

STEPS TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
REMOVE ALL SOURCES OF IGNITION PREVENT FROM ENTERING SEWER OR WATER SOURCES VENTILATE ENCLOSED SPACE. WEAR RESPIRATOR CLEAN UP (ANY ELECTRIC CLEANING EQUIPMENT MUST BE EXPLOSION PROOF) OR SOAK UP WITH SAND, COTTON WASTE OR OTHER ABSORBANT MATERIAL

WASTE DISPOSAL METHOD
THE WASTE LIQUIDS SHOULD BE SENT TO A LICENSED RECLAIMER OR INCINERATED AT A LICENSED INCINERATOR
DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL POLLUTION REGULATIONS

H-3
PE-2

W0657953

NEUTRALIZING AGENT

NA

SECTION IX - SPECIAL PROTECTION INFORMATION

REQUIRED VENTILATION
LOCAL EXHAUST SHOULD BE EMPLOYED TO KEEP AIR QUALITY AT OR EQUAL TO THE MAXIMUM ALLOWED CONCENTRATION

RESPIRATORY PROTECTION
NO RESPIRATOR IS NEEDED IN NORMAL USE. IN EMERGENCY SITUATIONS, HOWEVER THE FOLLOWING ARE RECOMENDED
500 PPM CERCOVF/CMOV/SAF/SCBAF
1000 PPM CERCOVF/CMOV/SAF/SCBAF
ESCAPE GMOV/SCBA

PROTECTIVE GLOVES
VITON, PVA, OR EQUIVALENT SHOULD BE WORN

EYE PROTECTION
CHEMICAL GOGGLES SHOULD BE WORN

OTHER PROTECTION
HEADGEAR AND APRON WHEN SPRAYING

SECTION X - STORAGE AND HANDLING INFORMATION

STORAGE TEMPERATURE INDOOR HEATED REFRIGERATED OUTDOOR
120 F --MAX 60 F --MIN R

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING
FOLLOW LABEL DIRECTIONS
KEEP OUT OF EYES AND SKIN VAPORS HARMFUL

OTHER PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN

SECTION XI - REGULATORY INFORMATION

CHEMICAL NAME	C.A.S. NUMBER	UPPER % LIMIT

PERCHLOROETHYLENE	127-18-4	48
METHYLENE CHLORIDE	75-09-2	36

THOSE INGREDIENTS LISTED ABOVE ARE SUBJECT TO THE REPORTING REQUIREMENTS OF 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372
IF DE MINIMIS EXEMPTIONS APPEARS UNDER UPPER % LIMIT, END USERS ARE EXEMPT FROM NOTIFICATION BECAUSE THE PRODUCT IS USED AND LABELLED FOR ROUTINE JANITORIAL WORK, OR THE PRODUCT IS USED AND LABELLED FOR FACILITY GROUNDS MAINTENANCE (SUCH AS FERTILIZERS AND HERBICIDES), OR THE PRODUCT IS USED AND LABELLED FOR MAINTAINING MOTOR VEHICLES

SECTION XII - TRANSPORTATION - (FOR FUTURE USE)

APPLICABLE REGULATIONS
--49 CFR --IMCO --TADPF U.S. --IATA --MILITARY AIR (AFR 71-4)

SHIPPING NAME

HAZARD CLASS ID NUMBER REPORT QTY

LABELS LIMITED QTY

UNIT CONTAINER

DOT SPS CONTAINER NET EXPLOSIVE WT

AEROSOL PROPELLANTED

SECTION XIII - REFERENCES

1 INDUSTRIAL HYGIENE & TOXICOLOGY, 3RD EDITION F.A. PATTY, 1981
2 NIOSH REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, 1983
3 CHEMICAL REGULATION REPORT

SYSTEMIC & OTHER EFFECTS (CONT) EPIDEMIOLOGIC STUDIES HAVE BEEN INCONCLUSIVE IN DETERMINING WHETHER PERCHLOROETHYLENE CAUSED CANCER IN HUMANS. PERIPHERAL NEUROPATHY HAS BEEN CITED AS A SYMPTOM OF CHRONIC OVEREXPOSURE.

REPRODUCTIVE TOXICITY STUDIES ON MICE, RATS AND RABBITS HAVE BEEN CONDUCTED TO EVALUATE THE POTENTIAL EFFECTS PERCHLOROETHYLENE MAY HAVE ON REPRODUCTION AND OFFSPRING OF LABORATORY ANIMALS. PERCHLOROETHYLENE HAS

BEEN FOUND TO BE EMBRYOTOXIC AND HAS CAUSED DELAYS IN THE DEVELOPMENT OF FETUSES. PERCHLOROETHYLENE HAS NOT CAUSED TERATOGENIC (BIRTH DEFECT) EFFECTS IN EXPERIMENTAL ANIMALS.
*THIS INGREDIENT MAY CONTAIN CONTAMINANTS WHICH ARE LISTED BY CALIFORNIA PROPOSITION 65 AS CARCINOGENS

ATTACHMENT VI

MATERIAL SAFETY DATA SHEETS
for
ENERGY CENTER
(partial list)

(003462-0274 -A0082508-0991) | DATE OF ISSUE 11/15/91 | SUPERSEDES 11/14/91

SECTION I - GENERAL INFORMATION

CHEMICAL NAME & SYNONYMS
N/A

TRADE NAME & SYNONYMS
BLUE LINESOLVENT DEGREAS

CHEMICAL FAMILY
ALIPHATIC/CHLORINATED SOLVENT

FORMULA
X<--MIXTURE

MANUFACTURERS NAME:
NATIONAL CHEMSEARCH DIV. OF NCH CORP.

ADDRESS (NUMBER, STREET, CITY, STATE & ZIP CODE)
BOX 152170
IRVING, TEXAS 75015

PREPARED BY:
M DICKSON/CHEMIST

PRODUCT CODE NUMBER
0991

EMERGENCY TELEPHONE NUMBER
214-438-1381

SECTION II- HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS.

CHEMICAL NAME (INGREDIENTS)	HAZARD	TLV	PEL	CAS#
ALIPHATIC PETROLEUM DISTILLATE	COMB.	300PPM 1.	300PPM 2.	8032-32-4
PERCHLOROETHYLENE	CARC 7,8.	50PPM 1.	25PPM 2.	127-18-4
METHYLENE CHLORIDE	CARC 7,8.	50PPM 1.	500PPM 2.	75-09-2

SECTION III - PHYSICAL DATA

BOILING PT.(FAHRENHEIT)	113	SPEC GRAVITY (H20=1)	:1.030

BLUE LINESOLVENT DEGREAS

(CONTINUED) SECTION III - PHYSICAL DATA PAGE : 02

VAPOR PRESSURE (MM HG).	60	COLOR	WATER WHITE
VAPOR DENSITY (AIR=1)	1	ODOR	CHLORINATED SOLVENT
PH @ 100%	N/A	CLARITY	TRANSPARENT
PERCENT, VOLATILE BY VOLUME (%)	100	EVAPORATION RATE (BU AC = 1)	0.10
SOLUBILITY IN WATER	NEGLIGIBLE		
VISCOSITY	NON-VISCOUS		

SECTION IV - FIRE AND EXPLOSION HAZARD

FLASH POINT (METHOD USED)	FLAMMABLE LIMITS	LEL	UEL
180 F. C.O.C.		N/A	N/A

EXTINGUISHING MEDIA "ALCOHOL"
X<--FOAM <--FOAM X<--CO2 DRY X<--CHEMICAL WATER <--SPRAY <--OTHER

SPECIAL FIRE FIGHTING PROCEDURES
AS WITH ALL FIRES INVOLVING SOLVENTS, PROTECTIVE EQUIPMENT SHOULD BE WORN INCLUDING SELF-CONTAINED BREATHING APPARATUS TO PROTECT FROM ACRID SMOKE AND HAZARDOUS DECOMPOSITION PRODUCTS.

UNUSUAL FIRE & EXPLOSION HAZARDS

UNDER CERTAIN CONDITIONS PHOSGENE CAN BE FORMED.
(TEMPERATURES IN EXCESS OF 1000 F.)

NFPA HAZARD RATING (0=INSIGNIFICANT;1=SLIGHT;2=MODERATE;3=HIGH;4=EXTREME):
3 <--HEALTH 2 <--FLAMMABILITY 0 <--REACTIVITY <--SPECIAL

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE :

NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

EFFECTS OF OVEREXPOSURE

- ACUTE - (SHORT TERM EXPOSURE)

CAN LEAD TO CENTRAL NERVOUS SYSTEM DEPRESSION, HEADACHE, DIZZINESS, NAUSEA AND LOSS OF CONSCIOUSNESS. WILL DEFAT SKIN AND CAUSE IRRITATION CAUSING TEARING AND REDNESS.

- CHRONIC - (LONG TERM EXPOSURE)

RESULTS FROM ANIMAL STUDIES INDICATE A POSSIBLE HUMAN CARCINOGENIC RISK. 4.

OVEREXPOSURE CAN LEAD TO CNS DEPRESSION, LIVER DAMAGE AND KIDNEY DAMAGE.

PRIMARY ROUTE OF ENTRY: X<-- INHALATION <-- INGESTION X<-- ABSORPTION

EMERGENCY & FIRST AID PROCEDURES

INHALATION :
MOVE TO FRESH AIR AND TREAT SYMPTOMATICALLY. GIVE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPS. GET MEDICAL HELP.

EYE CONTACT:
FLUSH WITH WATER FOR 5-6 MINUTES, HOLDING EYELIDS OPEN OCCASIONALLY FOR MAXIMUM BENEFIT. SEE A PHYSICIAN IF IRRITATION PERSISTS.

SKIN CONTACT:
WASH WITH SOAP AND WATER. APPLY AN EMOLLIENT RICH CREAM. SEE A PHYSICIAN IF IRRITATION PERSISTS.

INGESTION :
DO NOT INDUCE VOMITING EVEN IF VOMITING OCCURS. IF IT OCCURS, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO LUNGS. GET MEDICAL ATTENTION IMMEDIATELY.

NOTES TO PHYSICIAN :
DEPENDING ON THE AMOUNT INGESTED AND RETAINED AS WELL AS THE TOXICITY OF THE PRODUCT, GASTRIC LAVAGE SHOULD BE CONSIDERED. KEEP PATIENT'S HEAD BELOW HIPS TO PREVENT PULMONARY ASPIRATION. IF COMATOSE, A CUFFED ENDOTRACHEAL TUBE WILL PREVENT ASPIRATION. CONSULT A POISON CONTROL CENTER.

SECTION VI - TOXICITY INFORMATION

PRODUCT CONTAINS CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN BY:

IARC	NTP	OSHA	ACGIH	OTHER
X<--YES <--NO	X<--YES <--NO	<--YES X<--NO	<--YES X<--NO	<--YES X<--NO

PERCHLOROETHYLENE
TERATOGENESIS:
IHL-RAT: 300 PPM/7H/D 4.

CARCINOGENESIS:
ORL-MUS: 500 MG/KG D 4.
ORL-RAT LD50: 8100 MG/KG 5.
IHL-HMN TCLO: 96PPM/7H:SYS 5.
IHL-MAN TCLO: 280 PPM/2H:EYE 5.

METHYLENE CHLORIDE
CARCINOGENESIS:
ORL-MOD: 700MG/KG LIFETIME 3.
IHL-RAT: 500MG/KG LIFETIME 3.
IHL-HMN TCLO: 500PPM/1G-TFX:CSN 5.

ALIPHATIC PETROLEUM DISTILLATE
IHL-HMN TCLO: 600MG/M3/8H 5.
EYE-HMN TCLO: 880PPM/15M 5.
UNK-MAN LDLO: 1470MG/KG 5.
* SEE SECTION XIII
A PROPORTIONATE MORTALITY STUDY SHOWED NO INCREASE IN DEATH FROM MALIGNANT NEOPLASMS AMONG WORKERS EXPOSED FOR UP TO 30 YEARS TO MEAN CONCENTRATIONS OF METHYLENE CHLORIDE RANGING FROM 33 PPM TO 118.8 PPM, WHEN COMPARED TO CONTROL POPULATIONS. 6.

BLUE LINESOLVENT DEGREAS

IHL-HMN TCLO: 500PPM/18M-TFX:BLD 5. SEE SECTION XIII
AN INCREASED INCIDENCE OF MONONUCLEAR CELL LEUKEMIA WAS SEEN IN RATS INHALING 200 TO 400 PPM OF PERCHLOROETHYLENE FOR 2 YEARS. 9.

SECTION VII - REACTIVITY DATA

	X<--STABLE	<--UNSTABL	CONDITIONS TO AVOID
STABILITY			OPEN FLAMES.

INCOMPATIBILITY (MATERIALS TO AVOID)
STRONG ALKALIES, ACIDS, SELECTED AMINES, AND ALUMINUM (WHEN IN THE PRESENCE OF WATER AND CLOSE CONTACT UNDER PRESSURE.)

HAZARDOUS DECOMPOSITION PRODUCTS
CAN AT DECOMPOSITION TEMPERATURE RELEASE CARBON DIOXIDE, CARBON MONOXIDE, HYDROGEN CHLORIDE AND PHOSGENE.

	X <--WILL NOT OCCUR	<--MAY OCCUR	CONDITIONS TO AVOID
HAZARDOUS POLYMERIZATION	N/A		

SECTION VIII - SPILL OR LEAK PROCEDURES

STEPS TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
REMOVE ALL SOURCES OF IGNITION. PREVENT FROM ENTERING SEWER OR WATER SOURCES. VENTILATE ENCLOSED SPACE. WEAR RESPIRATOR. CLEAN UP (ANY ELECTRIC CLEANING EQUIPMENT MUST BE EXPLOSION PROOF) OR SOAK UP WITH SAND, COTTON WASTE OR OTHER ABSORBANT MATERIAL.

WASTE DISPOSAL METHOD
DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. REGULATIONS.

NEUTRALIZING AGENT

N/A

SECTION IX - SPECIAL PROTECTION INFORMATION

REQUIRED VENTILATION
LOCAL EXHAUST SHOULD BE EMPLOYED TO KEEP AIR QUALITY AT OR EQUAL TO THE MAXIMUM ALLOWED CONCENTRATION.

RESPIRATORY PROTECTION
NO RESPIRATOR IS NEEDED IN NORMAL USE. IN EMERGENCY SITUATIONS, HOWEVER THE FOLLOWING ARE RECCOMENDED:
500 PPM:CCROVF/GMOV/SAF/SCBAF
1000 PPM: CCROVF/GMOV/SAF/SCBAF
ESCAPE: GMOV/SCBA

PROTECTIVE GLOVES
VITON, PVA, OR EQUIVALENT SHOULD BE WORK.

EYE PROTECTION
CHEMICAL GOGGLES IF METHOD OF APPLICATION PRESENTS THE LIKELIHOOD OF EYE CONTACT.

OTHER PROTECTION
HEADGEAR AND APRON WHEN SPRAYING.

SECTION X - STORAGE AND HANDLING INFORMATION

STORAGE TEMPERATURE	INDOOR	HEATED	REFRIGERATED	OUTDOOR
120 F.<--MAX -50 F.<--MIN	X			

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING
FOLLOW LABEL DIRECTIONS.
KEEP OUT OF EYES AND SKIN. VAPORS HARMFUL.

OTHER PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN.

SECTION XI - REGULATORY INFORMATION

CHEMICAL NAME	C.A.S. NUMBER	UPPER % LIMIT
PERCHLOROETHYLENE	127-18-4	40
METHYLENE CHLORIDE	75-09-2	20

THOSE INGREDIENTS LISTED ABOVE ARE SUBJECT TO THE REPORTING REQUIREMENTS OF 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.
IF UE (USE EXEMPTION) APPEARS UNDER UPPER % LIMIT, END USERS ARE EXEMPT FROM NOTIFICATION BECAUSE THE PRODUCT IS USED AND LABELED FOR ROUTINE JANITORIAL WORK, OR THE PRODUCT IS USED AND LABELED FOR FACILITY GROUNDS MAINTENANCE (SUCH AS FERTILIZERS AND HERBICIDES), OR THE PRODUCT IS USED AND LABELED FOR MAINTAINING MOTOR VEHICLES.

CALIFORNIA PROPOSITION 65

BLUE LINESOLVENT DEGREAS

WARNING: THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE (1) CANCER OR (2) BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM:
Perchloroethylene (1).

SECTION XII - TRANSPORTATION * (FOR FUTURE USE)

APPLICABLE REGULATIONS
<--49 CFR <--IMCO <--TARIFF 6 D <--IATA <--MILITARY AIR (AFR 71-4)

SHIPPING NAME

HAZARD CLASS | ID NUMBER | REPORT QTY

LABELS | LIMITED QTY

UNIT CONTAINER

DOT SPS CONTAINER | NET EXPLOSIVE WT.

AEROSOL PROPELLANT(S)

SECTION XIII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 1990-1991.
2. OSHA PEL
3. CHEMICAL REGULATION REPORT.
4. INDUSTRIAL HYGIENE AND TOXICOLOGY, 3RD ED., F.A. PATTY, 1981.
5. NIOSH REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, 1982.
6. FRIEDLANDER BR ET AL; J OCCUPAT MED 20 (10): 657-66 (1978).
7. INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
8. NATIONAL TOXICOLOGY PROGRAM.
9. PROCTOR ET AL, 1988.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

NATIONAL CHEMSEARCH DIV. OF NCH CORP. ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE CAUSED BY THE USE, STORAGE OR DISPOSAL OF THE PRODUCT IN A MANNER NOT RECOMMENDED ON THE PRODUCT LABEL. USERS ASSUME ALL RISKS ASSOCIATED WITH SUCH UNRECOMMENDED USE, STORAGE, OR DISPOSAL OF THE PRODUCT.

Application for Certification and Release

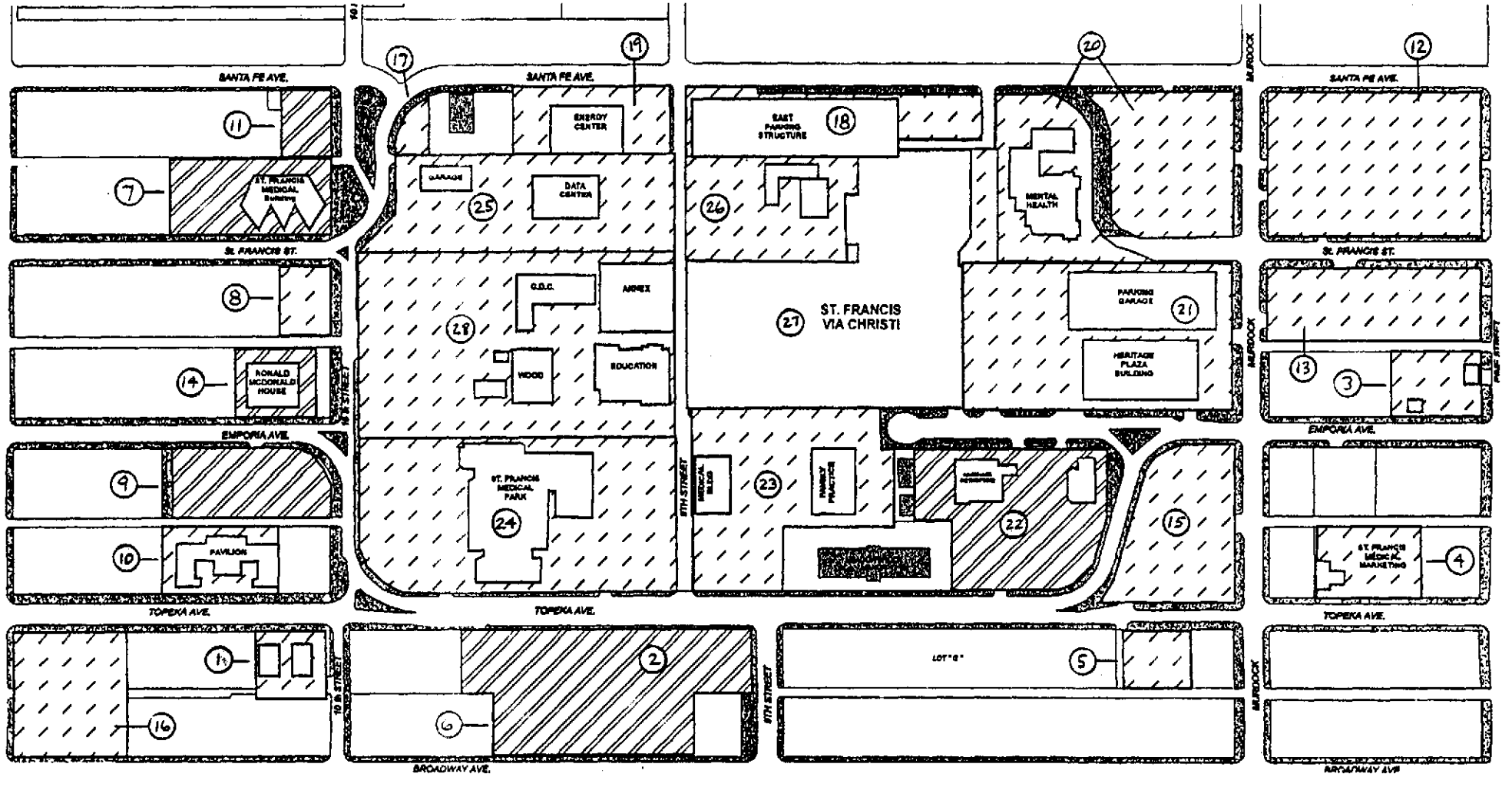
SUMMARY OF APPLICA

MAP ID	SITE NAME	LOCATION
1	Purdue House	Northwest Corner - 10th and Topeka
2	Raymond Clark	Northwest Corner - 9th and Topeka
3	Nearly New Store and EMS	Northeast Corner - Pine and Emporia
4	St. Francis Marketing	South of SE Corner - Topeka and Murdock
5	Lots 11 -13	North of NW Corner of Topeka and Murdock
6	Raymond Clark - Parking Lot For Future Hotel	Large Parking Lot Bounded by Broadway, Topeka, 9th and 10th
7	St. Francis Medical Building	1102 North St. Francis
8	Parking Lot	Northwest Corner - 10th and St. Francis
9	Parking Lot	Northwest Corner - Emporia and 10th
10	Pavillion Building	1122 North Topeka
11	Parking Lot	Northwest Corner - Santa Fe and 10th
12	Parking Lot	Southwest Corner - Murdock and Santa Fe
13	Parking Lot	Northwest Corner- St. Francis and Pine
14	Ronald McDonald House	1110 North Emporia
15	Lot	Murdock and Topeka
16	Lot	11th and Broadway
17	Vacant Lot	Southwest Corner - Santa Fe and 10th Street
18	East Parking Structure	Southwest Corner - 9th and Santa Fe
19	Energy Center	Northwest Corner - 9th and Santa Fe
20	Mental Health Building	Northwest Corner - Santa Fe and Murdock
21	South Parking Garage and Heritage Park Building	Northeast Corner - Murdock and Emporia
22	Advanced Orthopedic and Orthopedic Surgery Building	Emporia Circle and Emporia Avenue

SUMMARY OF APPLICA

MAP ID	SITE NAME	LOCATION
23	Family Practice and Medical Building	Southeast Corner - 9th and Topeka
24	St. Francis Medical Park Building	Southeast corner - 10th and Topeka
25	Data Center and Garage Buildings	Southeast Corner - 10th and Emporia Circle
26	MRI	South Side of 9th Street
27	Main Medical Center Complex	A,B,C,D,E,G,H,K,L,M,N,P , and Chapel Buildings
28	CDC, Annex, Education, and Wood Buildings	Northeast Corner - 9th and Emporia

1 - The Certificate and Release Application has been comple
Sedgwick County Health Department. The release application v
meeting between Mr. John Davis, the County project manager, anc
2 - The Certificate and Release Application has been comp
County Health Department and approval of the application is pendi



YELLOW = APPROVED

ORANGE = PENDING

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc. St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Northwest Corner of 10th and Topeka
Property Tax Key Numbers: B14411 and B-014412

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner and Leasehold

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

   a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Northwest Corner of Ninth and Topeka, Wichita, Kansas
Property Tax Key Numbers: B00909, B00910, B00911, B00912, B00913

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner and Leasehold

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center; William F. Flease; Lynne S. Ryan
(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

   a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, The Kansas Inn Limited Partnership,

(insert legal name(s) of party seeking certificate)

1250 Humboldt Street #603
Denver, Colorado 80218

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Northwest Corner of Ninth and Topeka, Wichita, Kansas
Property Tax Key Numbers: B00911, B00910, B00909, B00912, B00913

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Leasehold - to be signed
The partnership will enter into a long-term ground lease with Via Christi Regional Medical Center, Inc. in order to develop a hotel on the site.

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center; William F. Flease; Lynne S. Ryan

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
NE Corner of Pine and Emporia
(710 North Emporia) See Attachment 1

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other – describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
South of Southeast corner of Murdock & Topeka Ave., Wichita, Kansas
Property Tax Key Number: B-517; B-516; B-515; B-514

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner and Leasehold

(state whether owner, operator, lender, or other – describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus

(insert legal name(s) of party seeking certificate)

929 N. St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Properties located north of the northwest corner of the intersection of Topeka Ave. and Murdock, Wichita, Kansas.
Property Tax Key Numbers: B-884; B-885; B-886.
(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other – describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
A parking lot bounded by 9th Street to the south; Topeka Avenue to the east; Broadway Avenue to the west, and 10th Street to the north.

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
1102 North St. Francis, Wichita, Kansas. (See Attachment 1). (The St. Francis Medical Building located on the NE corner of the intersection of St. Francis Avenue and 10th Street.)
(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Operator

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: Affiliated Property Services, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus

(insert legal name(s) of party seeking certificate)

929 N. St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Lots located on the NW corner of the intersection of 10th Street and St. Francis Avenue, Wichita, Kansas

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Operator

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: Affiliated Property Services, Inc.
(See Comments page C4)
(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Parking lot located on the NW corner of the intersection of 10th Street and Emporia Avenue. (See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other – describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
1112 North Topeka, Wichita, Kansas (See Attachment 1). Pavillion Building, NE Corner, Topeka Avenue and 10th Street

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Grass covered lot located on the NW corner of 10th Street and Santa Fe
Wichita, Kansas (See Attachment 1).

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Operator

(state whether owner, operator, lender, or other – describe fully)

The Owner of Record is: Affiliated Property Services, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Parking lot located between Murdock, Santa Fe Avenue, St. Francis Avenue, and Pine Street (See Attachment 1).

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner and Leasehold

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center and Opal M. Yoder (Lots 4, 5, 6) Nesslys Subdivision.
(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Parking lot located on NW corner of St. Francis Avenue and Pine Street, Wichita, Kansas.

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner and Leasehold

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc., and Walter and Anna Graves (Lot 62, 64, 66)

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
1110 North Emporia, Wichita, Kansas
(Ronald McDonald House See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
A parking lot located on the NE corner of the intersection of Murdock Topeka Avenue and the NW corner of Murdock and Emporia Avenue.
(See Attachment 1)
(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

   a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Properties located south of the SE corner of Broadway and 11th Street and south of the SW corner of Topeka and 11th Street (See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Property located on the SW corner of the intersection of Santa Fe and 10th Street (See Attachment 1).

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 N. St. Francis
Wichita Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Parking garage located onthe southwest corner of the intersection of 9th Street and Santa Fe Avenue (See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Property located on the NW corner of the intersection of 9th and Santa Fe Avenue (See Attachment 1).

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Mental Health Building and Parking Lot located on the northwest corner of the intersection of Santa Fe Avenue and Murdock Street.
(See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Parking garage and the Heritage Plaza Building located adjacent to the north side of Murdock Street, between Emporia and St. Francis Avenues (See Attachment 1).

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
905 North Emporia, Wichita, Kansas
(Advanced Orthopedic Building and Orthopedic Surgery Building and
Parking Lots (See Attachment 1)).
(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 N. St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
959 & 925 North Emporia Avenue. Medical Building, Family Practice Building, and Parking Lots (See Attachment 1).

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: Via Christi Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
1035 North Emporia St. Francis Medical Park Building and Adjacent Parking Lots (See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
Data Center Building, Garage Building, and parking lots located between 10th Street, 9th Street, St. Francis Avenue and N-S alley.
(See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other – describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
928 North St. Francis (See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner and other (See Attachment 2)

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: MRI, L.P., and Via Christi Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita, Kansas 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
929 N. St. Francis (See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

CITY OF WICHITA
NORTH INDUSTRIAL CORRIDOR REDEVELOPMENT DISTRICT
APPLICATION FOR CERTIFICATE AND RELEASE
FOR ENVIRONMENTAL CONDITIONS

1. COMES NOW, Via Christi Regional Medical Center, Inc.
St. Francis Campus,

(insert legal name(s) of party seeking certificate)

929 North St. Francis
Wichita KS 67214

(insert full current mailing address)

("Applicant") and hereby certifies to the City of Wichita, Kansas, as follows:

2. That the Applicant seeks a Certificate and Release for Environmental Conditions for the property located at:
512 East 9th Street (See Attachment 1)

(state street address of property within the North Industrial Corridor area)

3. That the Applicant is the owner, operator, or holder of a security interest or other equitable interest in the above-described property, and that the interest held in the property is: Owner

(state whether owner, operator, lender, or other -- describe fully)

The Owner of Record is: St. Francis Regional Medical Center, Inc.

(if different than Applicant)

4. That the Applicant has personally inspected the property described in 2, above, and has made all reasonable inquiry into the current uses of the property, and has determined that one of the following conditions apply: (circle appropriate letters)

a. Residential. The property is a residential use property and is not and has not been used for commercial or industrial uses.

Excerpts from Report(s) Prepared by Others

Via Christi Regional Medical Center
St. Francis Campus
Wichita, Kansas

Phase 2 RSE and Addendum
Project Summary Report

Allied
Environmental
Consultants

Prepared For:

VIA CHRISTI REGIONAL MEDICAL CENTER, Inc.

Prepared By:

ALLIED ENVIRONMENTAL CONSULTANTS, INC.

FINAL

AEC File No. 99016-2-0299

MAY 8, 2000

ıne Anawalt House • 1109 N. Topeka (67214) • 316 262 5698 • www.alliedenvironmental.com ■ Wichita, Kansas ■

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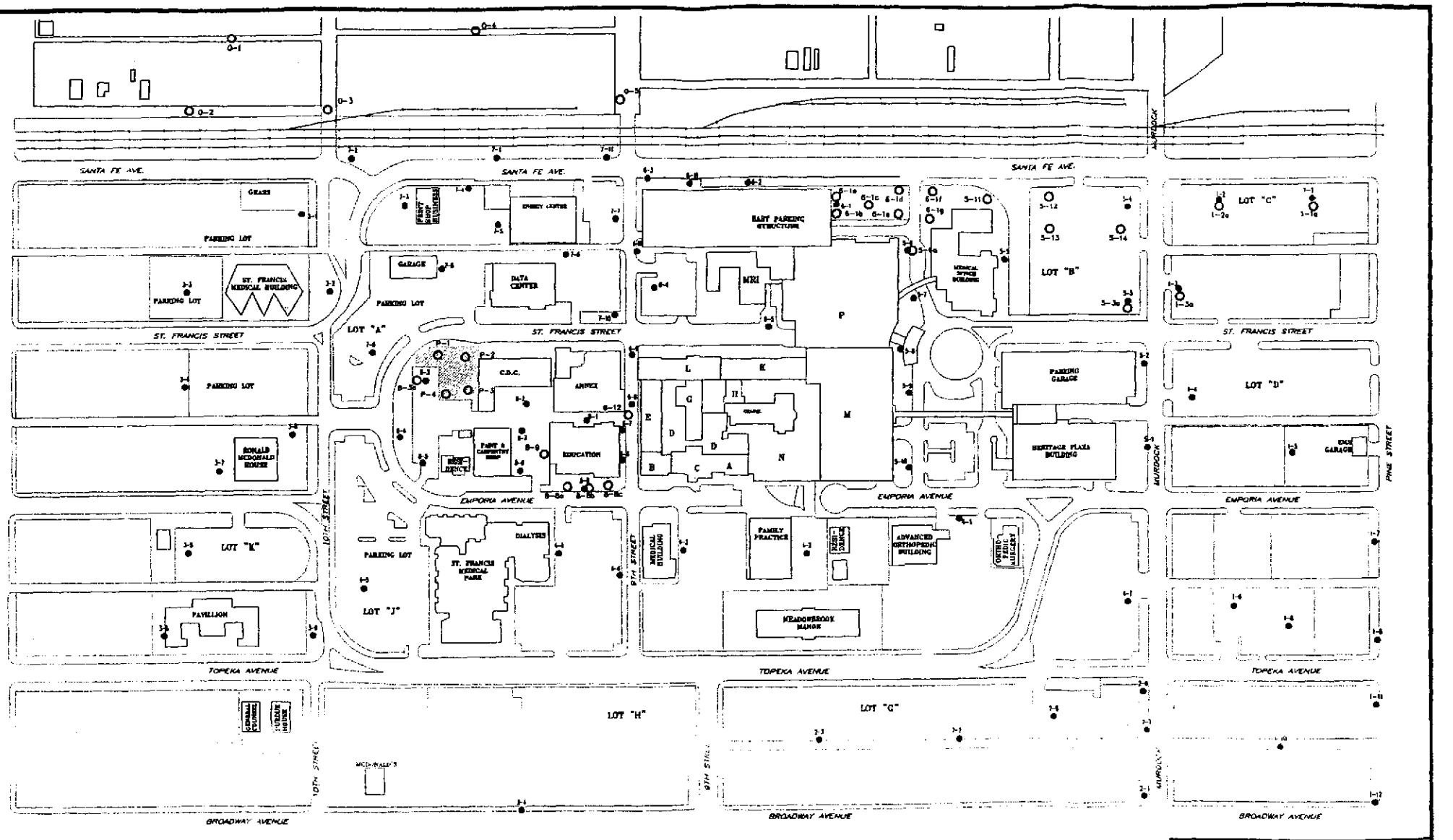
Appendix C – Groundwater Tables

Table C1 – Summary of Detected Analytes in Ground Water October 1997
Table C2 – Summary of Detected Analytes in Ground Water August 1999



LEGEND

8-1 ● — NOV. 1997 RSE PHASE 2 SAMPLE LOCATION

○ — AUG. 1999 RSE PHASE 2 ADDITIONAL SAMPLE LOCATION

AEC

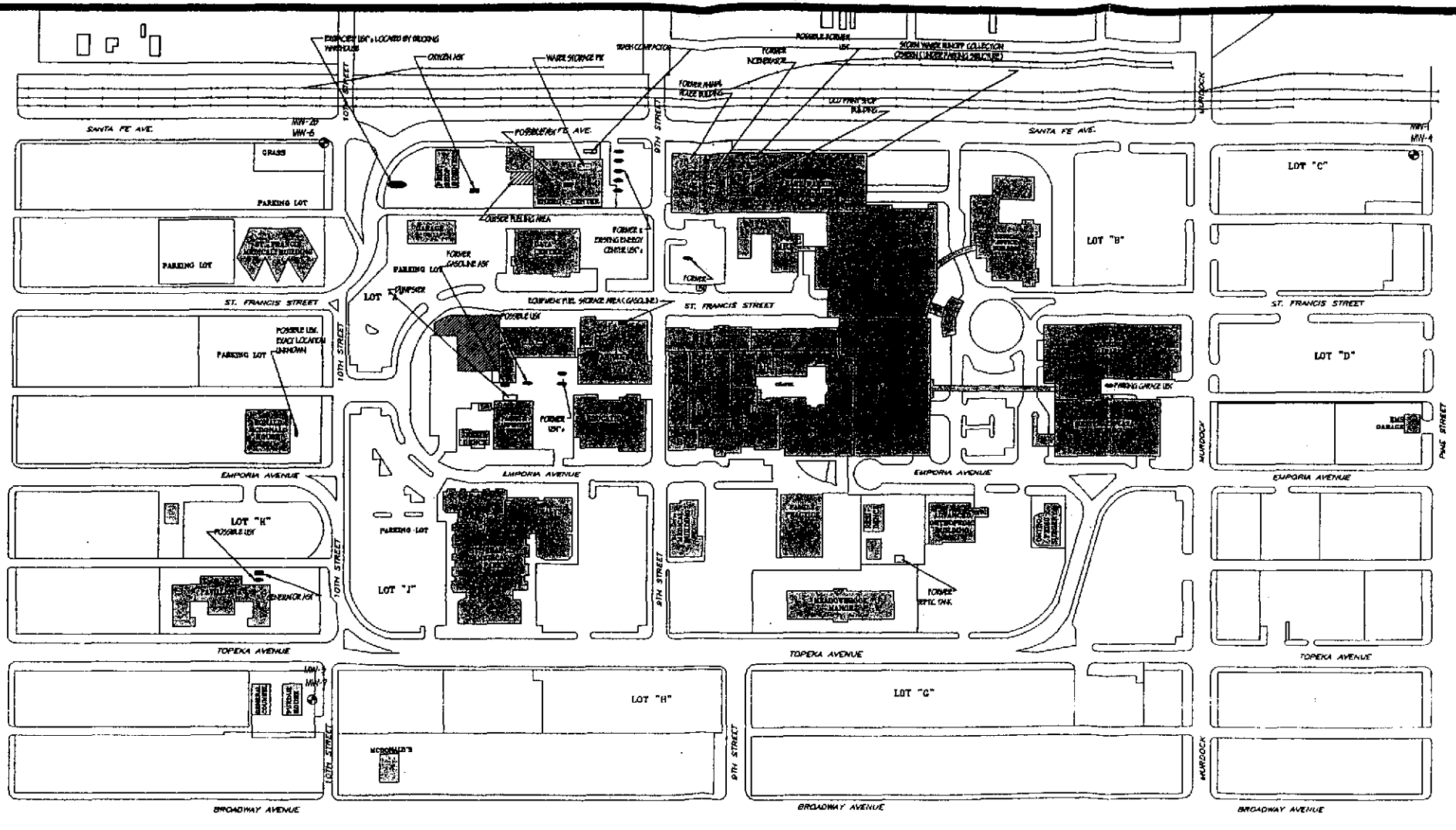
0 100 200 FEET

FIGURE 1

SITE BASE MAP and SAMPLING LOCATIONS PHASE 2 RSE and ADDENDUM

VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\990181\990181-2\ADV\FIG1.DWG 1-21-00 NSTD17LLC



LEGEND

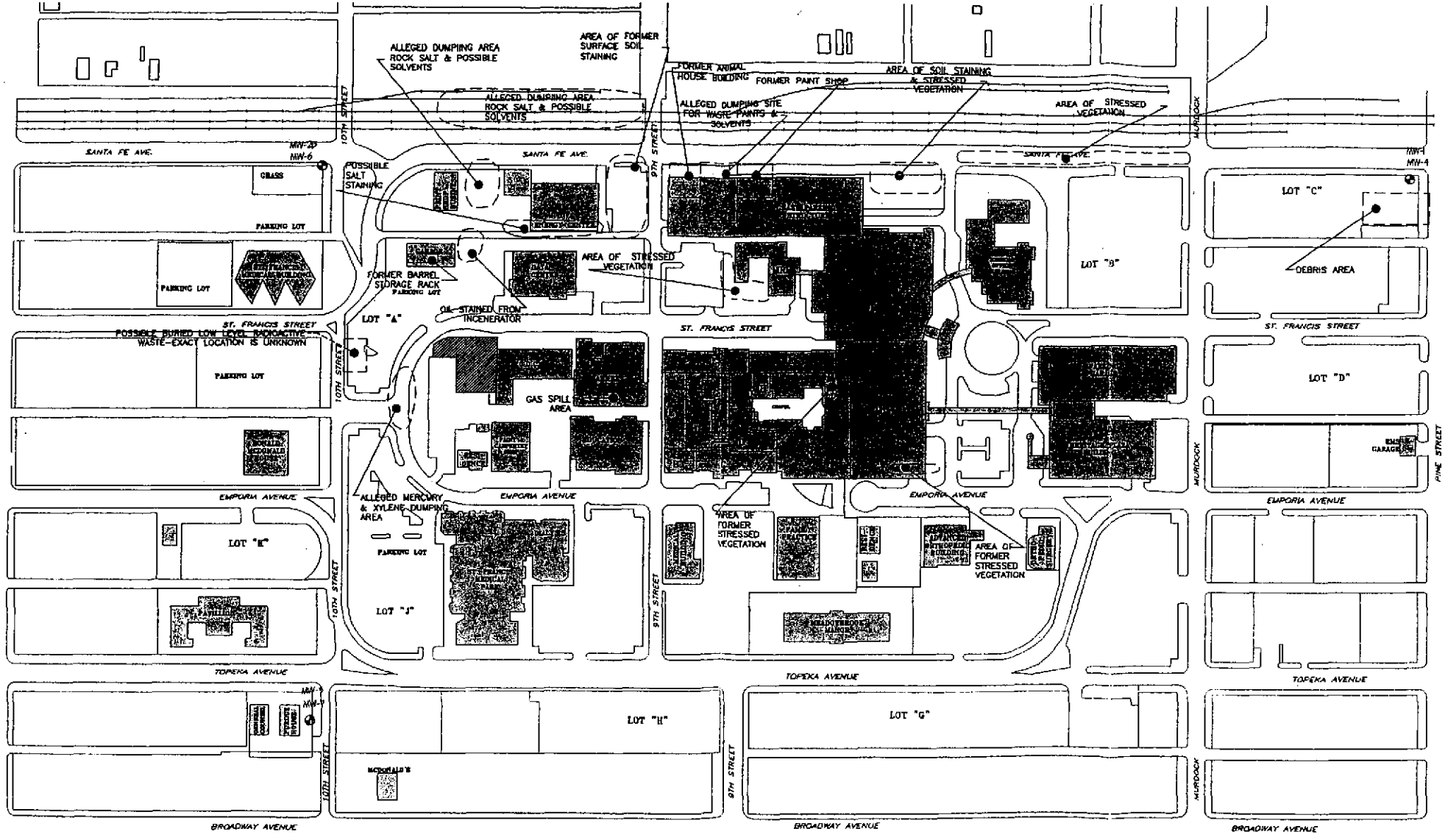
- —EXISTING MONITORING WELL
- —UNDERGROUND STORAGE TANK (UST)
- —ABOVE GROUND STORAGE TANK (AST)
- —SEPTIC TANK
- —PIT / DISTURBED AREAS

0 100 200 FEET

FIGURE 4

LOCATION OF EXISTING AND FORMER USTs, ASTs, & SEPTIC TANKS
PHASE 2 RSE and ADDENDUM
VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\98018\98018-2\CADD\FIG4.DWG 1-21-00



LEGEND

—EXISTING MONITORING WELL

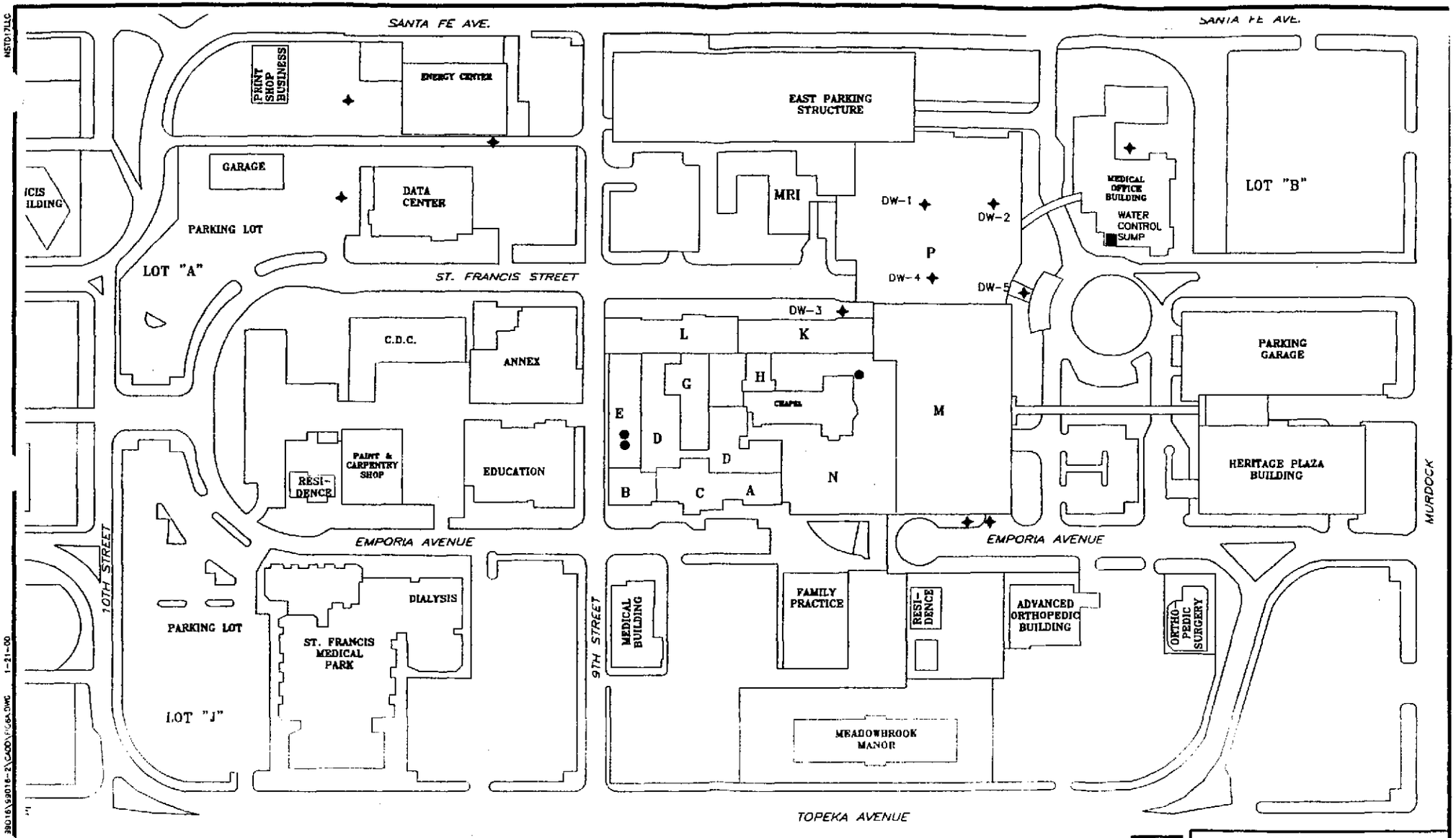
0 100 200 FEET

FIGURE 5

ALLEGED RELEASES & STRESSED VEGETATION
PHASE 2 RSE and ADDENDUM

VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\99\99016\99016-2\CADD\FIGS.DWG 1-21-00



LEGEND

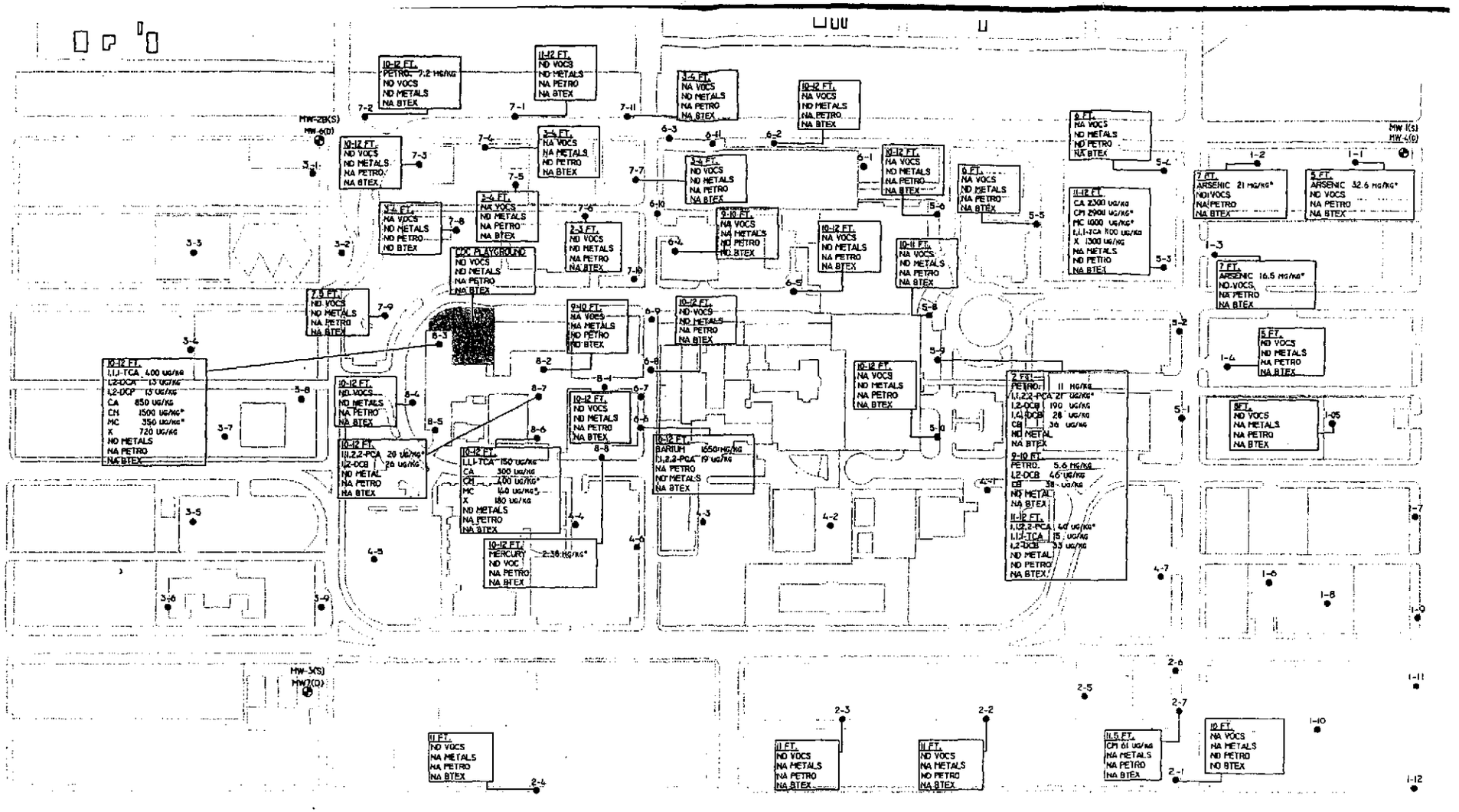
- ✦ —PAST CONSTRUCTION DE-WATERING WELL
- ■ —WATER CONTROL SUMP
- ● —INACTIVE WELL

FIGURE 6A

PAST DEWATERING WELLS AND WATER EXTRACTION POINTS PHASE 2 RSE and ADDENDUM

VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\39016\99016-2\CADD\FIG6A.DWG 1-21-00 HSTD:7LLC



NOTE:

* = CONCENTRATION EXCEEDING REGULATORY LEVEL
ND VOC = NO VOCS DETECTED
ND PETRO = NO PETROLEUM DETECTED
ND METALS = NO METALS DETECTED OVER REGULATORY LEVEL
ND BTEX = NO VOLATILE HYDROCARBONS DETECTED
NA = NOT ANALYZED

DATE OF SAMPLING: OCT/NOV 1997

LEGEND

- EXISTING MONITORING WELL
- ABOVEGROUND SOIL BORING LOCATION

LIST OF ABBREVIATIONS

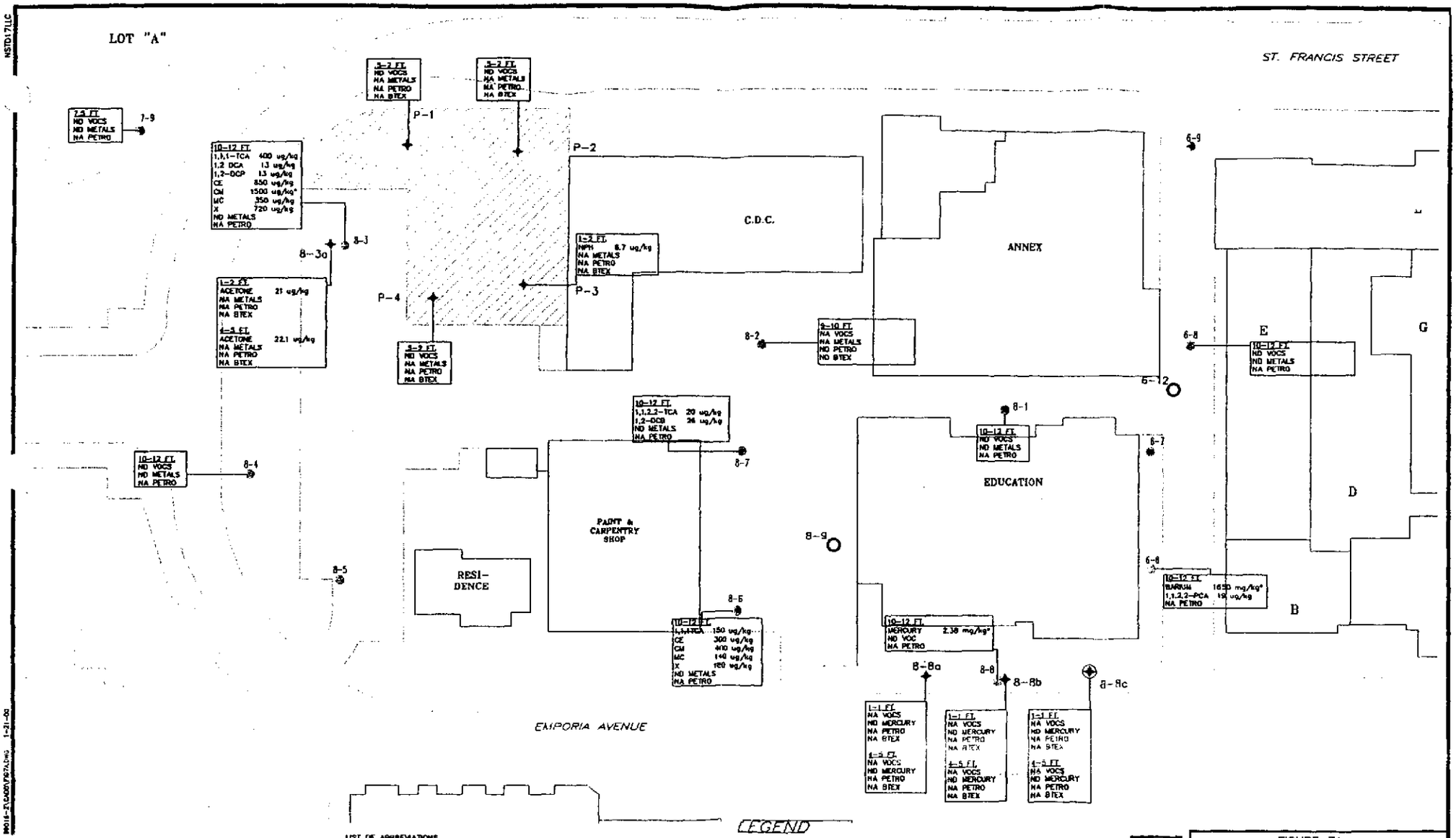
1,1,1-Trichloroethane, (ug/kg)	1,1,1-TCA	1,4-Dichlorobenzene, (ug/kg)	1,4-DCB
1,1,2,2-Tetrachloroethane, (ug/kg)	1,1,2,2-PCA	Chlorobenzene, (ug/kg)	CB
1,1,2-Trichloroethane, (ug/kg)	1,1,2-TCA	Chloroethane, (ug/kg)	CA
1,2-Dichlorobenzene, (ug/kg)	1,2-DCB	Chloromethane, (ug/kg)	CM
1,2-Dichloroethane, (ug/kg)	1,2-DCA	Methylene Chloride, (ug/kg)	MC
1,2-Dichloropropane, (ug/kg)	1,2-DCP	Xylene (Total), (ug/kg)	X
		Petroleum Hydrocarbons	PETRO

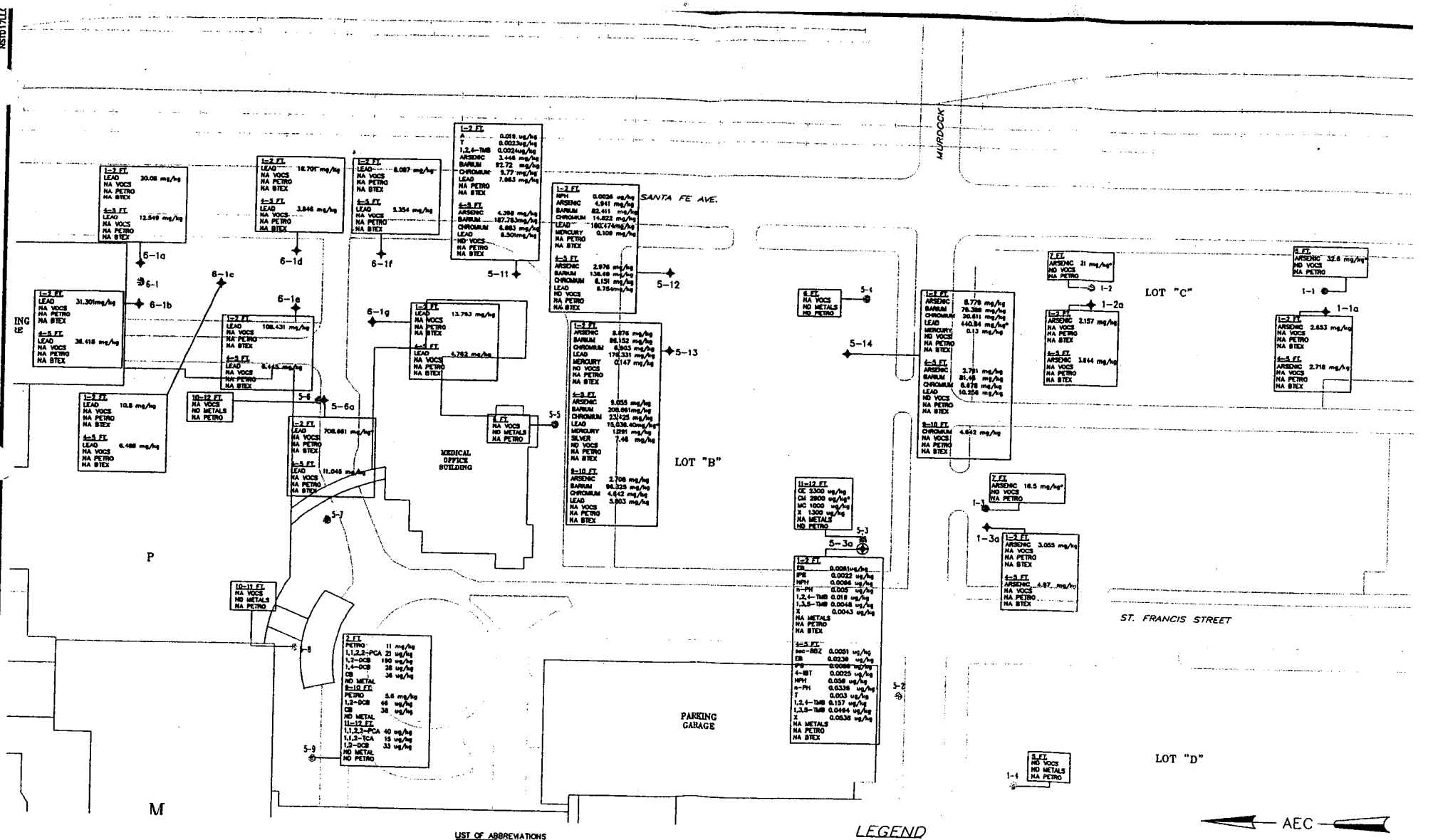
FIGURE 7

CONSTITUENTS DETECTED IN SOILS
NOV. 1997 PHASE 2 SAMPLES
PHASE 2 RSE and ADDENDUM

VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\99016-2\CADD\CADD2\FIG7.DWG 1-21-00


LOT "A"
ST. FRANCIS STREET
EMPORIA AVENUE
C.D.C.
ANNEX
EDUCATION
PAINT & CARPENTRY SHOP
RESI-DENCE
P-1
P-2
P-3
P-4
7-9
8-3
8-3a
8-4
8-5
8-6
8-7
8-2
8-1
8-8
8-8a
8-8b
8-8c
8-9
6-9
6-8
6-7
6-12
E
G
D
B
3-2 FT.
ND VOCS
NA METALS
NA PETRO
NA BTEX
7-9 FT.
ND VOCS
ND METALS
NA PETRO
10-12 FT.
1,1,1-TCA 400 ug/kg
1,2 DCA 13 ug/kg
1,2-DCP 13 ug/kg
CE 850 ug/kg
CM 1500 ug/kg*
MC 350 ug/kg
X 720 ug/kg
ND METALS
NA PETRO
1-2 FT.
NPH 8.7 ug/kg
NA METALS
NA PETRO
NA BTEX
1-3 FT.
ACETONE 21 ug/kg
NA METALS
NA PETRO
NA BTEX
4-5 FT.
ACETONE 22.1 ug/kg
NA METALS
NA PETRO
NA BTEX
9-10 FT.
NA VOCS
NA METALS
ND PETRO
ND BTEX
10-12 FT.
1,1,2,2-TCA 20 ug/kg
1,2-DCB 36 ug/kg
ND METALS
NA PETRO
10-12 FT.
1,1,1-TCA 150 ug/kg
CE 300 ug/kg
CM 410 ug/kg
MC 140 ug/kg
X 120 ug/kg
ND METALS
NA PETRO
10-12 FT.
MERCURY 2.38 mg/kg*
ND VOC
NA PETRO
10-12 FT.
BARIUM 1650 mg/kg*
1,1,2,2-PCA 19 ug/kg
NA PETRO
1-1 FT.
NA VOCS
ND MERCURY
NA PETRO
NA BTEX
4-5 FT.
NA VOCS
ND MERCURY
NA PETRO
NA BTEX
LEGEND
— NOV. 1997 RSE PHASE 2 SAMPLE LOCATION
— AUG. 1999 RSE PHASE 2 SOIL SAMPLE LOCATION
— AUG. 1999 SOIL AND GROUNDWATER SAMPLE LOCATIONS
— AUG. 1999 GROUNDWATER SAMPLE LOCATION
AEC
AUGUST 1999 CONCENTRATIONS IN PPB
TVOC – TOTAL VOLATILE ORGANIC COMPOUNDS
LIST OF ABBREVIATIONS
NOTE:
* = CONCENTRATION EXCEEDING REGULATORY LEVEL
ND VOC = ND VOCS DETECTED
ND PETRO = ND PETROLEUM DETECTED
ND METALS = ND METALS DETECTED OVER REGULATORY LEVEL
ND BTEX = ND VOLATILE HYDROCARBONS DETECTED
NA = NOT ANALYZED
DATE OF SAMPLING: OCT/NOV 1997
FIGURE 7A
CONSTITUENTS IN SOILS
-AUG. 1999 ADDITIONAL SAMPLING-
NORTH CENTRAL CAMPUS AREA
PHASE 2 RSE and ADDENDUM
VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS



NOTE:
* = CONCENTRATION EXCEEDING REGULATORY LEVEL
ND VOC = NO VOCS DETECTED
ND PETRO = NO PETROLEUM DETECTED
ND METALS = NO METALS DETECTED OVER REGULATORY LEVEL
ND BTEX = NO VOLATILE HYDROCARBONS DETECTED
NA = NOT ANALYZED

DATE OF SAMPLING: OCT/NOV 1997

LIST OF ABBREVIATIONS

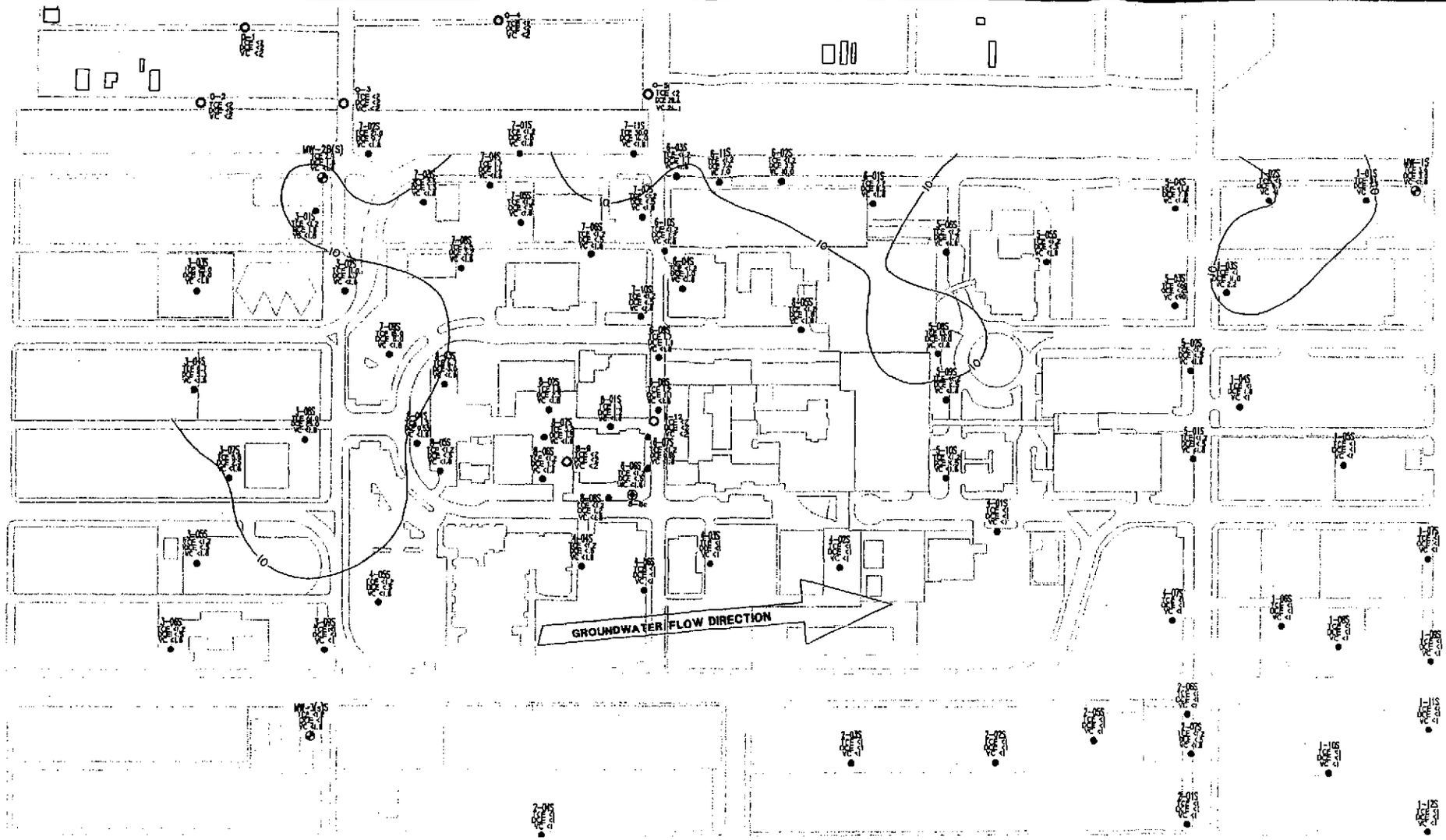
1,1,1-Trichloroethane, (ug/L)	1,1,1-TCA	Chloroethane, (ug/L)	CA	Naphthalene	NPH		
1,1,2,2-Tetrachloroethane, (ug/L)	1,1,2,2-PCA	Chloroform, (ug/L)	C	Aniline	A		
1,1-Dichloroethane, (ug/L)	1,1-DCA	Chloromethane, (ug/L)	CM	1,2,4 Trimethylbenzene	1,2,4-TMB		
1,1-Dichloroethene, (ug/L)	1,1-DCE	Dibromochloromethane, (ug/L)	DBM	sec Butylbenzene	sec-BBZ		
1,2-Dichlorobenzene, (ug/L)	1,2-DCB	Ethylbenzene, (ug/L)	EB	Isopropylbenzene	PB		
1,2-Dichloroethane, (ug/L)	1,2-DCA	Methylene Chloride, (ug/L)	MC	4 Isopropyltoluene	4-IBT		
1,2-Dichloropropane, (ug/L)	1,2-DCP	Styrene, (ug/L)	S	n-Propylbenzene	n-PB		
1,3-Dichlorobenzene, (ug/L)	1,3-DCB	Tetrachloroethene, (ug/L)	PCE	1,2,4-Trimethylbenzene	1,3,5-TMB		
1,4-Dichlorobenzene, (ug/L)	1,4-DCB	Toluene, (ug/L)	T	Trichloroethene	TCE		
Benzene, (ug/L)	B	trans-1,3-Dichloroethene, (ug/L)	T-1,3-DCE				
Bromodichloromethane, (ug/L)	BdCM	Xylene (Total), (ug/L)	X				

LEGEND

1-1 — NOV. 1997 RSE PHASE 2 SAMPLE LOCATION
— AUG. 1999 RSE PHASE 2 SOIL SAMPLE LOCATIONS
— AUG. 1999 RSE PHASE 2 SOIL AND GROUNDWATER SAMPLE LOCATIONS
— AUG. 1999 RSE PHASE 2 GROUNDWATER SAMPLE LOCATION

AUGUST 1999 CONCENTRATIONS IN PPB
TVOC – TOTAL VOLATILE ORGANIC COMPOUNDS

FIGURE 7B
CONSTITUENTS IN SOILS
–AUG. 1999 ADDITIONAL SAMPLING–
SOUTHEAST CAMPUS AREA
PHASE 2 RSE and ADDENDUM
VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS



LEGEND

- —EXISTING MONITORING WELL
- —NOV. 1997 RSE PHASE 2 SAMPLE LOCATION
- —AUG. 1999 RSE PHASE 2 ADDITIONAL SAMPLE LOCATION

NOTE:
S = SHALLOW/UPPER
D = DEEP/LOWER
CONTOURS BASED ON AGGREGATE VALUES.

LIST OF ABBREVIATIONS

Trichloroethene, (ug/L)	TCE
cis-1,2-Dichloroethene, (ug/L)	DCE
Vinyl Chloride, (ug/L)	VC

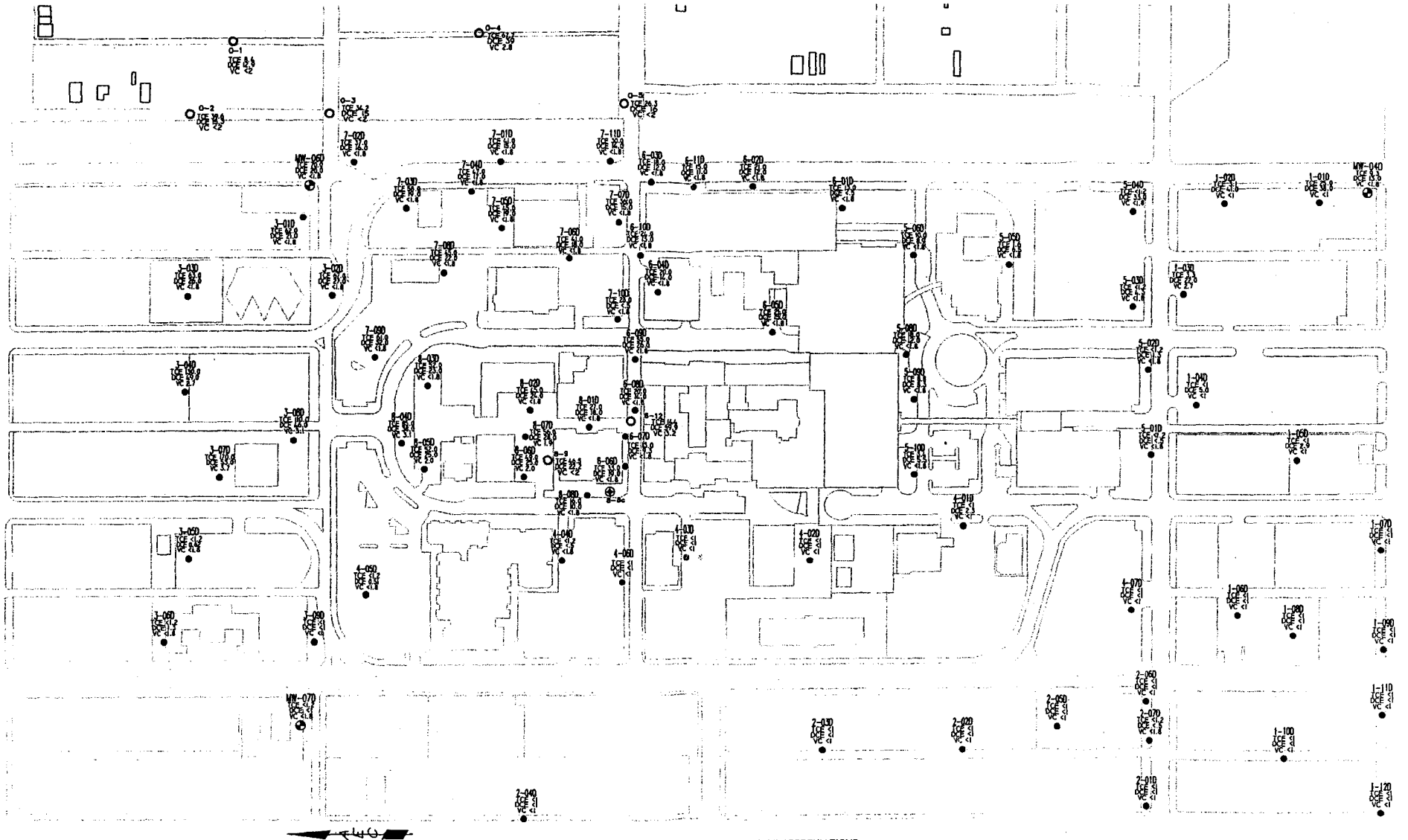
ATTORNEY/CLIENT PRIVILEGE

FIGURE 8

CONCENTRATIONS OF TCE, CIS-1,2-DCE & VINYL CHLORIDE DETECTED IN UPPER PORTION OF THE AQUIFER (NOV. 1997 & AUG. 1999) PHASE 2 RSE and ADDENDUM

VA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\99016\99016-2\CADD\FIG8.DWG 1-21-00



0 100 200 FEET

LEGEND

- EXISTING MONITORING WELL
- NOV. 1997 RSE PHASE 2 SAMPLE LOCATION
- AUG. 1999 RSE PHASE 2 ADDITIONAL SAMPLE LOCATION

LIST OF ABBREVIATIONS

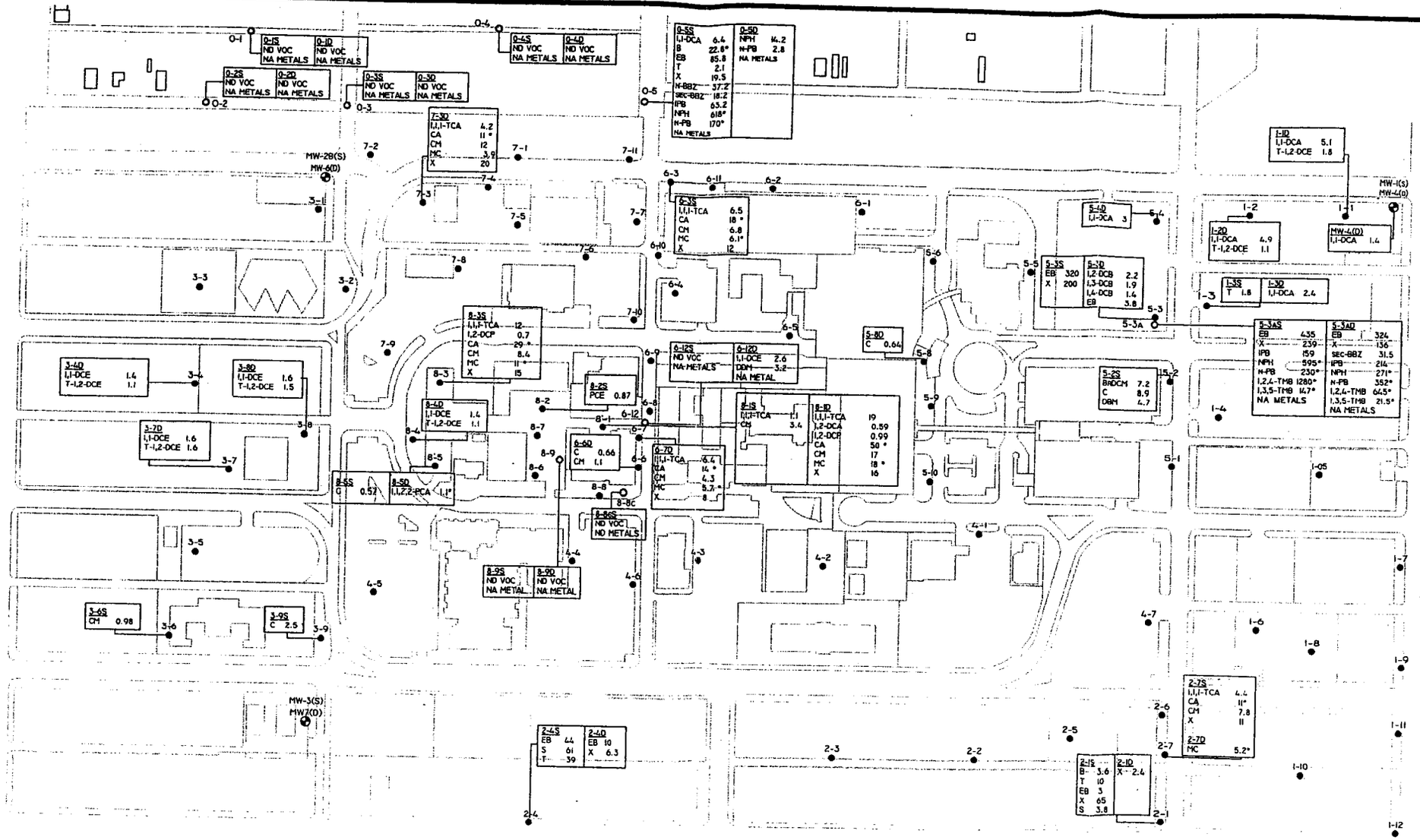
Trichloroethene, (ug/L)	TCE
cis-1,2-Dichloroethene, (ug/L)	DCE
Vinyl Chloride, (ug/L)	VC

FIGURE 9

CONCENTRATIONS OF TCE, CIS-1,2-DCE & VINYL CHLORIDE DETECTED IN LOWER PORTION OF THE AQUIFER (NOV. 1997 AND AUG. 1999) PHASE 2 RSE and ADDENDUM

VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\...\CAD\FIG9.DWG 1-21-00



NOTE:
S = SHALLOW/UPPER - COLLECTED WITHIN UPPER 5' OF AQUIFER
D = DEEP/LOWER - COLLECTED WITHIN LOWER 3' OF AQUIFER
* = CONCENTRATION EXCEEDING REGULATORY LEVEL
ND VOC = NO VOCS DETECTED
ND PETRO = NO PETROLEUM DETECTED
ND METALS = NO METALS DETECTED OVER REGULATORY LEVEL
ND BTEX = NO VOLATILE HYDROCARBONS DETECTED
NA = NOT ANALYZED
SHALLOW AND DEEP SAMPLES WERE COLLECTED AT EACH LOCATION
DATE OF SAMPLING: OCT/NOV 1997

0 100 200 FEET

LEGEND

- EXISTING MONITORING WELL
- NOV. 1997 RSE PHASE 2 SAMPLE LOCATION
- AUG. 1999 RSE PHASE 2 ADDITIONAL SAMPLE LOCATION

LIST OF ABBREVIATIONS

1,1,1-Trichloroethane, (ug/L)	1,1,1-TCA
1,1,2,2-Tetrachloroethane, (ug/L)	1,1,2,2-PCA
1,1-Dichloroethane, (ug/L)	1,1-DCA
1,1-Dichloroethene, (ug/L)	1,1-DCE
1,2-Dichlorobenzene, (ug/L)	1,2-DCB
1,2-Dichloroethane, (ug/L)	1,2-DCA
1,2-Dichloropropane, (ug/L)	1,2-DCP
1,3-Dichlorobenzene, (ug/L)	1,3-DCB
1,4-Dichlorobenzene, (ug/L)	1,4-DCB
Benzene, (ug/L)	B
Bromodichloromethane, (ug/L)	BrDCM
Chloroethane, (ug/L)	CA
Chloroform, (ug/L)	C
Chloromethane, (ug/L)	CM
Dibromochloromethane, (ug/L)	DBM
Ethylbenzene, (ug/L)	EB
Methylene Chloride, (ug/L)	MC
Styrene, (ug/L)	S
Tetrachloroethene, (ug/L)	PCE
Toluene, (ug/L)	T
trans-1,2-Dichloroethene, (ug/L)	T-1,2-DCE
Xylene (Total), (ug/L)	X
n-Butylbenzene(ug/L)	n-BBZ
sec-Butylbenzene(ug/L)	sec-BBZ
Dichlorodifluoromethane(ug/L)	DCM
Isopropylbenzene(ug/L)	IPB
Naphthalene(ug/L)	NPH
n-Propylbenzene(ug/L)	n-PH
1,2,4-Trimethylbenzene(ug/L)	1,2,4-TMB
1,3,5-Trimethylbenzene(ug/L)	1,3,5-TMB

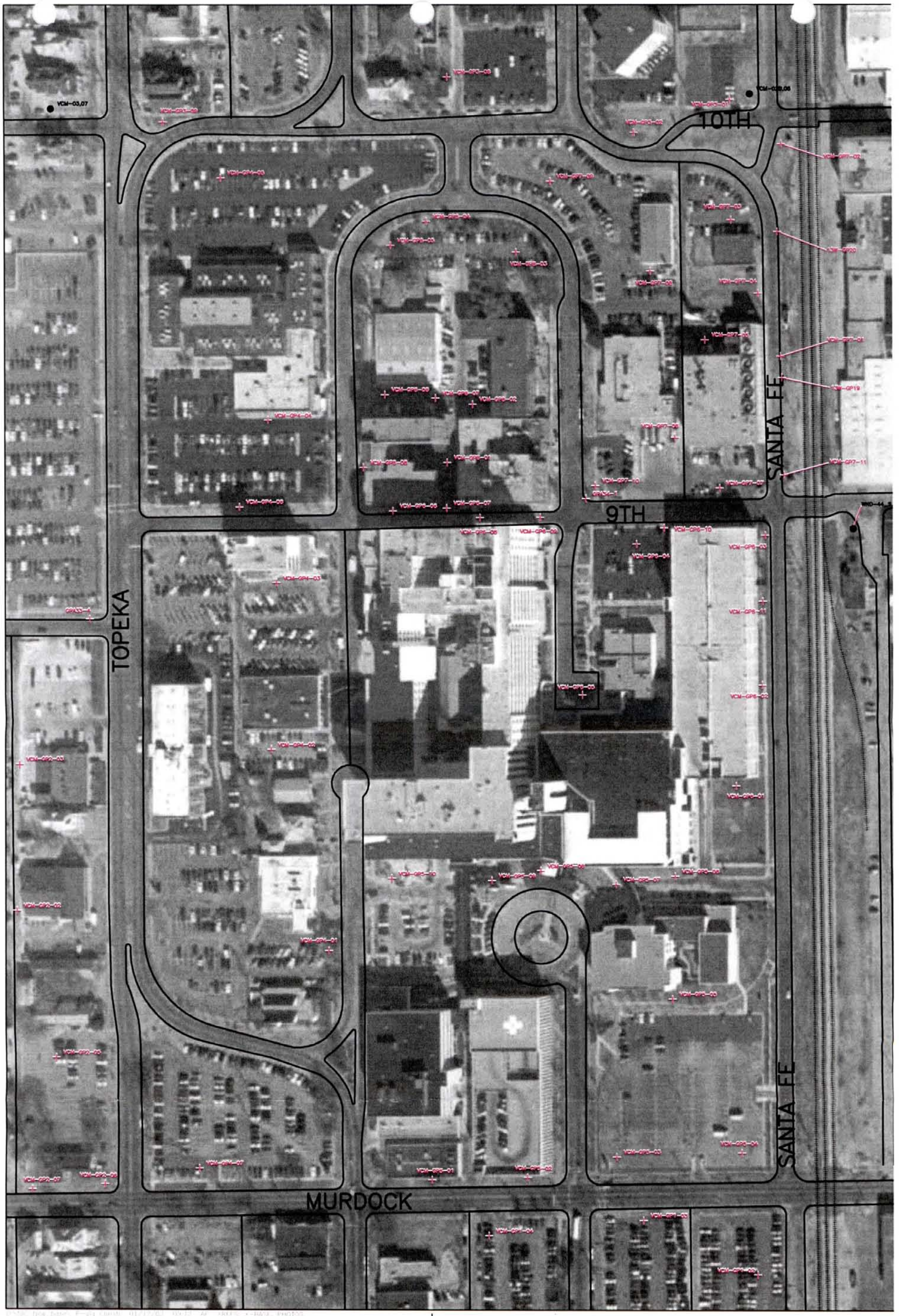
FIGURE 12

CONSTITUENTS DETECTED IN GROUNDWATER EXCLUDING TCE, DCE & VINYL CHLORIDE (NOV. 1997 and AUG. 1999) PHASE 2 RSE and ADDENDUM

VIA CHRISTI HOSPITAL SITE
WICHITA, KANSAS

FILENAME: H:\...\715-2\CADD\CADD3\FIG12.DWG 1-21-00

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 150'

75 0 150

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Via Christi

Table(s)
Analytical Data Table(s)

Via Christi Medical Center, St. Francis Campus
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GPA33-4	S/20	12/04/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA33-4	D/35	12/04/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA34-1	S/20	12/23/97		µg/L	<1	**5.7**	**3.6**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA34-1	D/36	12/23/97		µg/L	<1	**35**	**22**	<1	<1	<1	<1	<1	<1	<1	<5.4
VCM-MW-02B	S	05/02/01		µg/L	<1.0	**15**	**7.5**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
VCM-MW-03	S	05/02/01		µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
VCM-MW-06	D	05/02/01		µg/L	<1.0	**71**	**37**	**1.7**	<1.0	**1.4**	**1**	<1.0	<1.0	<1.0	**5.4**
VCM-MW-07	D	05/02/01		µg/L	<1.0	**6.1**	**6**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**6**
WND-44D	D	12/04/97		µg/L	<1	**21 JDB**	**7.7 JDB**	<1	<1	<1	<1	<1	<1	<1	**6**
WND-44D	D	05/08/01		µg/L	<1.0	**18**	**17**	**2.7**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
WND-44S	S	12/04/97		µg/L	<1	**28 JDB**	**6.7 JDB**	**15**	<1	**2.1**	<1	<1	<1	**1.8**	**7.6**
WND-44S	S	05/08/01		µg/L	<1.0	<1.0	**1.3**	**23**	<1.0	**1.8**	<1.0	<1.0	<1.0	**2.3**	**6.7**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-26
Waco Handi-Wash Facility

PRP Evaluation Summary

Waco Handi-Wash Facility
1008 North Waco (Northeast 9th and Waco)

Potential Source Area PRP and Work Plan Addendum Map ID – 07A
Contaminants of Concern – PCE and its degradation products
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Waco Handi-Wash Facility

PCE Contamination

Data indicate that this area is a significant active source of chlorinated VOC groundwater contamination. Groundwater sampling data collected along the groundwater flow path across the facility have shown an increase in the concentrations of tetrachloroethene (PCE), and its degradation product trichloroethene (TCE). A groundwater sample collected from the shallow (26 feet bgs) aquifer upgradient of the Waco Handi-Wash (WHW) facility contained PCE and TCE concentrations of less than 1 μg/L at location GP#42-1. At Geoprobe sampling location GP#42-2, adjacent to the facility's rear, PCE was detected in the shallow (20 feet bgs) at a concentration of 8 μg/L. At downgradient sample locations GP#42-4 and GPA33-1, PCE was detected at concentrations of 17 and 55 μg/L respectively, during the NIC Phase 1/1A investigations. During a previous investigation (TerraTech, 1993) PCE and its degradation products were also detected and will be discussed below.

To integrate data collected downgradient of the WHW facility by TerraTech Environmental Service, Inc. (TerraTech) in 1993 into the NIC database, the identity of the 1993 groundwater sampling have been modified to provide the facility identifier and to correlate the TerraTech sample location. In the case of WHW, this nomenclature is implemented as such: the WHW investigation's sample location TH-1, collected by Geoprobe methods, is referred to as WHW-TH01. Sample locations GW-1 through -4 are renamed WHW-TH01 through TH04. Samples collected during the NIC investigation conducted by the City of Wichita are identified by the prefixes "GPA" or "GP#".

During 1993, TerraTech conducted an environmental investigation of property immediately downgradient of the WHW facility. Two samples collected during the investigation were submitted to an offsite laboratory and resulting data are discussed here. Downgradient of the facility groundwater samples indicate PCE concentrations of 66.7 and 3.4 μg/L at depths of 15 and 30 feet bgs, respectively, at sample location WHW-TH-03. Groundwater samples from this location also revealed TCE concentrations of 12.8 and 11.6 μg/L in the shallow and deep aquifer, respectively (TerraTech, 1993). The onsite field gas chromatograph identified PCE at a concentration

of 202 μg/L; however, that sample was not submitted to an offsite laboratory for confirmation. The presence of PCE and TCE at this concentration indicates that a release to the environment has occurred.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southeast.

References

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

TerraTech, 1993, Preliminary Assessment, Groundwater Investigation Utilizing the Heated Headspace Method, 936 - 940 N. Waco, Wichita, Kansas. Prepared for Bank IV Kansas, N.A.

Polk Directory Review and RCRA Information Summary

Company Name:	Waco Handi-Wash & Dry Cleaning
Name of Contact/Owner:	
Street Address:	1008 N. Waco
City, State, Zip:	Wichita, Ks 67203
Regarding Property At:	
Phone Numbers:	
History:	1995-Wald Handiwash & Dry Cleaners; 1990-same; 1984/5-same; 1980-same; 1975-same; 1970-same; 1965-same (Waco Handiwash); 1961-Wise Laundryette
RCRA Information:	RCRA file shows waste PCE filters; F002-spent halogenated waste; PCE still

Excerpts from Report(s) Prepared by Others

TERRATECH
ENVIRONMENTAL SERVICE, INC.
212 South Hydraulic, Suite #400, Wichita, Kansas 67211
Office: (316) 262-0735 Fax: (316) 262-6860

RECEIVED
DEC 29 1994
BUREAU OF ENVIRONMENTAL REMEDIATION

PRELIMINARY ASSESSMENT
GROUNDWATER INVESTIGATION UTILIZING THE HEATED HEADSPACE METHOD

936-940 N. Waco
Wichita, Kansas

August, 1993

Prepared for:

Ms. Debbie Howard
Bank IV Kansas, N.A.
P.O. Box 4
Wichita, Kansas 67201

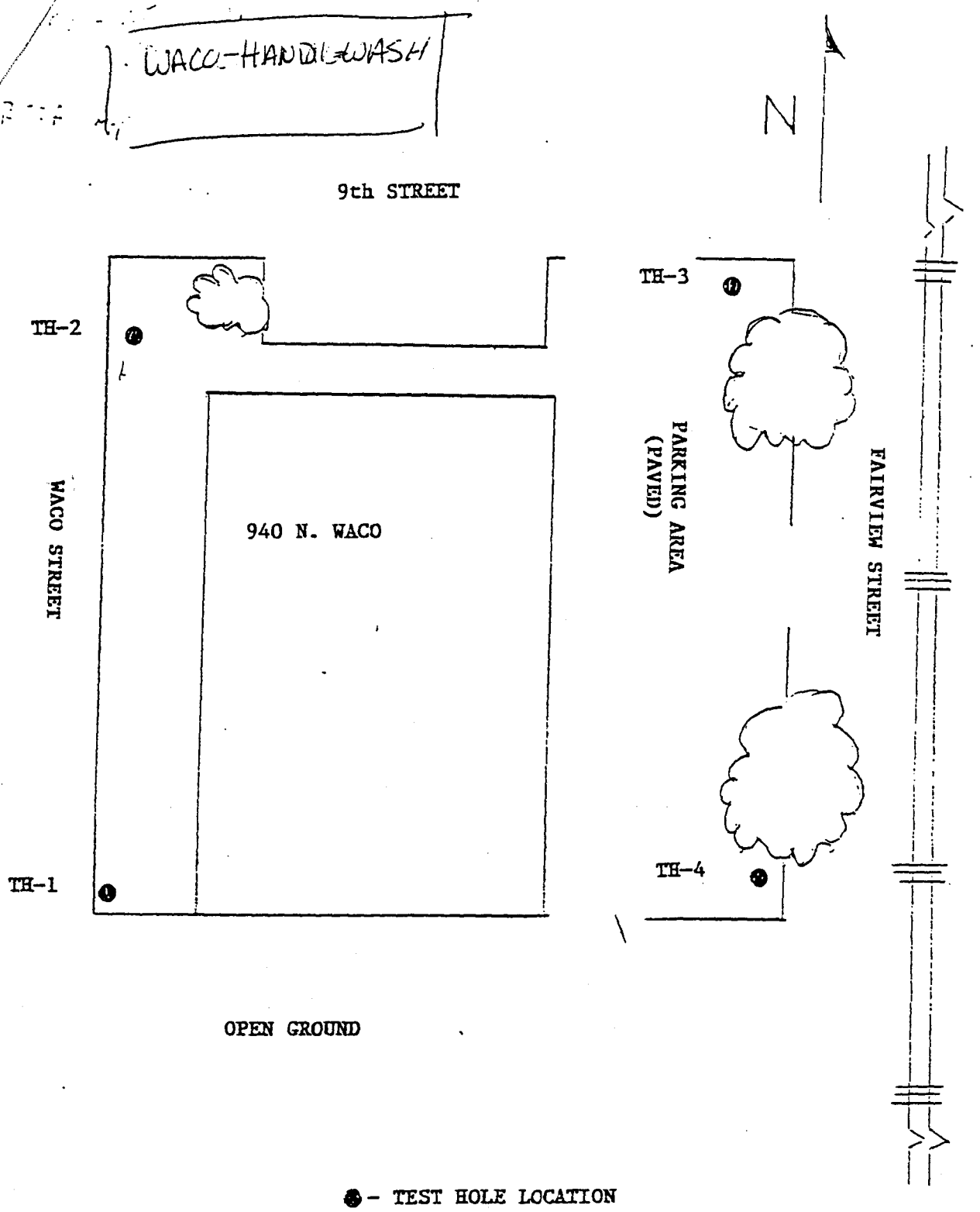
Prepared by:

TerraTech Environmental Service, Inc.
212 S. Hydraulic, Suite #400
Wichita, Kansas 67211
(316) 262-0735
FAX# (316) 262 6860

CONFIDENTIAL

PLEASE RECYCLE!

WACO-HANDWASH



● - TEST HOLE LOCATION
(number denotes sequence)

TERRATECH
ENVIRONMENTAL SERVICE, INC.

SITE MAP:
940 N. Waco
Wichita, Kansas

ICAN ANALYTICAL & TECHNICAL SERVICES

10926 E. 55th PLACE TULSA, OK 74146 918 664-0387

Lab = AATS

WWW-TH-4S

nt Name: TERRATECH ENVIROMENTAL SERVICES
1330 E. 1ST, SUITE 104
WICHITA , KS 67214

WWW-TH-4-15 Gal

Client ID:	TH-4-S	Project ID:	BIVWACO
AATS ID:	7640.03	Report:	7640.03
Received:	08/24/93	Analyzed:	08/25/93
Report Date:	08/26/93	Matrix:	Water

Sample Amount: 1.0 RESULTS REPORTED IN ug/L

COMPOUND	RESULTS	REPORTING LIMIT	COMPOUND	RESULTS	REPORTING LIMIT
CHLOROMETHANE	ND	5.0	VINYL CHLORIDE	ND	5.0
BROMOMETHANE	ND	5.0	CHLOROETHANE	ND	5.0
TRICHLOROFLUOROMETHANE	ND	5.0	1,1-DICHLOROETHENE	ND	5.0
METHYLENE CHLORIDE	ND	5.0	trans-1,2-DICHLOROETHENE	ND	5.0
1,1-DICHLOROETHANE	ND	5.0	CHLOROFORM	ND	5.0
1,1,1-TRICHLOROETHANE	ND	5.0	CARBON TETRACHLORIDE	ND	5.0
' 2-DICHLOROETHANE	ND	5.0	TRICHLOROETHENE	12.8	5.0
:-DICHLOROPROPANE	ND	5.0	BROMODICHLOROMETHANE	ND	5.0
‹-CHLOROETHYL VINYL ETHER	ND	5.0	cis-1,3-DICHLOROPROPENE	ND	5.0
trans-1,3-DICHLOROPROPENE	ND	5.0	1,1,2-TRICHLOROETHANE	ND	5.0
TETRACHLOROETHENE	66.7	5.0	DIBROMOCHLOROMETHANE	ND	5.0
CHLOROBENZENE	ND	5.0	BROMOFORM	ND	5.0
TETRACHLOROETHANE	ND	5.0	1,3-DICHLOROBENZENE	ND	5.0
1,4-DICHLOROBENZENE	ND	5.0	1,2-DICHLOROBENZENE	ND	5.0

QA Sequence No: 1A082593

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate Recoveries

cis-1,2-DICHLOROETHENE (65-135%)	p-CHLOROTOLUENE (40-140%)
101 %	100 %

** - Outside of QC Limits on both Original and Rerun
B - Compound Also Found in Blank
J - Estimated Value Below Reporting Limit
ND - Not Determined

Approved by: [signature]

Method: EPA 601/SW8010

AMERICAN ANALYTICAL & TECHNICAL SERVICES

10926 E. 55th PLACE TULSA, OK 74146 918 664-0387

Lab = AATS SAMPLE ID WHW-TH-4D

Client Name:	TERRATECH ENVIROMENTAL SERVICES 1330 E. 1ST, SUITE 104 WICHITA , KS 67214		
Client ID:	TH-4-D	Project ID:	BIVWACO
AATS ID:	7640.04	Report:	7640.04
Received:	08/24/93	Analyzed:	08/25/93
Report Date:	08/26/93	Matrix:	Water

Sample Amount: 5.0 RESULTS REPORTED IN ug/L

COMPOUND	RESULTS	REPORTING LIMIT	COMPOUND	RESULTS	REPORTING LIMIT
CHLOROMETHANE	ND	1.0	VINYL CHLORIDE	ND	1.0
BROMOMETHANE	ND	1.0	CHLOROETHANE	ND	1.0
TRICHLOROFLUOROMETHANE	ND	1.0	1,1-DICHLOROETHENE	ND	1.0
METHYLENE CHLORIDE	ND	1.0	trans-1,2-DICHLOROETHENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	CHLOROFORM	ND	1.0
1,1,1-TRICHLOROETHANE	ND	1.0	CARBON TETRACHLORIDE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	TRICHLOROETHENE	11.6	1.0
2-DICHLOROPROPANE	ND	1.0	BROMODICHLOROMETHANE	ND	1.0
CHLOROETHYL VINYL ETHER	ND	1.0	cis-1,3-DICHLOROPROPENE	ND	1.0
trans-1,3-DICHLOROPROPENE	ND	1.0	1,1,2-TRICHLOROETHANE	ND	1.0
TETRACHLOROETHENE	3.4	1.0	DIBROMOCHLOROMETHANE	ND	1.0
CHLOROBENZENE	ND	1.0	BROMOFORM	ND	1.0
TETRACHLOROETHANE	ND	1.0	1,3-DICHLOROBENZENE	ND	1.0
1,4-DICHLOROBENZENE	ND	1.0	1,2-DICHLOROBENZENE	ND	1.0

QA Sequence No: 1A082593

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate Recoveries

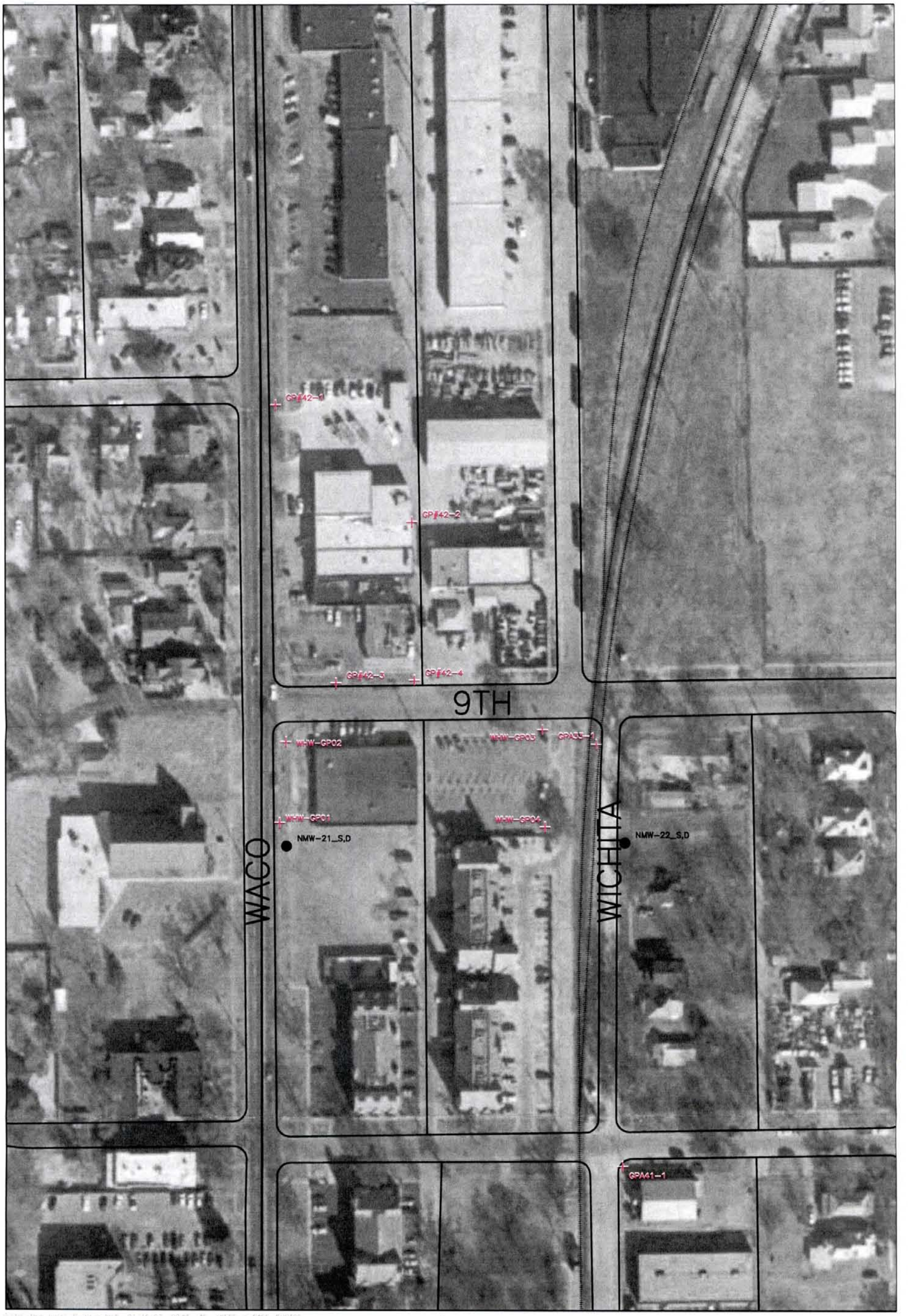
cis-1,2-DICHLOROETHENE (65-135%)	p-CHLOROTOLUENE (40-140%)
123 %	99 %

** - Outside of QC Limits on both Original and Rerun
B - Compound Also Found in Blank
J - Estimated Value Below Reporting Limit
ND - Not Determined

Approved by: [signature]

Method: EPA 601/SW8010

Figure(s)
Aerial Photographs and Sample Location Map(s)



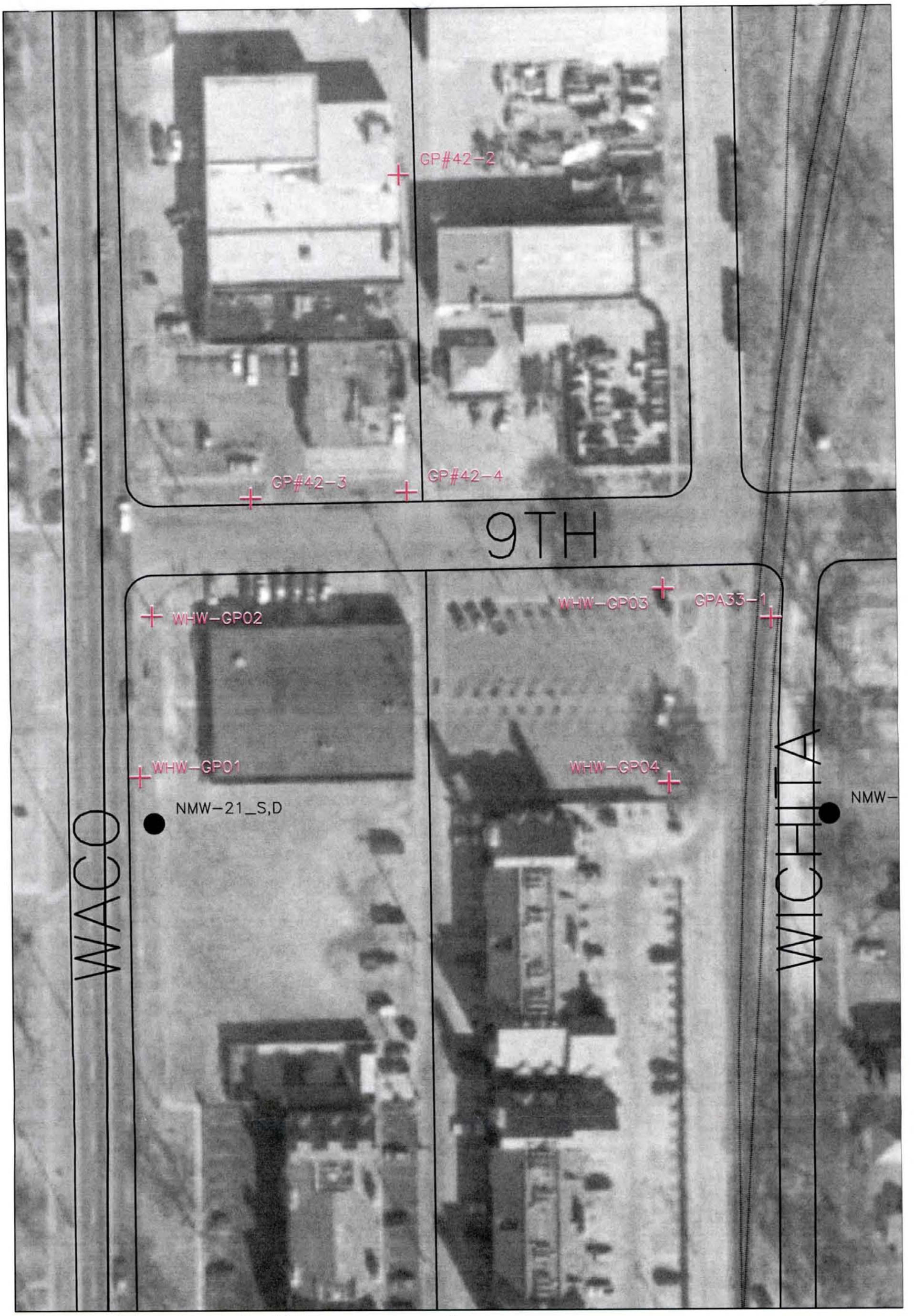
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Waco Handi-Wash Facility



CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Waco Handi-Wash Facility

Table(s)
Analytical Data Table(s)

Waco Handi-Wash Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#42-1	M/26	01/21/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#42-1	D/39	01/21/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#42-2	S/20	01/22/98		µg/L	**8**	**1.4**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#42-2	D/37	01/22/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#42-3	S/20	01/21/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#42-3	D/36	01/21/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#42-4	S/20	01/21/98		µg/L	**17**	**5.1**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#42-4	D/36	01/21/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA33-1	M/23	12/04/97		µg/L	**55**	**43**	**20**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA33-1	D/33	12/04/97		µg/L	**28**	**42**	**4.2**	<1	<1	<1	<1	<1	<1	<1	<5.4
NMW-21D	D	05/04/01		µg/L	<1.0	<1.0	**5.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
NMW-21S	S	05/04/01		µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
NMW-22D	D	05/07/01		µg/L	**2.8**	**1.8**	**2.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
NMW-22S	S	05/07/01		µg/L	**19**	**1.7**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-27
Western Uniform Facility

PRP Evaluation Summary

Western Uniform Facility

1707 North Mosley Street (Northwest and Northeast of 16th and Mosley)

Potential Source Area PRP and Work Plan Addendum Map ID - NA

Contaminants of Concern – PCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Excerpts from Report(s) Prepared by Others
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Western Uniform Facility

PCE Contamination

Data indicate that the Western Uniform Facility (WU) at 1707 North Mosley Street is a low level source of chlorinated VOC contamination. Groundwater sampling data collected by WU and by the City during the NIC Remedial Investigation have shown an increase in concentrations of PCE along the groundwater flow path through this area.

To integrate data collected at the WU facility into the NIC database, the identity of groundwater sampling locations referred to in the WU investigation has been modified to provide the facility identifier and to correlate the sample location as noted in the facility's investigation. In the case of WU, this nomenclature is implemented as such: the WU investigation's sample location GP-01, collected by Geoprobe methods, is referred to as WU-GP01. Sample locations GP-01 through GW-13 are renamed WU-GP01 through WU-GP13, inclusive. Samples collected during the NIC investigation conducted by the City of Wichita are identified by the prefix "GPA", "GP#", or "GP02E". Monitoring well identities are modified by dropping the "MW" prefix and replacing it with WU. Shallow monitoring well MW-2S would be renamed WU-2_S by this convention. Samples collected during the 13th and Washington Investigation (KDHE 1993) are identified by the prefix "13W" followed by the sample location number.

Sampling at upgradient locations WU-GP02, WU-GP09, WU-1 (shallow well), and WU-5_S indicated no detectable concentrations of PCE in the shallow groundwater. At downgradient locations WU-GP02, -GP11, WU-7_S and WU-8_S, PCE was detected at concentrations of 36, 11, 7.5 and 8.5 µg/L, respectively, in shallow groundwater (G&E 1997). Several other onsite shallow groundwater samples yielded detectable concentrations of less than 5 µg/L PCE. Shallow groundwater samples collected from downgradient Geoprobe points 13W-GP03 and 13W-GP04 during the 13th and Washington Investigation revealed concentrations of 4.6 and 4.9 µg/L (KDHE 1993). Groundwater samples collected from downgradient monitoring well WND-41_S have yielded PCE concentrations of 5.7, 7.2 and 2.5 µg/L in 1993, 1997 and 1999 respectively (G&E 1997a, G&E 1997b, AEC, 2000). PCE was also reported in the 1999 samples from

shallow monitoring wells WU-7 and WU-8 at 3.5 and 4.6 μg/L, respectively. At offsite downgradient sampling location GP#19-06 (RI Phase 1), PCE was detected in shallow groundwater at concentration of 2.2 μg/L (CDM 2000). During the Phase 2 NIC RI investigation, PCE was detected in monitoring well WND-41_S at 2.3 μg/L, and in the deep groundwater samples from four downgradient Geoprobe locations. These were GP-02E-02, GP-02E-07, GP-02E-08 and GP-02E-09, in which PCE was reported at 1.6, 1.7, 1.2, and 1.5 μg/L, respectively.

Though most PCE concentrations are near or below the MCL of 5 μg/L, the data indicate that a PCE release to the environment has occurred at this facility and that the WU facility is a continuing low-level source of PCE that has migrated from the site boundaries.

Groundwater Flow

Localized groundwater flow direction in the vicinity of WU is well defined by monitoring wells at the facility and is to the south-southeast (G&E 1997b). The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the southeast.

References

AEC 2000, *Groundwater Sampling and Analysis, 1707 N. Mosley St, Wichita, Kansas,* Allied Environmental Consultants, Inc. Wichita, Kansas, January 12, 2000.

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas,* Camp Dresser & McKee Inc., Wichita, Kansas.

G&E 1997a, *Preliminary Investigation/Characterization Work Plan, Western Uniform and Towel Service, Inc. Facility, Wichita, Kansas,* G&E Engineering, Oklahoma City, Oklahoma, July, 1997.

G&E 1997b, "*Draft*" *Site Assessment Report, 1707 North Mosley Street, Wichita, Kansas,* G&E Engineering, Oklahoma City, Oklahoma, November, 1997.

KDHE 1993, *Expanded Site Investigation, 13th and Washington Site, Wichita, Kansas, CERCLIS Identification Number KSD984988456,* Kansas Department of Health and Environment, Bureau of Environmental Remediation, Pre-Remedial Unit/Remediation Section, September, 1993.

Polk Directory Review and RCRA Information Summary

Polk Search Results

Reference ID	Location	1951	1961	1965	1970	1975	1980	1984-1985	1990	1995-1996	2000
Western Uniform Facility	1707 N. Mosley	Willard Johnson	No Listing	(1707-1711)- Western Uniform & Towel Service Inc. (rental)	Western Uniform & Towel Service Inc.	Western Uniform & Towel Service Inc.	Western Uniform & Towel Service Inc.	Western Uniform & Towel Service Inc.	Western Uniform & Towel Service Inc.	Western Uniform & Towel Service Inc.	Western Uniform & Towel Service Inc. (Indus Indrers)

Potential source at property known as: 1707 N. Mosley
1655 N. Mosley
1721 N. Mosley
1753 N. Mosley

Current Owner/Business: Western Uniform & Towel Service Inc.

Contact Person: Jim Bering

Mailing Address: 1707 N. Mosley
Wichita, KS 67214

Phone Number: (316) 264-2342

Other information:

Name of Company:		Western Uniform
Name and/or Contact Person:		
Street Address of Company:		**1707 N. Mosley**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		1707 N. Mosley
Phone Number of Contact:		
History:	1951	Willard Johnson
	1961	No Listing
	1965	(1707-1711): Western Uniform & Towel Service Inc. (rental)
	1970	Western Uniform & Towel Service Inc.
	1975	Western Uniform & Towel Service Inc.
	1980	Western Uniform & Towel Service Inc.
	1984/5	Western Uniform & Towel Service Inc.
	1990	Western Uniform & Towel Service Inc.
	1995/6	Western Uniform & Towel Service Inc.
	2000	Western Uniform & Towel Service Inc. (Indus Indrers)

RCRA Info:

Name of Company:		Western Uniform & Towel
Name and/or Contact Person:		
Street Address of Company:		**1707 N. Mosley**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		1655 N. Mosley
Phone Number of Contact:		
History:	1951	No Listing
	1961	Kenco Inc (airplane parts)
		Steel Prods Inc.
		Kitchenette restr
	1965	Kenco Inc. (airplane parts)
		Chaney, Al Real Estate
		Kitchenette Café
	1970	Kitchenette Café
		Chaney, Albert
		Rear Vacant
	1975	Cuzzin Jeff's
	1980	No listing
	1984/5	Vacant
	1990	Western Uniform & Towel Serv.
		(used clothing store)
	1995/6	Vacant
	2000	No listing

RCRA Info:

Name of Company:		Western Uniform & Towel
Name and/or Contact Person:		
Street Address of Company:		**1707 N. Mosley**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		1721 N. Mosley
Phone Number of Contact:		
History:	1951	No Listing
	1961	Service Station Equip Co Inc (gas station equipment)
	1965	Brasted Ralph & Co Inc. (paint)
	1970	Brasted Ralph & Co Inc. (paint)
	1975	Brasted Ralph & Co Inc. (auto paint)
	1980	Vacant
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

Name of Company:		Western Uniform & Towel
Name and/or Contact Person:		
Street Address of Company:		**1707 N. Mosley**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		1753 N. Mosley
Phone Number of Contact:		
History:	1951	Namee's Food Market
	1961	Jabara Grocery
	1965	Vacant
	1970	M K & W Supply Co. (power tools)
	1975	Precision Contours Inc. (mach shop)
	1980	Precision Contours Inc. (mach shop)
	1984/5	Vacant
	1990	Vacant
	1995/6	Vacant
	2000	No Listing

RCRA Info:

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

2-025677

DA MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-006.00-B

B -01833 120453

PROPERTY ADDRESS:
1721 N MOSLEY AVE WICHITA KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERV CO
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 1-3 EXC E 8 FT FOR ST
MOSLEY AVE.
GLAZE & JOCELYNS ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

5-003597

ATE MAILED: 02-29-2000

ARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-004.00-B

B -01837-000B 120459

ROPERTY ADDRESS:
KS

ROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 21-23 EXC E 8 FT FOR ST
MOSLEY AVE
GLAZE & JOCELYN'S ADD.

EDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

5-003595

ATE MAILED: 02-29-2000

ARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-004.00-A

B -01837-0001 120460

ROPERTY ADDRESS:
KS

TRACT DESCRIPTION:
LOT 25 EXC E 8 FT FOR ST
MOSLEY AVE
GLAZE & JOCELYN'S ADD.

TY OWNER:
WESTERN UNIFORM & TOWEL SERVICE
1707 N MOSLEY
WICHITA KS 67214

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

5-003603

DA MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-004.00-E

B -01836 120456

PROPERTY ADDRESS:

KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 9-11 EXC E 8 FT FOR ST.
MOSLEY AVE
GLAZE & JOCELYN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

1-195163

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-005.00-

B -01835 120455

PROPERTY ADDRESS:
1717 N MOSLEY AVE WICHITA KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERV INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOT 7 EXC 8 FT FOR ST
MOSLEY AVE.
GLAZE & JOCELYN'S ADD.

BHD: 8210

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

2-025675

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-006.00-A

B -01834 120454

PROPERTY ADDRESS:

KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERV CO
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOT 5 EXC E 8 FT FOR ST
MOSLEY AVE.
GLAZE & JOCELYNS ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

1-190981

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-04-009.00-

B -01839 120462

PROPERTY ADDRESS:
1655 N MOSLEY AVE WICHITA KS

PROPERTY OWNER:
CHANEY, ALBERT ETAL
% WESTERN UNIFORM & TOWEL SERV.
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 31-33-35-37 EXC E 8 FT FOR ST
MOSLEY AVE
GLAZE & JOCELYN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

5-003599

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-004.00-C

B -01837-000A 120458

PROPERTY ADDRESS:
1707 N MOSLEY WICHITA KS 67214

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 17-19 EXC E 8 FT FOR ST
MOSLEY AVE
GLAZE & JOCELYN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

5-003601

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-004.00-D

B -01837 120457

PROPERTY ADDRESS:
KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 13-15 EXC E 8 FT FOR ST
MOSLEY AVE
GLAZE & JOCELYN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

6-029027

ATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-01-006.00-B

B -01862 120490

PROPERTY ADDRESS:
1702 N MOSLEY AVE WICHITA KS 67214

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 24-26 EXC W 8 FT FOR ST
MOSLEY AVE.
GLAZE & JOCELYN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

6-029025

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-01-006.00-A

B -01861 120489

PROPERTY ADDRESS:
KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 20-22 EXC W 8 FT FOR ST
MOSLEY AVE.
GLAZE & JOCELYN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

2-026533

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-04-008.00-

B -01839-001A 120464

PROPERTY ADDRESS:
KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
PT LOT 39 BEG 8 FT W NE COR S .64
FT W 127 FT TO NW COR E 127 FT TO
BEG. MOSLEY AVE.
GLAZE & JOCELYN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

1-190985

DA , MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-001.00-

B -01919 120551

PROPERTY ADDRESS:
1753 N MOSLEY ST WICHITA KS 67214

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SER INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 1-3-5-7 EXC E 8 FT FOR ST
MOSLEY AVE.
GLENN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

6-029031

ATE MAILED: 02-29-2000

ARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-003.00-B

B -01902 120535

ROPERTY ADDRESS:
801 E 16TH ST N WICHITA KS

ROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 7-8
GLAZE & JOCELYN'S 2ND. ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

V. ATION NOTICE
TAX YEAR **2000**
THIS IS NOT A TAX BILL

6-029029

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-003.00-A

B -01901 120534

PROPERTY ADDRESS:
KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 5-6
GLAZE & JOCELYN'S 2ND. ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR 2000
THIS IS NOT A TAX BILL

6-029033

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-007.00-A

B -01922 120554

PROPERTY ADDRESS:

KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 17-19 EXC E 8 FT FOR ST.
MOSLEY AVE.
GLENN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR 2000
THIS IS NOT A TAX BILL

6-029035

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-007.00-B

B -01921 120553

PROPERTY ADDRESS:
1727 N MOSLEY ST WICHITA KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 13-15 EXC E 8 FT FOR ST.
MOSLEY AVE
GLENN'S ADD.

SEDGWICK COUNTY, KANSAS
OFFICE OF THE APPRAISER
525 N. MAIN, ROOM 227
WICHITA, KANSAS 67203-3795

VALUATION NOTICE
TAX YEAR 2000
THIS IS NOT A TAX BILL

2-026531

DATE MAILED: 02-29-2000

PARCEL IDENTIFICATION NUMBER: 122-09-0-31-02-008.00-

B -01920 120552

PROPERTY ADDRESS:
1743 N MOSLEY WICHITA KS

PROPERTY OWNER:
WESTERN UNIFORM & TOWEL SERVICE INC
1707 N MOSLEY
WICHITA KS 67214

TRACT DESCRIPTION:
LOTS 9-11 EXC E 8 FT FOR ST
MOSLEY AVE.
GLENN'S ADD.

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
Robert C. Harder, *Secretary*

BUREAU OF
DEC 21 1993
WASTE MANAGEMENT

Reply to: South Central District Office
1919 N. Amidon, Suite 130
Wichita, Kansas 67203
Phone: (316) 838-1071
Fax: (316) 838-0042

December 20, 1993

Dennis Baalman, Plant Manager
[redacted]
1707 N. Mosley
[redacted] Kansas 67214

Re: Hazardous Waste Compliance Inspection
1743 N. Mosley, Wichita
EPA Identification Number: [redacted]

Dear Mr. Baalman:

On December 8, 1993, your facility was inspected to determine compliance with state hazardous waste regulations. The inspection revealed that your wastewater treatment facility generates waste oil. You are currently managing this waste as a hazardous waste. My inspection and resulting Notice of Compliance/Non-Compliance form was based on the waste oil being a hazardous waste.

A review of the waste analysis shows the oil is not a hazardous waste; therefore, the Notice of Compliance/Non-Compliance is not applicable. We suggest that you contact a waste oil collector for recycling. The generation and storage of this oil is regulated under K.A.R. 28-29-26; 40 CFR, Part 266, and 40 CFR, Part 279. Please notify our department when you have selected a disposal method for the waste oil.

Since your facility does not generate hazardous waste, you may want to request that your facility be removed from the notifiers list by writing to John Mitchell, Kansas Department of Health and Environment, Bureau of Waste Management, Forbes Field, Building 740, Topeka, Kansas 66620. Another option would be to retain your number for contingency purposes.

Your cooperation with the hazardous waste management program is appreciated. If you have any questions, you may call me at 316/838-1071.

Sincerely,

Teresa Hansen
Waste Management Programs
Bureau of District Operations

cc: Ron Smith, BWM, Compliance and Enforcement Unit
John Mitchell, BWM, Hazardous Waste Section
SCDO - File

Kansas Department of Health and Environment
Bureau of Air and Waste Management
Forbes Field, Topeka, Kansas 66620

Hazardous Waste Generator/Transporter Compliance Inspection Report

General

Time 1300 Date 12/8/93

Facility Name Western Uniform & Towel Service, Inc. EPA ID No. KSD039313880

Street 1743 N. Mosley City Wichita KS Zip 67214

Mailing Address (If different than above) 1707 N. Mosley, Wichita 67214

County Sedgwick Phone (316) 264-2345

Contact(s) Dennis Bralman, Plant Manager

I ector(s) Teresa Hansen

Type of Business Industrial laundry service

Has the company declared any information/processes as trade secrets (KSA 65-3447)? Yes No
If yes, explain.

Industrial Wastes Generated

(List hazardous wastes first)

Waste:	waste oil	
If waste is hazardous, give HW ID Number:	n/a	
Amount generated per month:	220 – 330 gallons	
Amount presently in storage:	715 gallons	
Accumulation time:	11/15/93	
Present disposal method:	USPCI	

Waste:		
If waste is hazardous, give HW ID Number:		
Amount generated per month:		
Amount presently in storage:		
Accumulation time:		
Present disposal method:		

General Requirements (GGR)

I. Has the facility evaluated all potentially hazardous waste(s) to determine if it is hazardous? (KAR 28-31-4(b)) — Yes No

A. If waste(s) was tested, was the analysis conducted by a laboratory certified by KDHE? (KAR 28-31-4(b)(3)(A)) — Yes No NA

B. If waste(s) was tested, are the results kept for three years? (KAR 28-31-4(f)(1)(C))? — Yes No NA

II. If hazardous waste(s) is disposed of via the sanitary sewer to a Publicly Owned Treatment Works (POTW), has written permission been obtained from the operator of the POTW? (KAR 28-31-3/40 CFR 261.4) — Yes No NA

III. If industrial waste(s) is disposed of at a permitted sanitary landfill, has a disposal authorization been obtained? (KAR 28-29-23) — Yes No NA

A. If yes, list the authorization number(s): Filter cake #95-1534 exp 12/31/94

IV. Facility size classification:

- [x] Not a Generator
- [ ] Small Qty. Generator
- [ ] Kansas Generator
- [ ] EPA Generator
- [ ] T/S/D Facility
- [ ] Transporter
- [ ] HW Burner/Marketer
- [ ] Used oil Burner/Marketer

Hazardous Waste Determination Requirements: [x] Adequate [ ] Inadequate

Notification Requirements (GGR)

V. Has generator notified KDHE and obtained an EPA Identification Number? (KAR 28-31-4(c)) — Yes No NA

VI. Is current notification accurate? (KAR 28-31-4(c)(1)) — Yes No NA

A. Is this facility marketing (selling) hazardous waste as a fuel? — Yes No NA

B. Is this facility marketing (selling) used oil as a fuel? — Yes No NA

(If yes, to either question A or B, complete Used Oil Fuel Marketers/Blenders Checklist.)

C. Is this facility burning hazardous waste as a fuel? — Yes No NA

D. Is this facility burning used oil as a fuel? — Yes No NA

Notification Requirements: [ ] Adequate [ ] Inadequate [x] NA

(If small quantity generator, stop here.)

File - NIC PRP, Western Unif. & Towel 11.0

State of Kansas

Bill Graves Governor

Department of Health and Environment

Gary R. Mitchell, Secretary

June 18, 1997

Mr. Jim Behring
Western Uniform and Towel Service, Inc.
1707 North Mosley
Wichita, Kansas

RE: Review of the Draft Preliminary Investigation/Characterization Work Plan, Western Uniform and Towel Service Inc., Wichita, Kansas

Dear Mr. Behring:

The Kansas Department of Health and Environment (KDHE) has completed its review of the draft document entitled, "Preliminary Investigation/Characterization Work Plan, Western Uniform and Towel Service Inc.", hereafter referred to as the Work Plan. The document was submitted to KDHE on April 11, 1997 by G&E Engineering (G&E) on behalf of Western Uniform and Towel Service Inc. (Western).

KDHE's review of the document and the following comments are based on the work plans ability to fulfill the objectives set forth in the Scope of Work for a Preliminary Investigation (BER-RS-017), compliance with the North Industrial Corridor Settlement Agreement between the City of Wichita and KDHE (case # 95-E-0321), and compliance with federal and state guidance documents.

1. Section 1.4, page 4.

   A. KDHE requests that the statement, "A review of the chemicals listed reveals no chemical constituents that have been identified as contaminants in the groundwater in and around the 17th Street and Mosley Street area" be removed from the Work Plan. Based on review of Tables 1 and 2, KDHE feels this statement is inaccurate because the tables list chemicals containing xylene, aromatic hydrocarbons, and aliphatic hydrocarbons. Xylene and many other compounds classified as aromatic or aliphatic hydrocarbons have been identified as contaminants within the North Industrial Corridor (NIC) Site.

   B. KDHE requests that a figure (or figures) be added to this report which shows specific potential source area locations. The information shown on this figure(s) should include, but not be limited to, chemical storage areas, dirty towel and uniform storage areas, pits, sumps, trenches, pertinent process areas, drainage lines to the water treatment facility, and any former operations that could have contributed to the contamination (e.g. machine shop, dune buggy repair shop). This information will be used to further evaluate the proposed well and probe locations.

2. Section 1.5.1, page 5. For the purpose of NIC Site investigations, shallow wells are screened within the upper 10 feet of saturated sand and screened across the water table, typically 3 to 5 feet of screen above the water table and 5 to 7 feet below the water table. Deep wells should be screened in the lower 5 to 10 feet of the alluvial aquifer, with the base of the screen set on the bedrock surface. Please clarify the text in this section.

3. Section 1.5.3, page 6. Please describe whether the soil samples that will be field screened will

Division of Environment, Bureau of Environmental Remediation
Forbes Field, Building 740, Topeka, KS 66620-0001

Telephone: (913) 291-3253
FAX: (913) 296-1686

be composite samples of the entire 5 foot interval or discrete samples from one portion of the 5 foot interval. Also describe how soil samples will be handled until the field screening has been completed to determine which (if any) sample to submit for analysis. KDHE requires that soil which will be submitted to the lab for VOC analysis be held at 4° celsius with as little headspace as possible.

4. Section 1.5.4, page 7.

   A. Installation of flush mount wells in Kansas requires a waiver from the KDHE Bureau of Water (BOW). Please contact Don Taylor (913-296-5522) or Richard Harper (913-296-3565) of the BOW to obtain the required waiver.

   B. KDHE requests that the filter pack of the wells be installed to two feet above the screen rather than the one foot proposed.

   C. As the Work Plan notes, new wells should be surveyed and tied into the existing coordinate system for the NIC Site. KDHE requests that you contact Darren Brown of Camp Dresser and Mckee Inc. at 303-298-1311 to discuss or coordinate surveying activities.

5. Section 1.5.5, page 7. KDHE requires at least five well volumes be removed when developing a newly installed monitoring well. Three to five well volumes should be purged prior to collecting samples from a well.

6. Section 1.5.6, page 7.

   A. Stabilization of the pH and temperature of the well water should also be used to determine when purging is complete.

   B. Please state the type of sample that will be collected from the wells and state the analytical method that will be used for analysis.

7. Section 1.5.7, page 8. Please describe in detail the methods that will be used to collect ground water and soil samples from geoprobe borings. Include discussion on purging (method and volume), logging, soil liners, and transfer of sample to sample containers.

8. Section 1.5.11, page 10. The proposed field screening for soils may reduce or eliminate the composite samples proposed in this section for waste disposal determinations. If soil cuttings are non-detect or < 1 ppm for VOCs, the cuttings may be disposed of (spread) on site if Western chooses to do so. A flow chart for disposal of VOC contaminated soil cuttings is attached to this letter.

9. Notification. KDHE requires notification a minimum of 7 days prior to initiating field work so that KDHE may arrange to be on site to collect split samples.

10. Section 2, page 12. Please provide, in this section or where appropriate, a summary table or list of the number of ground water, soil and QA/QC (including type) samples proposed to be collected for this investigation. Please present a minimum or approximate number if the exact number of samples collected is to be determined in the field.

11. Section 2.2.1, page 12. Geoprobe equipment is mentioned in the heading of this section, but is not discussed in the text describing the decontamination process. Please modify as necessary.

12. Sections 2.3 and 2.3.1, pages 12 and 13. These sections discuss the **recommended** frequency of QA/QC samples or the frequency **usually** collected. Based on the proposed ground water and soil samples, please state how many of each type of QA/QC samples **will** be collected for this investigation. If the actual number will be determined in the field, please state the minimal number that will be collected and the rational that will be used for determining if additional samples are necessary. For the equipment blank, please state which equipment the blank will be collected from.

13. Section 2.3.3, page 14. The last bullet in this section states that the average depth of the sample is "not applicable for ground water". KDHE notes that the average depth of ground water samples collected with a geoprobe is applicable, especially if ground water samples are collected from more than one depth in a single geoprobe location. Please include the sample depth on geoprobe water sample labels and lab reports.

14. Section 2.7, page 15. KDHE requests that a review of holding times also be included in the data validation process.

15. Section 3, Health and Safety Plan. KDHE does not officially review or approve Health and Safety Plans (HSP). KDHE acknowledges receipt of the site specific HSP and, after a cursory review, notes that in general it appears to be representative of known site conditions. However, based on previous sampling data, KDHE recommends adding vinyl chloride to Table 1.

16. Subcontractors. The Work Plan does not identify subcontractors proposed to conduct the drilling and geoprobe work. Please provide this information. Also provide the name of the analytical laboratory and a copy of the labs Quality Control Plan to KDHE at least 7 days before initiating the field work.

17. Contingencies. If the possibility exists for expanding the PI investigation based on field observations or field screening, please include a contingency statement about how this additional work will be coordinated with KDHE.

To save time and copying expenses, KDHE recommends submitting a letter response addressing each of the comments above. Upon notification of approval of the letter responses, a Final document should be produced and submitted to KDHE (3 copies) and the City of Wichita (1 copy) to be retained in the file. Please call if you have any questions.

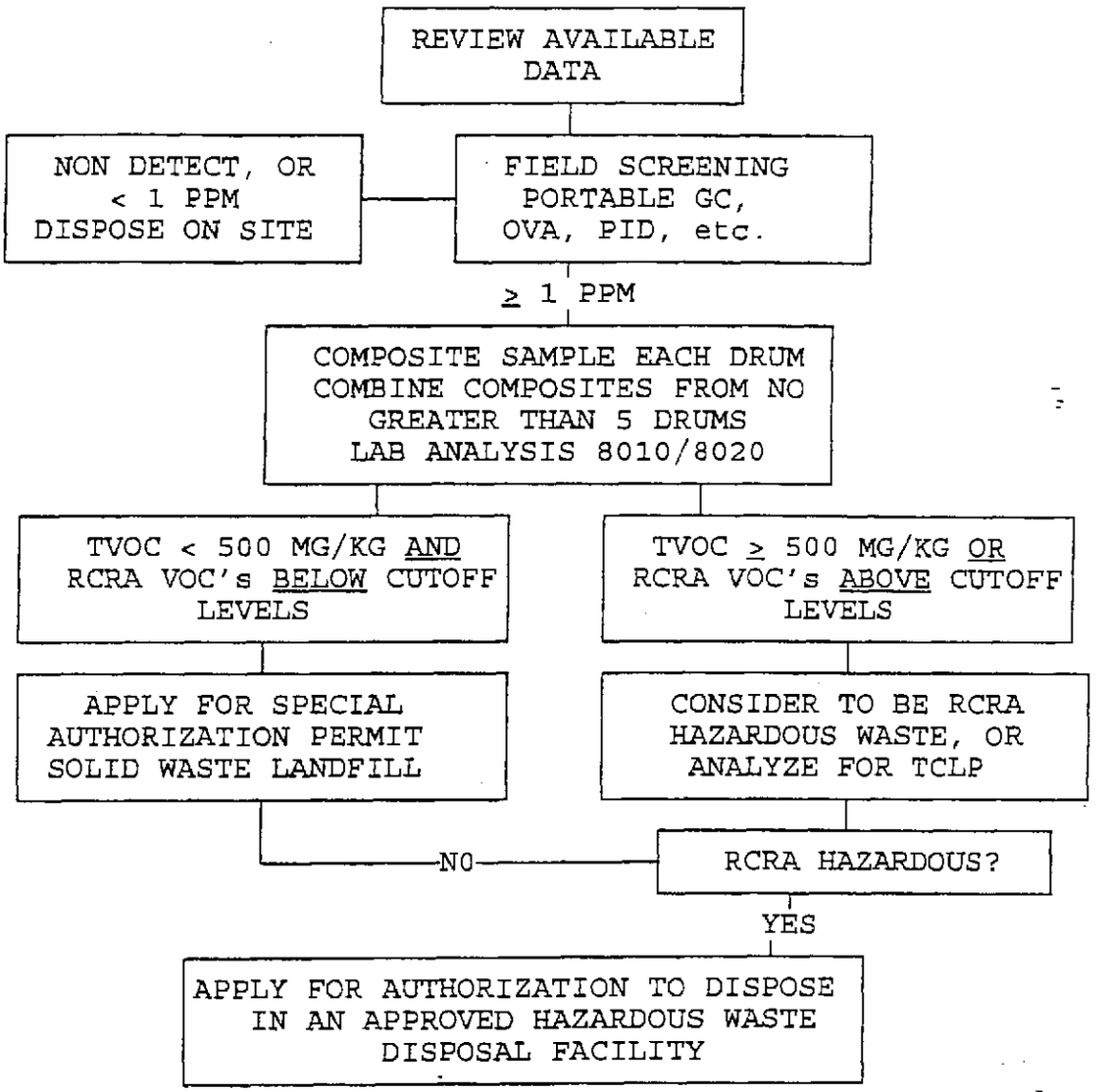
Respectfully,

Christine R. Jump
Environmental Geologist
Remedial Section/Monitoring Remedial Unit
Bureau of Environmental Remediation

CRJ/kae

c: Rick Bean--> Frank Arnwine--> File
Scott Baber, G & E Engineering
Kristine Burrichter, WSCDCH

KDHE RECOMMENDED PROCEDURES FOR CHARACTERIZATION AND DISPOSAL OF RCRA VOC CONTAMINATED SOIL CUTTINGS



RCRA VOC CONCENTRATION CUTOFF LEVELS (MG/KG)

Benzene	10.0	Trichloroethylene	10.0	Carbon Tetrachloride	10.0
Chlorobenzene	2000.0	Chloroform	120.0	1,2-Dichloroethane	10.0
Methyl Ethyl Ketone	4000.0	Tetrachloroetylene	14.0	1,1-Dichloroethylene	14.0
Vinyl Chloride	4.0				

CITY OF WICHITA
WATER & SEWER DEPARTMENT
PRETREATMENT PROGRAM

INDUSTRIAL USER INSPECTION CHECKLIST

DATE OF INSPECTION: August 12, 1998 DATE: 9:30 AM
Persons Present During Inspection:
Industry Staff: Jim Woody, Plant Manager
Pretreatment Staff: Jade Dundas, Pretreatment Specialist

I. GENERAL INFORMATION

1. Industry Identification

Industry Name: Western Uniform and Towel Service, Inc.
Location Address: 1707 N. Mosley, Wichita, KS 67214
Mailing Address: 1707 N. Mosley, Wichita, KS 67214
Telephone Number: 316-264-2342 FAX Number: 316-264-9042
Industry Contact: Jim Woody Title: Plant Manager

2. Industry's Activity

Type of operation: Industrial laundry and uniform rental
Products: Clean laundry and rental uniforms
Raw Materials: Uniforms, shop towels, mats and linen supplies
Manufacturing Processes: Launder and rent uniforms, shop towels, mats and linen supplies. Items are picked up daily, laundered and returned to customers
Planned Changes to Plant: Expansion of production area. Addition of 1 washer and 1 dryer
No. of employees: 94 No. of shifts per day: 1
Days worked per week: 5 Mon-Fri Is production seasonal: No
Employee showers (Y/N): No Scheduled shutdowns: Holidays x 6
Number of Outfalls: Total: 2 Regulated: 1

3. Industry's Specific Requirements

Applicable Categorical Standards: None
Applicable Non-categorical Standards: Prohibited - 40 CFR Part 403
Regulated Process: Wash water, plant and equipment cleanup
Pollutants of Concern: pH, Oil and Grease, Lead and Total Toxic Organics
Regulated Sampling Location: West end of effluent trough in the Pretreatment Building, and/or manhole in alley west of the Pretreatment Building
Was a sample taken during the inspection? Yes - 2 each
If so, from where was the sample taken? Regulated sampling location

W0656095

II. WATER BALANCE

1. Complete the following table on current water consumption.

SOURCE	AVERAGE FLOW (GPD)	PEAK FLOW (GPD)
City Water	82,475	
Private Well		
Other		
TOTALS	82,475	

2. What are the water uses within the plant? List all processes that use water when completing the table below. Attach a copy of the Plant's process schematic and show the locations from which wastewaters are generated.

WASTEWATER GENERATING PROCESS	AVERAGE FLOW (GPD)	PEAK FLOW (GPD)	BATCH OR CONTINUOUS	MEASURED\ ESTIMATED	TREATED (Y/N)
A Process	58,250		C	E	Y
B P&E Wash down	1,400		B	E	Y
C Chemical makeup	1,700		B	E	Y
D					
E					
F Contact Cooling					
SUBTOTALS	61,350				
G Boiler Feed			B	E	Y
H Evaporation	15,500		C	E	NA
I Non-con cooling					
J Lawn Maintenance	25		B	M	Y
K Sanitary	5,600		B	E	N
L In Product					
M Pollution Control			C	E	Y
TOTAL	82,475				

III. INDUSTRY'S PAST YEAR COMPLIANCE ACHIEVEMENT

1. Does industry consistently achieve compliance? (100% compliance with all regulatory parameters or compliance status in which no more than one minor violation occurs per fiscal year, based on City of Wichita's Water Department Laboratory results and industry's self monitoring results.)

Yes

2. If not, describe any violations within the past year.

None

W0656096

IV. WASTEWATER TREATMENT

1. Does the industry treat it's process wastewater before discharge to the POTW?
   Yes

If yes, complete the following:

Treatment Facility
Type: Memtek Date originally installed: Jan 6, 1987
Design flow: 150 GPM Actual flow: 130 GPM
Treatment (Batch or continuous): Continuous
Discharge (Batch or continuous): Continuous
Operation
Hours/day: 13, 3:30 AM - 4:30 PM Days/week: Monday thru Friday
Full time employee's needed to operate: 1 full time
Reagents used (including usage rates): Sulfuric acid @ 1300 lbs/day, ferrous sulfate @ 70 lbs/day, lime @ 950 lbs/day, polymer @ 1.8 gals/day
Clarifier volume: 2,400 gals Effluent filtration media: Filter press
Description of operation and overall condition:
Oil and Grease is removed by acid cracking, sludge removed by polymer and caking and neutralization with pH control. The system is in good condition and well maintained.

2. Sludge Generation/Disposal (Complete the following for facilities that generate sludge).

Source of sludge: From the treatment system
Sludge dewatering method: Filter press
Moisture content: 40% Amount generated: 60 Tons/month
Disposal method: Contract hauler Storage (bbls): 225 cu ft before disposal
Hazardous (Y/N): No Shipment frequency: Every 3 days
Sludge Hauler: BFI, Wichita, KS
Disposal Location: Brooks landfill, Wichita, KS

3. Has the facility experienced any operational/upset problems since the last inspection? If so describe.
   No

4. Is the pretreatment system operating satisfactorily?
   Yes

5. If not, describe deficiencies in the industries process and/or discharge system.
   None

6. Recommended Corrective action.
   None

W0656097

V. Monitoring and reporting

1. Sampling/ Reporting Procedures:

Procedure	Permit Requirements	Industry Practice
Sampling Frequency (pollutants)	Monthly	Monthly
Sampling Frequency (other)	Quarterly	Quarterly
Sample Type: Metals (Grab, composite)	Flow composite	Flow composite
Sample Type: O&G, pH (Grab)	Grab	Grab
Reporting Frequency	Semi Annual	Semi Annual
Sampling Dates Due/Dates Sent	July 31 & January 31	10/97 & 6/98
Reporting Dates Due/Dates Sent	June 30 & December 31	11-24-97 & 7-20-98

2. How many times was the facility actually sampled for pollutants of concern during the last reporting period?
   13 times

3. Was the facility sampled only during periods of process waste discharge or treatment system operation/discharge? __X__ Yes _____ No

Flow Measurement:

4. Does the monitoring location permit the measurement of wastewater flow?
   Yes

5. Is flow measured at the sampling location? __X__ Yes _____ No

   If so, what type of measuring devise is used?
   Signet Scientific paddle wheel flowmeter
   When was the devise calibrated last? Date: Calibrated in house regularly by timed meters on the discharge pumps.

Sampling Analysis:

6. Does the industry perform any sample analysis in-house? If so, for what pollutants?
   Yes - pH with Hydroxyl ion paper and calibrate pH probe with buffer.
   Does the facility's method conform with 40 CFR Part 136? _____ Yes __X__ No

7. Which laboratory did the industry choose to perform their analysis?
   A&E Analytical Laboratory, Wichita, KS
   If a contract lab is used do their methods conform to with 40 CFR Part 136?
   Yes
8. What sample preservation methods are used?
   Per 40 CFR Part 136

Combined Wastestream Formula:

9. Are dilution wastestreams present at the sample location? _____ Yes __X__ No
   A. Is the facility using a Combined Wastestream Formula? _____ Yes __X__ No
      1. How are the flows determined?
         NA
   B. Should the facility be using the Combined Wastestream Formula?
      No

W0656098

VI. FOR INDUSTRIES SUBJECT TO CATEGORICAL PRETREATMENT STANDARDS

1. Electroplating/Metal Finishing: NA

Regulated Process(es): _____
Hours of Operation: _____

Does the facility phosphatize: _____ Yes _____ No
Metallic salts in the phosphoric acid: _____
Basis metal phosphatized: _____
Does the facility ever phosphatize galvanized metal? _____

Does the facility use Cyanide (Y/N): _____ Yes _____ No
In what process(es) : _____
Method of destruction: _____
Has the facility investigated a replacement for CN? _____

Does the facility use Hex Chrome (Y/N): _____ Yes _____ No
Method of reduction to trivalent state: _____

Plating methods:
Barrel (Y/N/NA): _____ Rack (Y/N/NA): _____
Rinsing Methods:
Countercurrent (Y/N/NA): _____ Dead Rinse (Y/N/NA): _____

2. Does the facility have a Solvent Management Plan to Control TTOs?
   No - not required
3. Is the facility subject to a TTO limit?
   No
   If so, does the facility sample for the surrogate parameter?
   NA
   What is the frequency of self monitoring for TTOs or the surrogate parameter?
   NA

4. Production Based Standards
   NA

Applicable Standard(s): _____

Process Qualifying for Allowance (see applicable CFR)	Production normalizing Parameter (Average daily production rate)
1	
2	
3	
4	
5	

5. Describe the methods by which the industry tracks its production rates.
   NA

W0656099

VII. ADMINISTRATIVE DEFINITIONS AND REQUIREMENTS

1. Does the industry have a copy of the city's Pretreatment Ordinance?
   Yes

2. Did the inspector describe major requirements of the City's Pretreatment Ordinance pertaining to the industry.

a.	Extra Strength Charge	X Yes	____ No
b.	Toxic Pollutant Charge	X Yes	____ No
c.	Wastewater Analysis	X Yes	____ No
d.	Prohibited Discharge	X Yes	____ No
e.	Pretreatment Requirement	X Yes	____ No
f.	Accidental Spill Discharge	X Yes	____ No
g.	Excessive Discharge	X Yes	____ No
h.	Bypass Event	X Yes	____ No
I.	Permit Provisions	X Yes	____ No

3. Has the industry submitted an application for permit to discharge?
   Yes and is in the process of completing their Wastewater Discharge Permit Application

a.	Baseline Monitoring Report (BMR) submitted?	X Yes	____ No
b.	90 Day Compliance Report completed?	X Yes	____ No
c.	Site plan submitted?	X Yes	____ No
d.	Does the industry have an active permit?	X Yes	____ No

4. Based on the on-site inspection, does the inspector feel a spill/slug control plan is needed?
   X Yes ____ No

If so , does the industry have a spill prevention, control and counter measure plan (SPCP) in place? Dated: 8-12-92 X Yes ____ No

a.	Is secondary containment being used?	X Yes	____ No
b.	Has an emergency contact been designated?	X Yes	____ No

c. Has a sign containing the name of the emergency contact with the telephone number been posted for all employees to view? X Yes ____ No

W0656100

VIII. INDUSTRY'S WASTE HANDLING PRACTICES

1. Describe industry's waste minimization (pollution prevention) plan.

The industry requires MSDS sheets from their customers to be sure that they are not receiving hazardous material in the dirty laundry. The industry has a control group of cutomers that are checked regularly for contamination.

2. Describe industry's waste source reduction/substitution.

Customer education program on how to reduce Oil & Grease and solvents in their dirty laundry.

3. Describe industry's recycling of waste off-site/on-site.

The dried sludge generated is hauled to the landfill. Waste oil is removed by Guthrie, Great Bend, KS and used for kiln fuel. Paper, cardboard, old material and metals are recycled off site.

4. Describe industry's chemical storage area.

Industry stores its chemicals inside in the Pretreatment Building. There is containment under the stored and in use chemicals. An in case of a spill sign has been posted.

5. Is industry aware of the Resource Conservation and Recovery Act (RCRA)?

Yes

a.	Generators of hazardous waste?	X	Yes	____	No
b.	Storage of hazardous waste?	____	Yes	X	No
c.	Transportation/Disposal of hazardous waste?	____	Yes	X	No

6. Additional Comments:

The bypass valve seal is still intact which means that no bypass events have occurred within the last year. The pretreatment area looked good. Acid is still purchased in spill proof containers and containment is used in all chemical use and storage areas. An abbreviated cross connection with backflow prevention inspection was completed and revealed a DC Conbraco #C5830 backflow preventer in use. Hose bibs were being used on hose connections. Jim Woody escorted the inspectors during this inspection. If there are any questions concerning this report, please call the Pretreatment Staff at 529-9975.

The contents of this report have been adequately explained to me. I understand that discharging wastes to the sanitary sewer above the limits specified in Permit 5072 is a violation of EPA Pretreatment Standards; 40 CFR, Part 403 and the City Pretreatment Ordinance; Section 17.20 and may be subject to monetary penalties if concentrations of discharge pollutants exceed the Wastewater Permit and/or Ordinance standards.

Jim Woody
Company Representative Signature

2-11-99
Date

W0656101

Excerpts from Report(s) Prepared by Others

Final Draft

PRELIMINARY INVESTIGATION/CHARACTERIZATION WORK PLAN

WESTERN UNIFORM AND TOWEL SERVICE, INC. FACILITY

WICHITA, KANSAS

PREPARED FOR

WESTERN UNIFORM AND TOWEL SERVICE, INC.

WICHITA, KANSAS

JULY 1997

PREPARED BY

G&E ENGINEERING

A Division of TreaTek - CRA Company

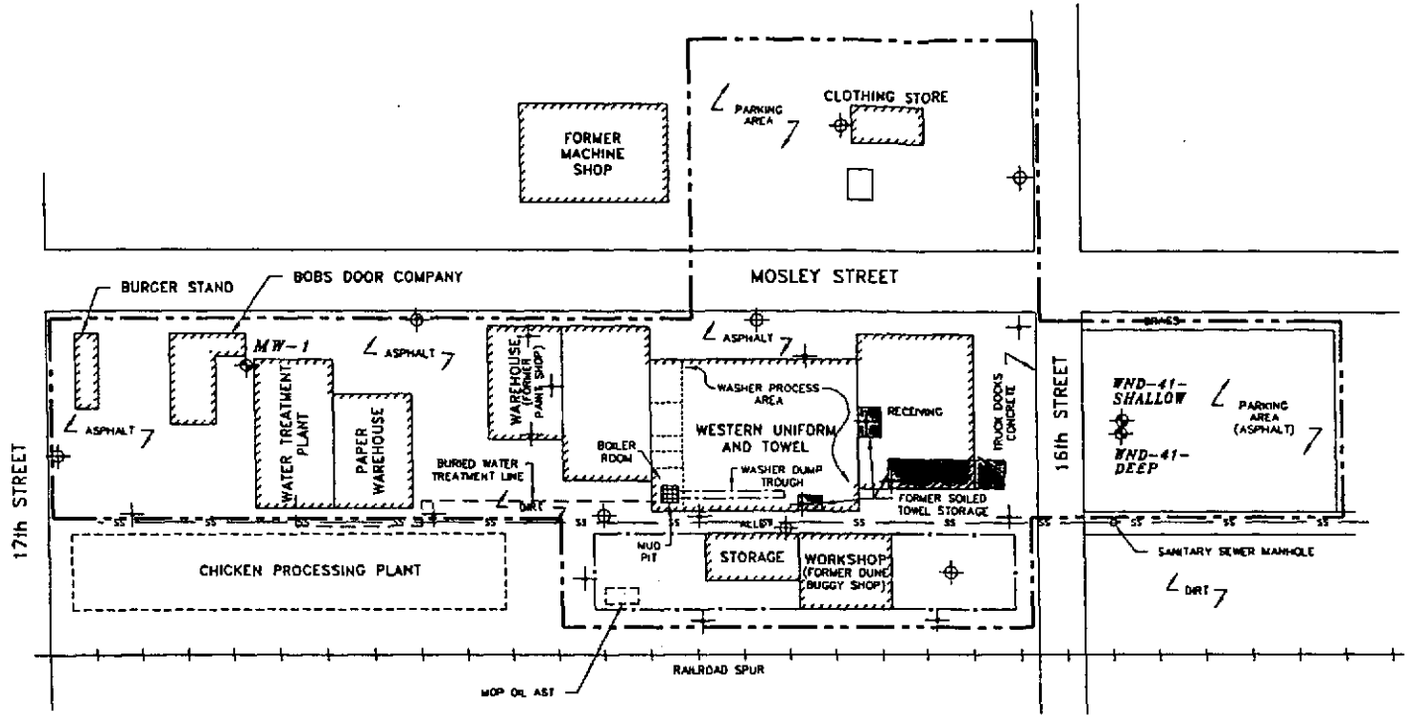
TABLE 4
GROUNDWATER ANALYTICAL RESULTS FROM ON-SITE MONITOR WELLS
WESTERN UNIFORM & TOWEL SERVICE, INC.
1707 NORTH MOSLEY
WICHITA, KANSAS

CHEMICAL	DATE	MW-1	DATE	GP-3	GP-4	DATE	41-S	41-D	MCL
Zinc (mg/L)	04/10/90 05/30/95	0.04 1	09/92	NA	NA	04/07/93	NA	NA	None
Nickel (mg/L)	04/10/90 05/30/95	<0.06 0.06	09/92	NA	NA	04/07/93	NA	NA	0.1
Cadmium (mg/L)	04/10/90 05/30/95	<0.001 0.008	09/92	NA	NA	04/07/93	NA	NA	0.005
Chromium (mg/L)	04/10/90 05/30/95	<0.005 0.07	09/92	NA	NA	04/07/93	NA	NA	0.1
Copper (mg/L)	04/10/90 05/30/95	<0.05 0.34	09/92	NA	NA	04/07/93	NA	NA	1.3
Lead (mg/L)	04/10/90 05/30/95	<0.005 0.24	09/92	NA	NA	04/07/93	NA	NA	0.015
Vinyl Chloride (µg/L)	04/10/90 05/30/95	1.7 37	09/92	ND	98.1	04/07/93	<2.0	<20.0	2
1,1-Dichloroethane (µg/L)	04/10/90 05/30/95	– <0.2	09/92	2.3	7.4	04/07/93	<2.0	6.7	None
1,1-Dichloroethene (µg/L)	04/10/90 05/30/95	<1 <0.2	09/92	ND	3.3	04/07/93	<2.0	3.3	7
Chloroform (µg/L)	04/10/90 05/30/95	<1 <0.2	09/92	NA	NA	04/07/93	<2.0	2.3	80
Total 1,2-Dichloroethene (µg/L)	04/10/90 05/30/95	1.7 ♦	09/92	19.2	65.7	04/07/93	25	140	None
Trans 1,2-Dichloroethene (µg/L)	04/10/90 05/30/95	* <0.2	09/92	NA	NA	04/07/93	<2.0	5.1	100
Cis 1,2-Dichloroethene (µg/L)	04/10/90 05/30/95	* 2.5	09/92	NA	NA	04/07/93			70

CHEMICAL	DATE	MW-1	DATE	GP-3	GP-4	DATE	41-S	41-D	MCL
1,1,1-Trichlorethylene (µg/L)	04/10/90 05/30/95	<1 <0.2	09/92	3	ND	04/07/93	<2.0	<20.0	200
Tetrachloroethene (µg/L)	04/10/90 05/30/95	<1 <0.2	09/92	4.6	4.9	04/07/93	5.7	7.7	5
Trichlorethylene (µg/L)	04/10/90 05/30/95	<1.0 1.8	09/92	NA	NA	04/07/93	44	560	5
Trichlorofluoromethane (µg/L)	04/10/90 05/30/95	<1.5 <0.2	09/92	NA	NA	04/07/93	3.2	17	None
Benzene (µg/L)	04/10/90 05/30/95	19 25	09/92	NA	NA	04/07/93	<2.0	<20.0	5
Toluene (µg/L)	04/10/90 05/30/95	30 7.7	09/92	NA	NA	04/07/93	4.8	<20.0	1,000
Ethylbenzene (µg/L)	04/10/90 05/30/95	330 48	09/92	NA	NA	04/07/93	<2.0	<20.0	700
Xylenes (µg/L)	04/10/90 05/30/95	270 17	09/92	NA	NA	04/07/93	11	<20	10,000
Total BTEX (µg/L)	04/10/90 05/30/95	649 97.7	09/92	0	54	04/07/93	15.8	0	

NOTES:

1) mg/L = milligrams per liter; µg/L = micrograms per liter.
2) BTEX = benzene, toluene, ethylbenzene, and total xylenes.
3) MCL = maximum contaminant level.
4) NA = not analyzed.
5) None = no MCL available.
6) Analytical results were extracted from previous reports which were either referenced in Table 3 or contained in Appendix A.
7) See Figure 2 for the location of monitor wells MW-1, 41S, and 41D; according to the "Expanded Site Investigation" dated September 1993 done by the KDHE. GP-3 and GP-4 are south of the 16th Street and west of Mosley.



LEGEND

- APPROXIMATE PROPERTY LINE
- MONITOR WELL LOCATION
- SANITARY SEWER LINE
- FENCE
- PROPOSED MONITOR WELL LOCATION
- PROPOSED GEOPROBE LOCATION

NOTES:

1.) EACH PROPOSED MONITOR WELL LOCATION CONTAINS ONE DEEP AND ONE SHALLOW MONITOR WELL.

2.) LOCATIONS FOR MONITOR WELLS AND GEOPROBES ARE APPROXIMATE AND MAY BE MOVED DUE TO OBSTRUCTIONS.

0 feet 80
APPROXIMATE SCALE

POSSIBLE SOURCE AREAS	
OFF-SITE	ON-SITE
RAILROAD CORRIDOR	FORMER SOILED TOWEL STORAGE
INDUSTRIAL PROPERTIES TO NORTH	WASHER PROCESS AREA
CHICKEN PROCESSING PLANT	WASHER DUMP TROUGH
FORMER MACHINE SHOP	MOP OIL AST
	BURIED WATER TREATMENT LINE
	FORMER DUNE BUGGY SHOP
	FORMER PAINT SHOP

G&E ENGINEERING
A Division of Tedlok - CRA company
ENVIRONMENTAL CONSULTANTS

DATE	NO.	REVISION	BY

DESIGNED BY:
DRAWN BY: A.B. LAPRARE 07/08/97
CHECKED BY: RSB 7/18/97
APPROVED BY:

WESTERN UNIFORM AND TOWEL SERVICE
WICHITA, KANSAS
Client

WESTERN UNIFORM AND TOWEL
1707 NORTH MOSLEY DRIVE
WICHITA, KANSAS
Project Location

POSSIBLE SOURCE AREAS

1"=80' APPROXIMATE SCALE
24129-00-B2 DRAWING No. REV.
3 FIG./SHEET No.

G&E ENGINEERING
ENVIRONMENTAL CONSULTANTS
5601 NW 72ND STREET, SUITE 290 • OKLAHOMA CITY, OK 73132-5903 • (405) 720-9831 • FAX (405) 720-9803

"DRAFT"

SITE ASSESSMENT REPORT

1707 NORTH MOSLEY STREET

WICHITA, KANSAS

PREPARED FOR

WESTERN UNIFORM & TOWEL SERVICE, INC.

WICHITA, KANSAS

November 20, 1997

Submitted by:

Eric J. Ohsfeldt, CHMM
Project Manager

Philip D. Wood, PE
Regional Manager

A Division of TreaTek-CRA™ Company
AMERICAN CONSULTING ENGINEERS COUNCIL

TABLE 1
VOC CONCENTRATIONS IN SOIL
WESTERN UNIFORM AND TOWEL SERVICE, INC.
WICHITA, KANSAS

I.D.	VCL	1,1-DCE	t-1,2-DCE	1,1-DCA	c-1,2-DCE	Chloroform	1,1,1-TCA	Benzene	TCE	BDCM	Toluene	PCE	DBCM	Ethylbenzene	Xylenes
GP-01 (8)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
GP-03 (8)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
GP-07 (4)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
GP-07 (6)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
GP-08 (10)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
MW-35 (8)	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

VCL = Vinyl Chloride
1,1-DCE = 1,1-Dichloroethene
t-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
c-1,2-DCE = cis-1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
PCE = Tetrachloroethene
TCE = Trichlorethylene
BDCM = Bromodichloromethane
DBCM = Dibromochloromethane

All concentrations are given in milligrams/kilogram.

TABLE 2
VOC CONCENTRATIONS IN GEOPROBES
WESTERN UNIFORM AND TOWEL SERVICE, INC.
WICHITA, KANSAS

I.D.	VCL	1,1-DCE	t-1,2-DCE	1,1-DCA	c-1,2-DCE	Chloroform	1,1,1-TCA	Benzene	TCE	BDCM	Toluene	PCE	DBCM	Ethylbenzene	Xylenes
GP-01 (15)	0.0063	<0.001	<0.001	<0.001	0.0062	<0.001	<0.001	0.0012	<0.001	<0.001	0.0043	<0.001	<0.001	0.0011	0.0082
GP-01 (40)	<0.005	<0.005	<0.005	<0.005	0.070	<0.005	<0.005	<0.0025	0.41	<0.005	0.011	<0.005	<0.005	<0.005	0.015
GP-02 (15)	<0.001	<0.001	<0.001	<0.001	0.0015	<0.001	<0.001	<0.0005	0.0094	<0.001	0.0032	0.036	<0.001	<0.001	0.0070
GP-02 (39)	<0.010	<0.010	<0.010	<0.010	0.072	<0.010	<0.010	<0.005	0.45	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GP-03 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.001	<0.001	0.0051	<0.001	<0.001	<0.001	0.0040
GP-03 (39)	<0.010	<0.010	<0.010	<0.010	0.038	<0.010	<0.10	<0.005	0.37	<0.010	0.032	<0.010	<0.010	<0.010	0.035
GP-04 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0029	<0.0005	<0.001	<0.001	<0.001	0.0038	<0.001	<0.001	<0.001
GP-05 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
GP-05 (40)	<0.010	<0.010	<0.010	<0.010	0.081	<0.010	<0.010	<0.005	0.53	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GP-06 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0064	<0.0005	0.0014	<0.001	<0.001	0.0025	<0.001	<0.001	<0.001
GP-06 (40)	<0.010	<0.010	<0.010	<0.010	0.080	<0.010	<0.010	<0.005	0.48	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GP-07 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0039	<0.0005	0.002	<0.001	<0.001	0.0028	<0.001	<0.001	<0.001
GP-07 (40)	<0.010	<0.010	<0.010	<0.010	0.10	<0.010	<0.010	<0.005	0.60	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GP-08 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	0.0027	<0.001	<0.001	0.0043	<0.001	<0.001	<0.001
GP-08 (40)	<0.010	<0.010	<0.010	<0.010	0.11	<0.010	<0.010	<0.005	0.61	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GP-09 (15)	<0.001	<0.001	<0.001	<0.001	0.0015	<0.001	<0.001	<0.0005	0.0031	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
GP-09 (40)	<0.005	<0.005	<0.005	<0.005	0.043	<0.005	<0.005	<0.0025	0.17	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
GP-10 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
GP-10 (40)	<0.010	<0.010	<0.010	<0.010	0.077	<0.010	<0.010	<0.005	0.45	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
GP-11 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	0.0016	<0.001	<0.001	0.011	<0.001	<0.001	<0.001
GP-11 (40)	<0.005	<0.005	<0.005	<0.005	0.026	<0.005	<0.005	<0.0025	0.15	<0.005	<0.005	0.0056	<0.005	<0.005	<0.005
GP-12 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.0005	<0.001	<0.001	<0.001	0.0030	<0.001	<0.001	<0.001
GP-12 (40)	<0.005	<0.005	<0.005	<0.005	0.052	<0.005	<0.005	<0.0025	0.26	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
GP-13 (15)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.0005	<0.001	<0.001	<0.001	0.0027	<0.001	<0.001	<0.001
GP-13 (40)	<0.010	<0.010	<0.010	<0.010	0.064	<0.010	<0.010	<0.005	0.41	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MCL	0.002	0.007	0.100	NA	0.070	0.080	0.200	0.005	0.005		1.000	0.005		0.700	10.000

VCL = Vinyl Chloride
1,1-DCE = 1,1-Dichloroethene
t-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
c-1,2-DCE = cis-1,2-Dichloroethene

1,1,1-TCA = 1,1,1-Trichloroethane
PCE = Tetrachloroethene
TCE = Trichlorethylene
BDCM = Bromodichloromethane
DBCM = Dibromochloromethane

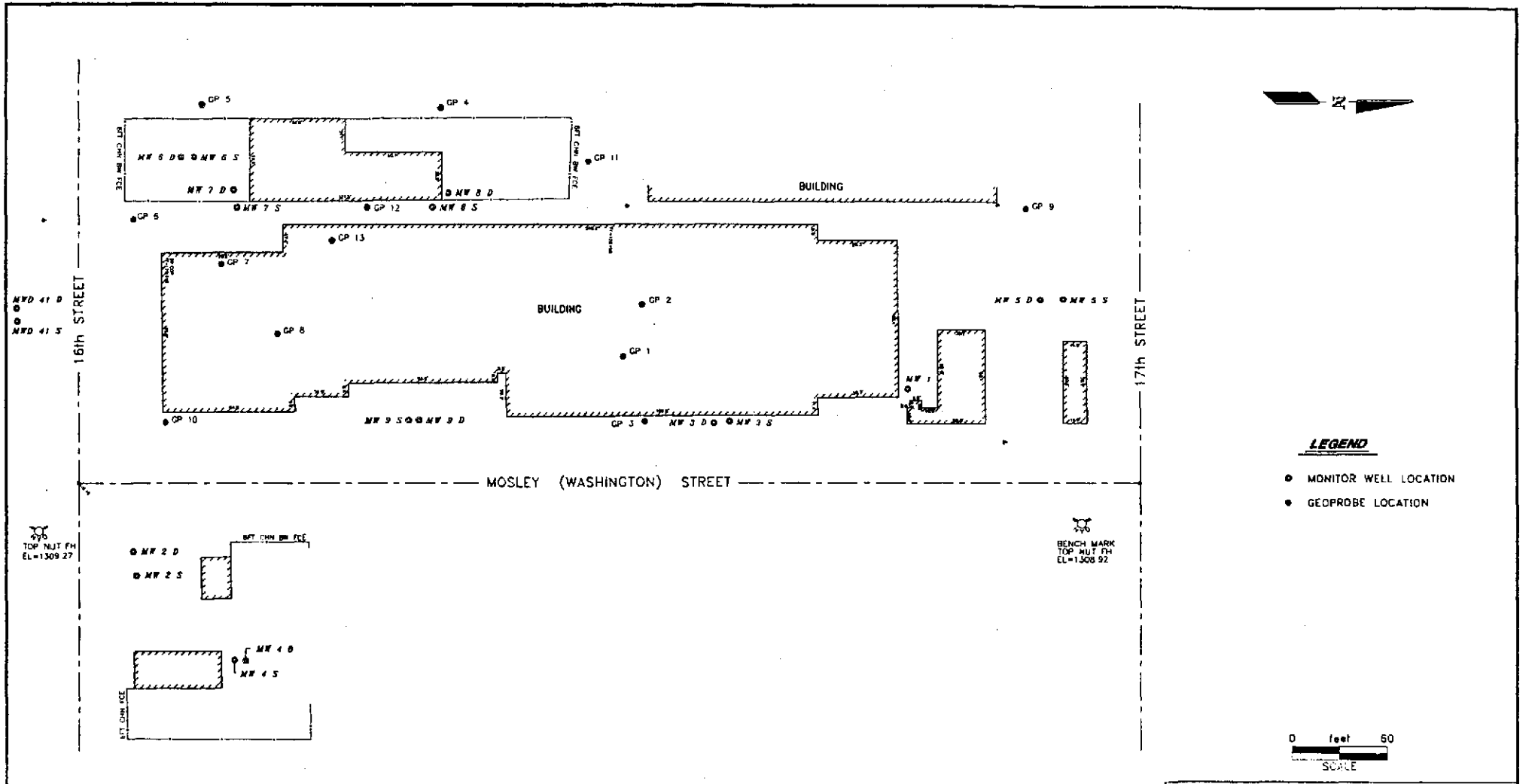
MCL = Federal Drinking Water Standard, Maximum Contaminant Level
Shaded values indicate concentrations over MCLs.
All concentrations are given in milligrams/liter.

TABLE 3
VOC CONCENTRATIONS IN MONITOR WELLS
WESTERN UNIFORM AND TOWEL SERVICE, INC.
WICHITA, KANSAS

Well	VCL	1,1-DCE	t-1,2-DCE	1,1-DCA	c-1,2-DCE	Chloroform	1,1,1-TCA	Benzene	TCE	BDCM	Toluene	PCE	DBCM	Ethylbenzene	Xylenes
MW-1	0.021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.011	<0.001	<0.001	0.0046	0.037
MW-2S	<0.001	<0.001	<0.001	<0.001	0.013	<0.001	<0.001	<0.0005	0.049	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-2D	<0.001	<0.001	0.0013	<0.001	0.019	0.010	<0.001	<0.0005	0.130	0.0083	<0.001	<0.001	0.0067	<0.001	<0.001
MW-3S	0.0088	<0.001	<0.001	<0.001	0.033	<0.001	<0.001	0.007	0.0013	<0.001	0.010	<0.001	<0.001	0.170	0.061
MW-3D	<0.005	<0.005	<0.005	<0.005	0.096	<0.005	<0.005	<0.0025	0.460	<0.005	0.013	<0.005	<0.005	<0.005	0.016
MW-4S	0.0038	<0.001	0.0012	<0.001	0.051	<0.001	<0.001	<0.0005	0.048	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MW-4D	<0.001	<0.001	0.0011	<0.001	0.018	0.0097	<0.001	<0.0005	0.130	0.0073	0.001	<0.001	0.0053	0.007	<0.001
MW-5S	<0.002	<0.002	<0.002	<0.002	0.014	<0.002	<0.002	0.011	0.100	<0.002	0.017	<0.002	<0.002	0.170	0.180
MW-5D	<0.002	0.0039	0.0046	0.0022	0.061	0.0084	<0.002	<0.001	0.550	0.0077	<0.002	<0.002	<0.002	<0.002	0.0022
MW-6S	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0052	<0.0005	<0.001	<0.001	<0.001	0.0027	<0.001	<0.001	<0.001
MW-6D	<0.005	<0.005	<0.005	<0.005	0.058	<0.005	<0.005	<0.0025	0.460	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-7S	<0.001	<0.001	<0.001	<0.001	0.0027	<0.001	0.0046	<0.0005	0.020	<0.001	<0.001	0.0078	<0.001	<0.001	0.0011
MW-7D	<0.005	<0.005	<0.005	<0.005	0.055	<0.005	<0.005	<0.0025	0.430	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MW-8S	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	0.0085	<0.001	<0.001	<0.001
MW-8D	<0.005	<0.005	<0.005	<0.005	0.051	0.0064	<0.005	<0.0025	0.300	0.0059	<0.005	<0.005	<0.005	<0.005	<0.005
MW-9S	0.0049	<0.001	<0.001	<0.001	0.017	<0.001	<0.001	0.0005	0.0042	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001
MW-9D	<0.005	<0.005	<0.005	<0.005	0.052	<0.005	<0.005	<0.0025	0.400	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
WND-41S	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0051	<0.0005	0.012	<0.001	<0.001	0.0072	<0.001	<0.001	<0.001
WND-41D	<0.002	<0.002	<0.002	<0.002	0.025	<0.002	<0.002	<0.001	0.180	<0.002	<0.002	0.0035	<0.002	<0.002	<0.002
MCL	0.002	0.007	0.100	NA	0.070	0.080	0.200	0.005	0.005		1.000	0.005		0.700	10.000

VCL = Vinyl Chloride
1,1-DCE = 1,1-Dichloroethene
t-1,2-DCE = trans-1,2-Dichloroethene
1,1-DCA = 1,1-Dichloroethane
c-1,2-DCE = cis-1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
PCE = Tetrachloroethene
TCE = Trichlorethene
BDCM = Bromodichloromethane
DBCM = Dibromochloromethane

MCL = Federal Drinking Water Standard, Maximum Contaminant Level
= concentrations over MCLs.
All Concentrations are given in milligrams/Liter.



G&E ENGINEERING
A Division of Tetra Tech - CRA COMPANY
ENVIRONMENTAL CONSULTANTS

DATE	NO.	REVISION	BY

DESIGNED BY:
DRAWN BY: A.B. LAPRARIE 10/14/97
CHECKED BY:
APPROVED BY:

WESTERN UNIFORM & TOWEL SERVICE, INC.
WICHITA, KANSAS
Client

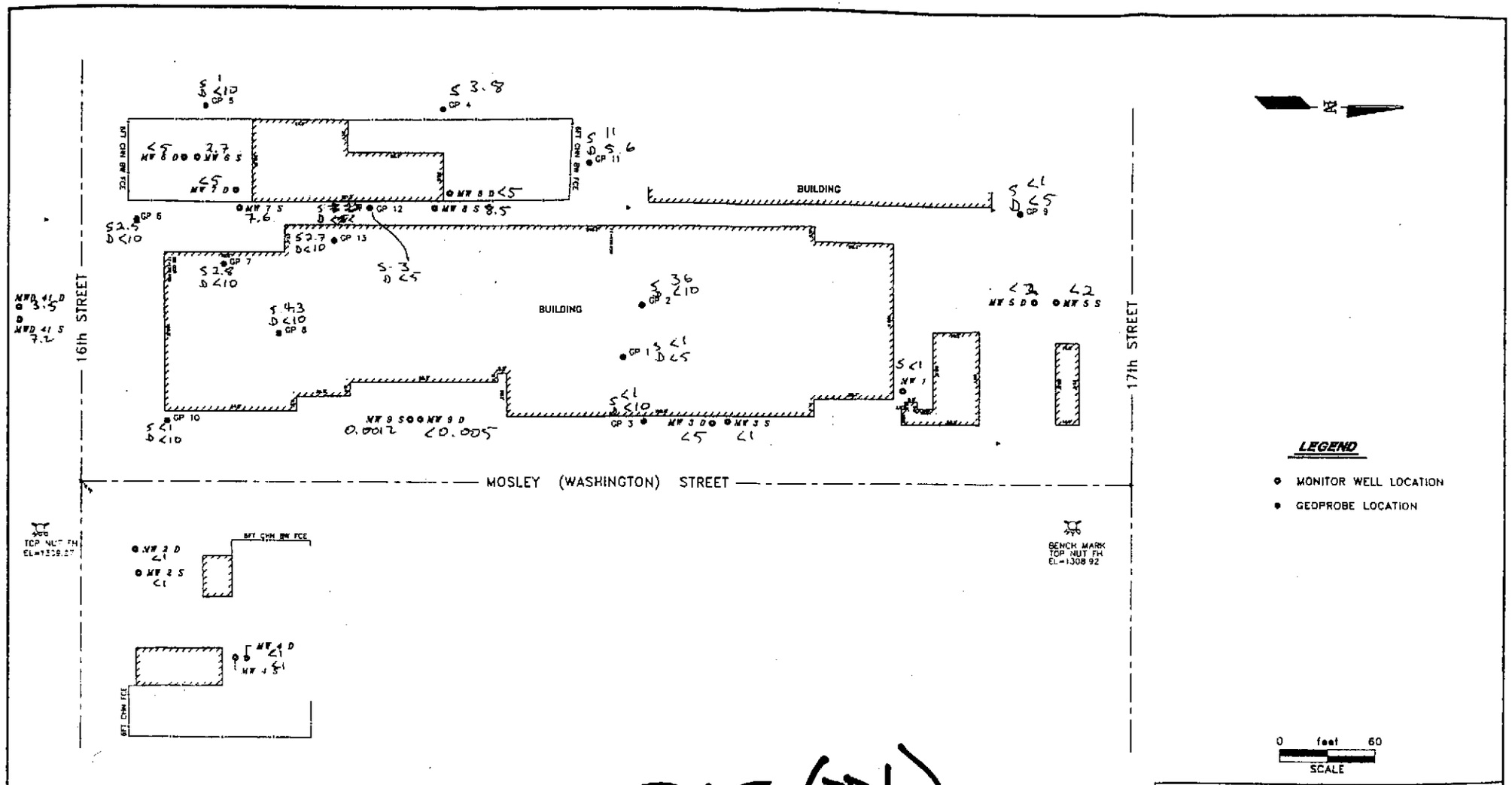
WESTERN UNIFORM & TOWEL SERVICE, INC.
1707 NORTH MOSLEY
WICHITA, KANSAS
Project Location

SITE PLAN

1"=60'
SCALE

24129-02-B1 | 0
DRAWING No. | REV

2
FIG./SHEET No.



PCE (ppb)

G&E ENGINEERING
A Division of Radtek - CRA COMPANY
ENVIRONMENTAL CONSULTANTS

DATE	NO.	REVISION	BY

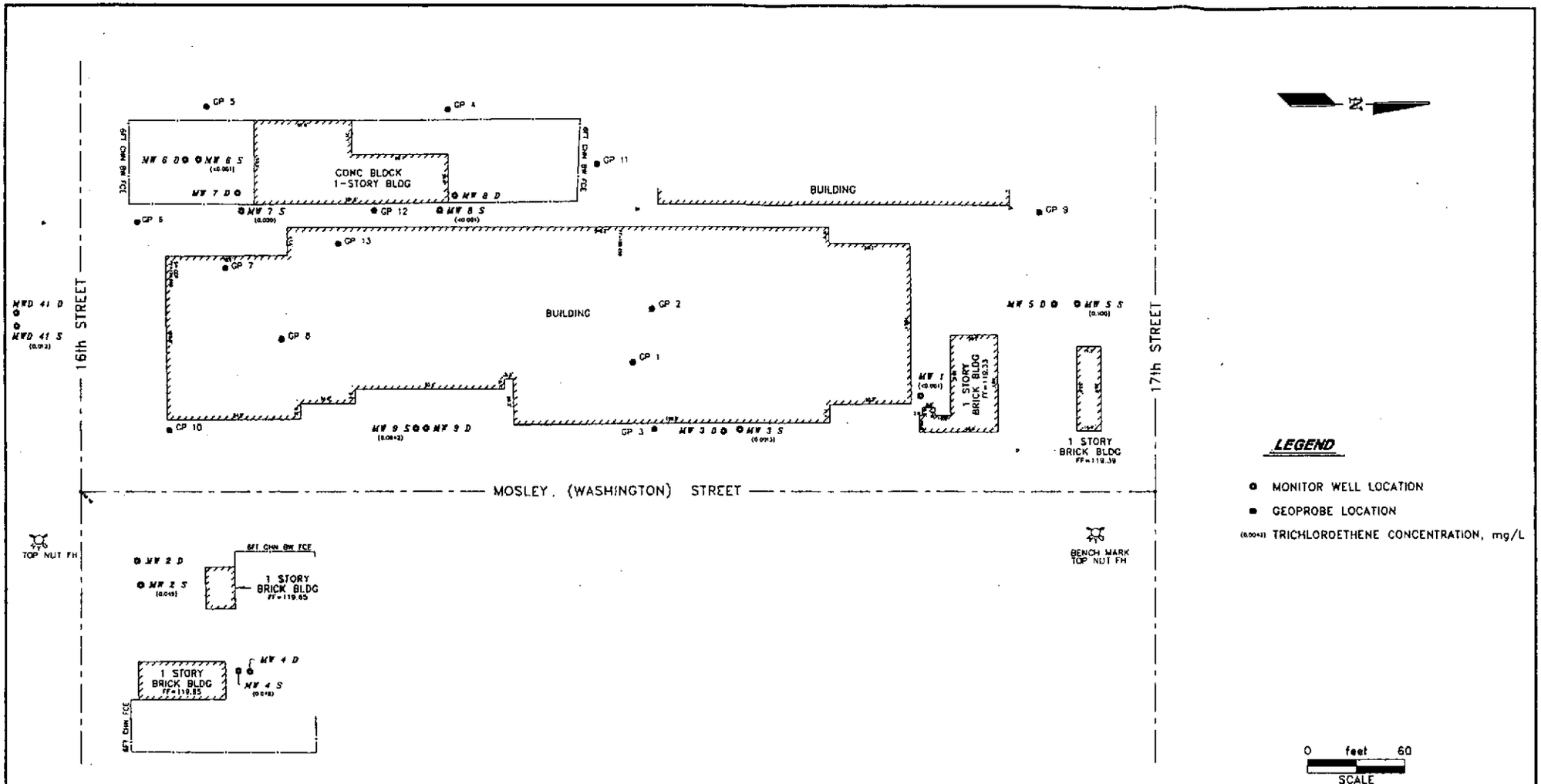
DESIGNED BY:
DRAWN BY: A.B. LAPOARIE
CHECKED BY:
APPROVED BY:
10/14/97

WESTERN UNIFORM & TOWEL SERVICE, INC.
WICHITA, KANSAS
Client

WESTERN UNIFORM & TOWEL SERVICE, INC.
1707 NORTH MOSLEY
WICHITA, KANSAS
Project Location

SITE PLAN

1"=60'
SCALE
24129-02-B1
DRAWING No.
0
REV.
2
FIG./SHEET No.



G&E ENGINEERING
A Division of Tetra Tech - CRA Company
ENVIRONMENTAL CONSULTANTS

DATE	NO.	REVISION	BY

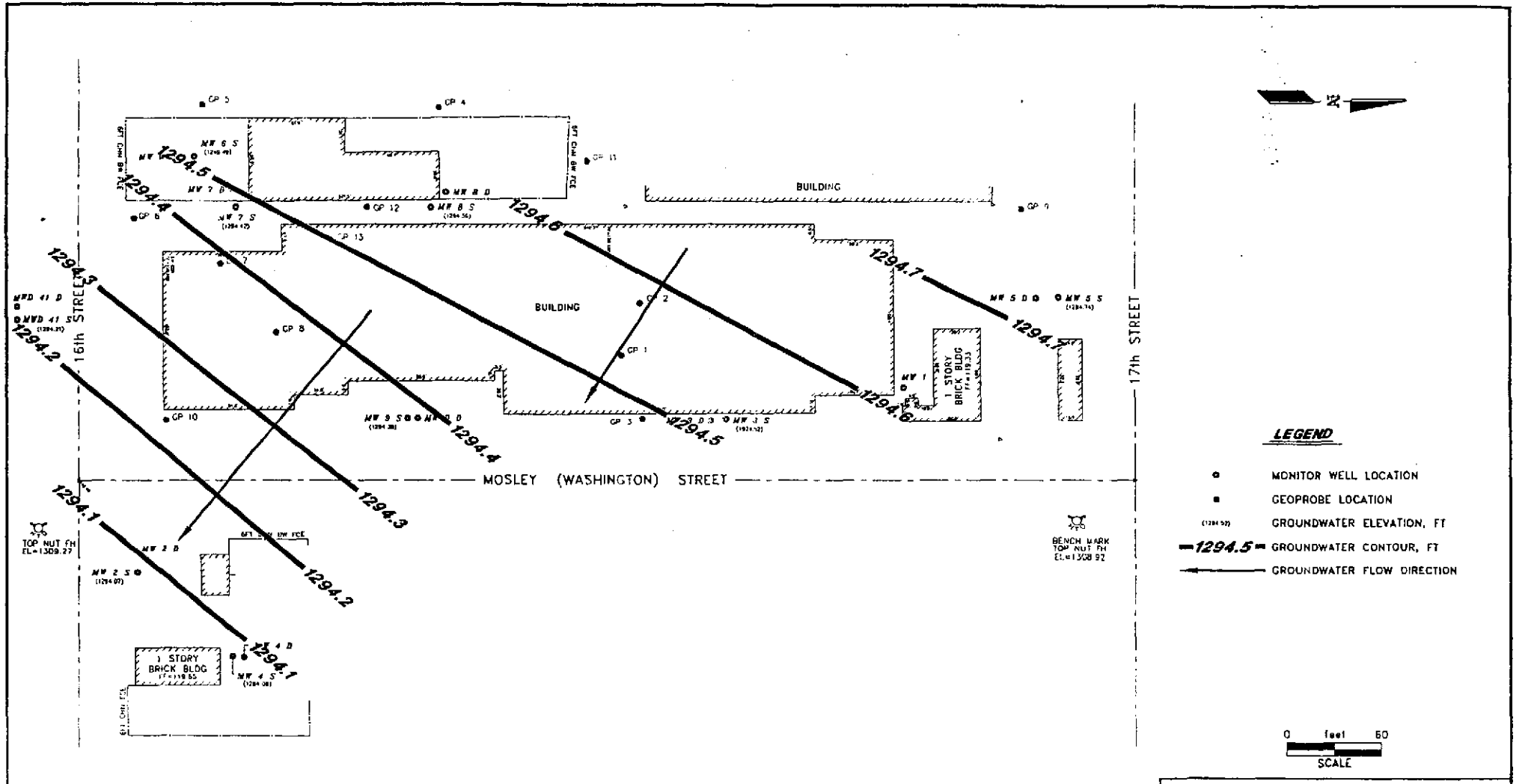
DESIGNED BY:
DRAWN BY: T.S. CLARK 10/20/97
CHECKED BY:
APPROVED BY:

WESTERN UNIFORM & TOWEL SERVICE, INC.
WICHITA, KANSAS
Client

WESTERN UNIFORM & TOWEL SERVICE, INC.
1707 NORTH MOSLEY
WICHITA, KANSAS
Project Location

TRICHLOROETHENE CONCENTRATIONS IN SHALLOW MONITOR WELLS SEPTEMBER 17 AND 18, 1997

1"=60'
SCALE
24129-02-B2
DRAWING No.
0
REV.
4
FIG./SHEET No.



G&E ENGINEERING
A Division of Tetra Tech - CRA COMPANY
ENVIRONMENTAL CONSULTANTS

DATE	NO	REVISION	BY

DESIGNED BY:
DRAWN BY: T.S. CLARK 10/20/97
CHECKED BY:
APPROVED BY:

WESTERN UNIFORM & TOWEL SERVICE, INC.
WICHITA, KANSAS
Client

WESTERN UNIFORM & TOWEL SERVICE, INC.
1707 NORTH MOSLEY
WICHITA, KANSAS
Project Location

GROUNDWATER POTENTIOMETRIC ELEVATIONS AND CONTOURS SEPTEMBER 17, 1997

SCALE: 1"=60'
DRAWING No.: 24129-02-84
REV.: 0
FIG./SHEET No.: 3

Allied Environmental Consultants, Inc.

January 12, 2000

DRAFT

RECEIVED

FEB 15 2000

BUREAU OF ENVIRONMENTAL REMEDIATION

Western Uniform & Towel Service, Inc.
1707 North Mosley Street
Wichita, Kansas 67214

Attention: Mr. Jim Behring

Reference: Ground Water Sampling and Analysis
1707 N. Mosley St., Wichita, Kansas
AEC File No. 99122:0504

Dear Mr. Behring:

Allied Environmental Consultants, Inc. (AEC) has completed the sampling and analyses of the ground water monitoring system located at the above-referenced site (see Figure 1, Attachment 1). This work has been conducted in accordance with our proposal dated November 30, 1999.

METHODOLOGY

During the current sampling event, conducted on December 8, 1999, seven monitoring wells (MW-2s, MW-3s, MW-4s, MW-5s, MW-7s, MW-8s, and MW-D41s) were sampled in accordance with the methodology outlined in the G&E Engineering Preliminary Investigation/Characterization Work Plan (July, 1997). These methods included purging each well with disposable polyethylene bailers until at least three well volumes of water had been removed and the parameters of pH, specific conductivity, and temperature had stabilized to within 10 percent of the previous reading. Access to MW-4s was blocked on December 8th, so AEC returned and sampled the well on December 9, 1999. Prior to purging, static ground water level measurements were recorded at each well to determine the current hydraulic gradient and flow direction.

One blind duplicate sample (DUP-A) was split from sample MW-7s and submitted to evaluate the accuracy of the laboratory analyses. A rinse sample (R-1) was collected to determine the effectiveness of the field decontamination procedures. In addition, a de-ionized water trip blank (TB) accompanied the samples during transit to the laboratory to evaluate the possibility of cross-contamination during shipping and handling. Finally, a wastewater sample (W-1) was collected from the purge tank for analyses to determine disposal requirements. All water samples were placed into laboratory-supplied containers, labeled, packed on ice in a cooler, and shipped to the laboratory under chain of custody documentation. The samples were analyzed for volatile organic compounds (EPA method 8260) by Specialized Assays, Inc., of Nashville, Tennessee.

The following attachments have been enclosed for your review:

Attachment 1 - tables summarizing the current ground water elevation data and detected analytes for all sampling events.

Attachment 2 - maps showing the current ground water flow direction (Figure 1) and concentrations of cis-1,2-Dichloroethene (1,2-DCE), Trichloroethene (TCE), and Tetrachloroethene (PCE) [Figure 2].

Attachment 3 - the complete laboratory reports and chain-of-custody forms.

Attachment 4 – field notes.

The Anawalt House, 1109 N. Topeka ■ Wichita, KS 67214 ■ Mail: P.O. Box 234 ■ Wichita, KS 67201-0234
Phone: (316) 262-5698 ■ Fax: (316) 262-0736 ■ www.alliedenvironmental.com

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

August 24, 2001

Doris Leslie
Wichita-Sedgwick County Department of Community Health
1900 East Ninth Street
Wichita, Kansas 67214

RE: North Industrial Corridor Site, Wichita, Kansas

Dear Ms. Leslie:

Enclosed is a copy of the report you requested from Mr. Van Delhotal in a letter dated August 7, 2001. The report contains data from November 1999 collected by Western Uniform and Towel Service, Inc. from monitoring wells on their facility. This version is identical (except for the *draft* stamp) to the copy dated June 8, 2000, which will be retained in KDHE's files. Mr. Delhotal is looking into whether there is data from a more recent sampling event which would have been conducted in response to KDHE's April 10, 2001 request for NIC site wide sampling. If you have any questions, please call me at 785-296-1935.

Respectfully,

Christine R. Jump
Environmental Geologist
Bureau of Environmental Remediation

cc: NIC PRP Site file (02 087 70150), Western Uniform and Towel Service, Inc. (02 087 70297)
Mr. Van Delhotal, Attorney at Law
Mr. Jim Behring, Western Uniform and Towel Service, Inc.
Darren Brown, CDM

TABLE 1
GROUND WATER ELEVATION DATA

	MW-2s	MW-3s	MW-4s	MW-5s	MW-7s	MW-8s	MWD-41s
TOC Elevation	1306.01	1305.88	1306.62	1306.85	1306.82	1306.98	1306.40
Depth to Ground Water	11.06	10.48	11.63	11.10	11.42	11.45	11.25
Ground Water Elevation	1294.95	1295.40	1294.99	1295.75	1295.40	1295.53	1295.15

TOC - top of casing. Water levels measured on December 8, 1999.

TABLE 2A
GROUND WATER ANALYTICAL RESULTS (ug/l)

DETECTED ANALYTE	RSK VALUE	MW-2s		MW-3s		MW-4s		MW-5s	
		9/97	12/99	9/97	12/99	9/97	12/99	9/97	12/99
Benzene	5	ND (0.5)	ND (2)	7.0	4.8	ND (0.5)	ND (2)	11	ND (2)
Toluene	1,000	ND (1.0)	ND (2)	10	ND (2)	ND (1.0)	ND (2)	17	ND (2)
Ethylbenzene	7	ND (1.0)	ND (2)	170	4.8	ND (1.0)	ND (2)	170	ND (2)
Xylenes	10,000	ND (1.0)	ND (2)	61	ND (2)	ND (1.0)	ND (2)	160	ND (2)
1,2-Dichloroethane	5	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (2.0)	ND (2)
Vinyl Chloride	2	ND (1.0)	ND (2)	8.8	ND (2)	3.8	ND (2)	ND (2.0)	ND (2)
1,1,1-Trichloroethane	200	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (2.0)	ND (2)
Cis-1,2-Dichloroethene	70	13	ND (2)	33	4.8	51	3.4	14	4.2
Trans-1,2-Dichloroethene	100	ND (1.0)	ND (2)	ND (1.0)	ND (2)	1.2	ND (2)	ND (2.0)	ND (2)
n-Butylbenzene	NL	NA	ND (2)	NA	4.1	NA	ND (2)	NA	ND (2)
Sec-Butylbenzene	NL	NA	ND (2)	NA	2.9	NA	ND (2)	NA	ND (2)
Isopropylbenzene	NL	NA	ND (2)	NA	18.1	NA	ND (2)	NA	ND (2)
Naphthalene	100	NA	ND (2)	NA	25	NA	ND (2)	NA	ND (2)
n-Propylbenzene	NL	NA	ND (2)	NA	40.6	NA	ND (2)	NA	ND (2)
Trichloroethene	5	49	ND (2)	1.3	2.7	48	3.8	100	28.6
Tetrachloroethene	5	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (2.0)	ND (2)

TABLE 2B
GROUND WATER ANALYTICAL RESULTS (ug/l)

DETECTED ANALYTE	RSK VALUE	MW-7s		MW-8s		MW-41s	
		9/97	12/99	9/97	12/99	9/97	12/99
Benzene	5	ND (0.5)	ND (2)	ND (0.5)	ND (2)	ND (0.5)	ND (2)
Toluene	1,000	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)
Ethylbenzene	7	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)
Xylenes	10,000	1.1	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)
1,2-Dichloroethane	5	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)
Vinyl Chloride	2	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)
1,1,1-Trichloroethane	200	4.6	ND (2)	ND (1.0)	ND (2)	5.1	ND (2)
Cis-1,2-Dichloroethene	70	2.7	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)
Trans-1,2-Dichloroethene	100	ND (1.0)	ND (2)	ND (1.0)	ND (2)	ND (1.0)	ND (2)
n-Butylbenzene	NL	NA	ND (2)	NA	ND (2)	NA	ND (2)
Sec-Butylbenzene	NL	NA	ND (2)	NA	ND (2)	NA	ND (2)
Isopropylbenzene	NL	NA	ND (2)	NA	ND (2)	NA	ND (2)
Naphthalene	100	NA	ND (2)	NA	ND (2)	NA	ND (2)
n-Propylbenzene	NL	NA	ND (2)	NA	ND (2)	NA	ND (2)
Trichloroethene	5	20	7.8	ND (1.0)	ND (2)	12	4
Tetrachloroethene	5	7.6	3.5	8.5	4.6	7.2	2.5

Notes:

Ug/l – micrograms per liter or parts per billion. ND - not detected with detection limits in parentheses. NL – not listed.
RSK – Risk-Based Standards for Kansas (Tier 2 – Residential Scenario). Shaded entries exceed the RSK values.

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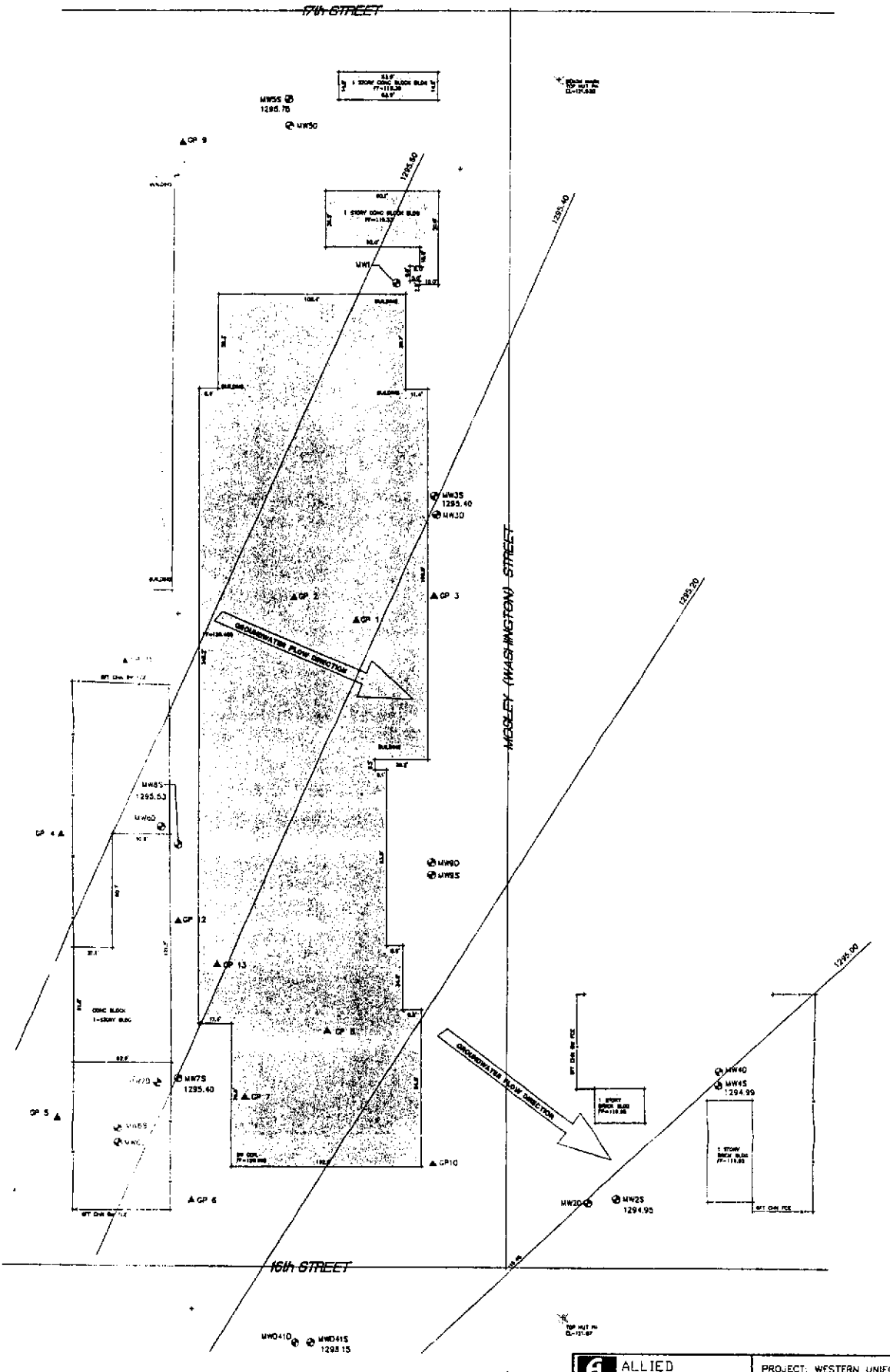
STD17P



LEGEND

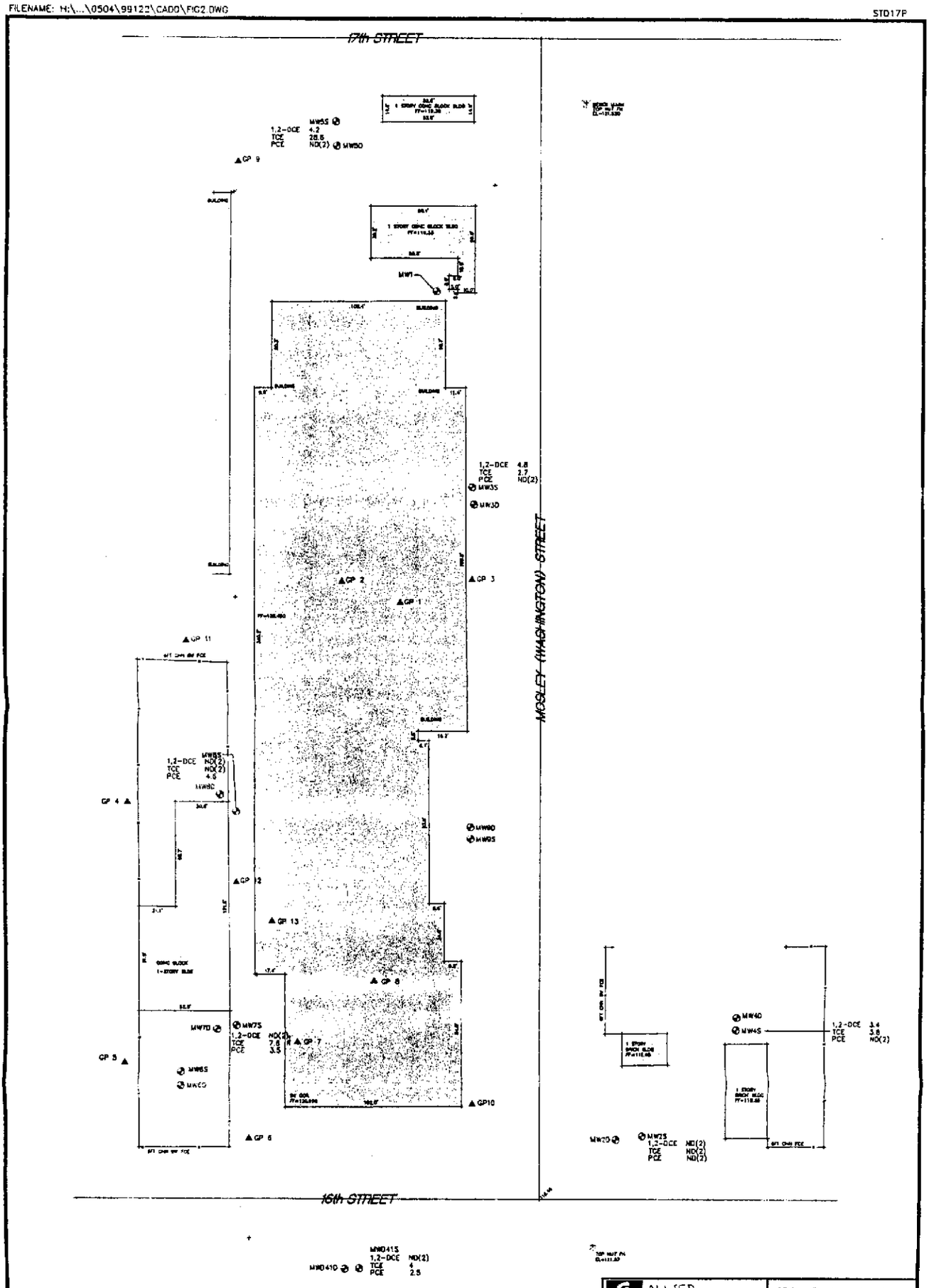
▲ GEOPROBE LOCATION

⊕ MONITOR WELL LOCATION

ALLIED ENVIRONMENTAL CONSULTANTS, INC.	PROJECT: WESTERN UNIFORM SCALE: 1" ≅ 50' DATE: 12-14-99
GROUNDWATER FLOW DIRECTION	
FIGURE: 1	DWN BY: GAW / CHKD BY: GAB

FILENAME: H:\...\0504\99122\CADD\FIG2.DWG

STD17F



ALLIED ENVIRONMENTAL CONSULTANTS, INC.

PROJECT: WESTERN UNIFORM

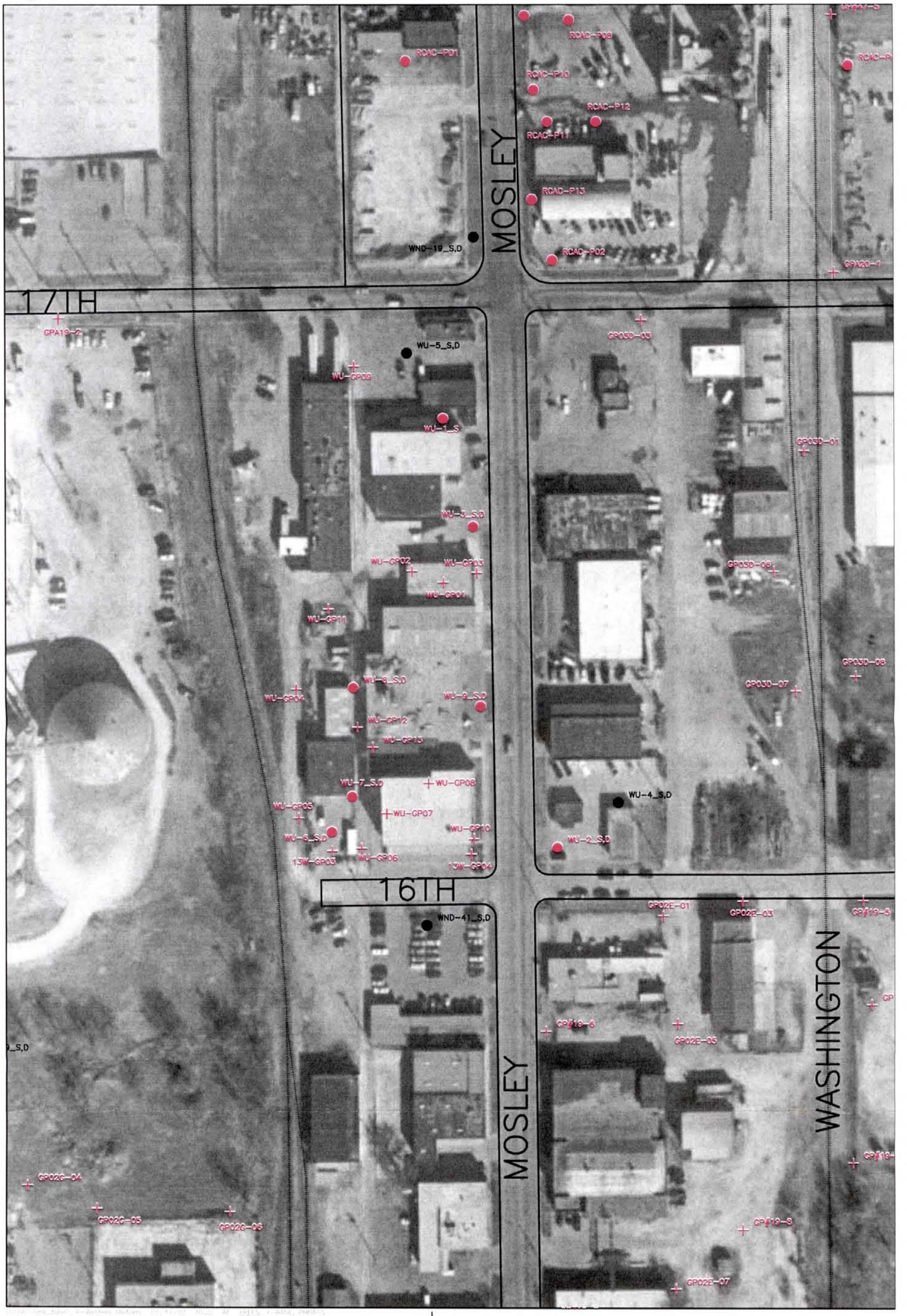
SCALE: 1"≈50'

DATE: 12-22-99

CIS 1,2-DCE, TCE, PCE
GROUNDWATER CONCENTRATIONS (ppb)

FIGURE: 2 | DWN BY: GAW | CHKD BY: DAB

Figure(s)
Aerial Photographs and Sample Location Map(s)



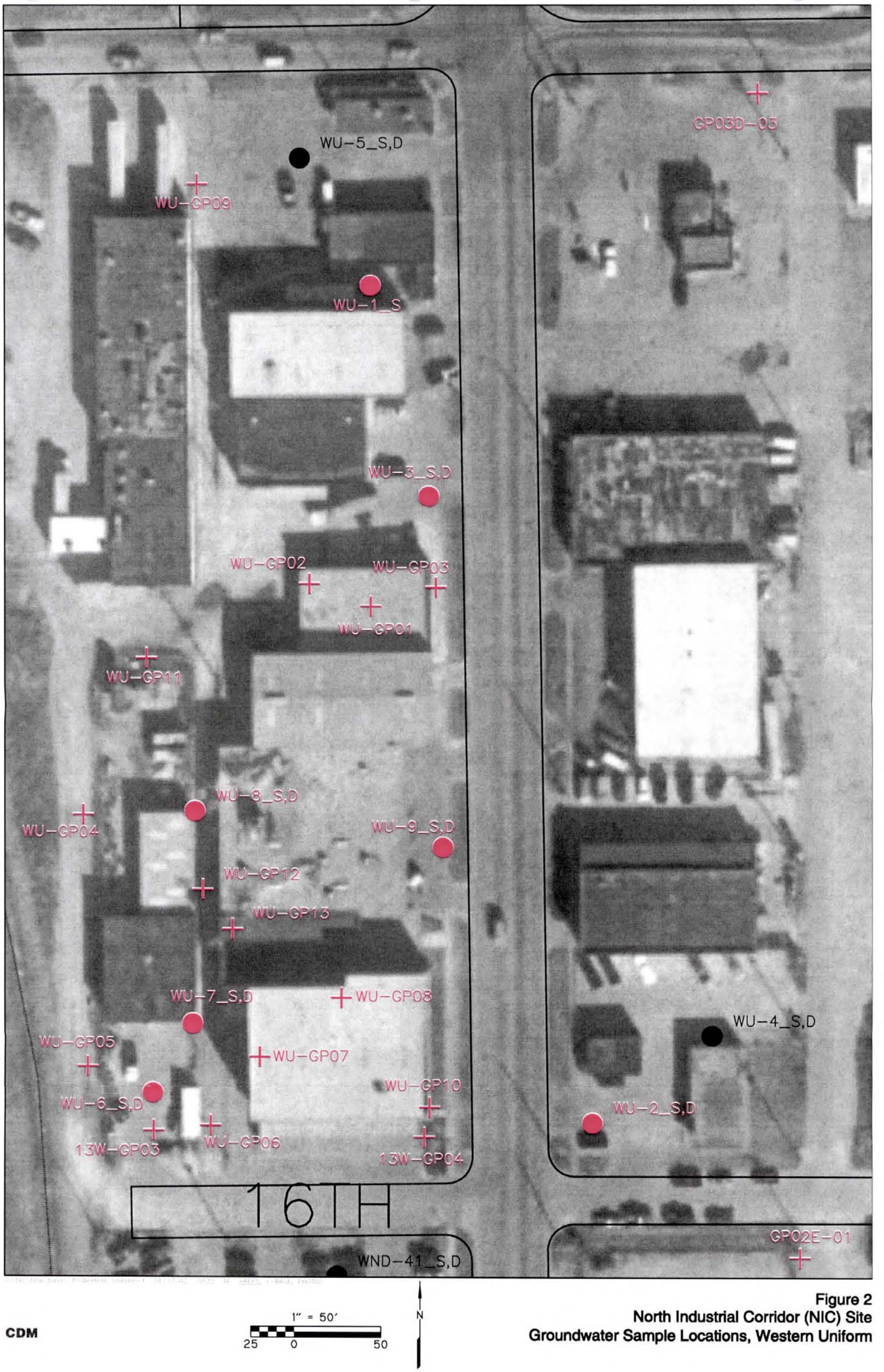
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Western Uniform



CDM

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Western Uniform

Table(s)
Analytical Data Table(s)

Western Uniform Facility
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#19-6	S/20	06/01/98		µg/L	**2.2**	**310**	**40**	**2.7**	<1	**1.7**	**2.5**	<1	<1	<1	<5.4
GP#19-6	S/20	10/15/99		µg/L	**3.4**	**160**	**27**	**1.2**	<1	<1	**1.3**	<1	<1	<1	<5.4
GP#19-6	D/28	06/01/98		µg/L	**1**	**440**	**66**	**2.7**	<1	**2.1**	**2.4**	<1	<1	<1	<5.4
GP02E-01	S/17	10/21/99		µg/L	<1	**27**	**17**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02E-01	D/32	10/21/99		µg/L	<1	**280**	**51**	**3.4**	**1**	**2.5**	**4.9**	<1	<1	<1	<5.4
GP02E-03	S/17	11/02/99		µg/L	<1	**21**	**22**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02E-03	D/31	11/02/99		µg/L	<1	**420**	**55**	**2.3**	<1	**2.1**	**2.5**	<1	<1	<1	<5.4
GP02E-05	S/17	11/11/99		µg/L	<1	**2.7**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02E-05	D/29	11/11/99		µg/L	<1	**230 JH**	**52 JH**	**1.6**	<1	**1.5**	**1.5**	<1	<1	<1	<5.4
GP03D-03	S/17	11/11/99		µg/L	<1	<1	**1.4**	**1.1**	<1	<1	<1	<1	<1	**1.4**	**10.5**
GP03D-03	D/32	11/11/99		µg/L	<1	**160**	**29**	**1.3**	<1	<1	**1.6**	<1	<1	<1	<5.4
GP03D-03	D/32	11/11/99	DUP	µg/L	<1	**160**	**30**	**1.5**	<1	<1	**1.8**	<1	<1	<1	<5.4
WND-19D	D	12/03/97		µg/L	<1	**330**	**51 JDB**	**2.3**	<1	**1.7**	**3.9**	<1	<1	<1	**5.5**
WND-19D	D	05/09/01		µg/L	<1.0	**150**	**37**	**5.5**	<1.0	**1.7**	**5.2**	<1.0	<1.0	<1.0	**5.4**
WND-19S	S	12/03/97		µg/L	<1	**110**	**17 JDB**	<1	<1	<1	<1	<1	<1	<1	**5.9**
WND-19S	S	05/09/01		µg/L	<1.0	**14**	**1.6**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
WND-41D	D	05/03/01		µg/L	**3.2**	**59**	**4.6**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**
WND-41S	S	05/03/01		µg/L	**2.3**	**7.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-28
Wichita Brass & Aluminum

PRP Evaluation Summary

Wichita Brass and Aluminum

412 E. 29th St. North (Northeast of 29th and Topeka)

Potential Source Area PRP and Work Plan Addendum Map ID - 10C

Contaminants of Concern - 1,1,2,2-TCA and its degradation products, petroleum hydrocarbons and other chlorinated VOCs

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Wichita Brass and Aluminum

1,1,2,2-Tetrachloroethane Contamination

Data indicate that concentrations of 1,1,2,2-tetrachloroethane (1,1,2,2-PCA) and its degradation products, 1,1,2-trichloroethane (1,1,2-TCA) and chloroethane (CA) increase along the groundwater flowpath across this area. Groundwater samples collected from shallow (20 feet bgs) upgradient locations GP#67-1, -2, and -3 contained 1,1,2,2-PCA concentrations of <1 ug/L. Downgradient shallow (20 feet bgs) groundwater samples collected from GP#67-04 and -05 contained 1,1,2,2-PCA concentrations of 49 (estimated) and 27 µg/L, respectively. At GP#67-04 and -05, groundwater samples contained 1,1,2-TCA at concentrations of 6.4 and 1.5 µg/L, respectively. At GPA05-01, CA was detected at 1.4 and 2.7 µg/L in the shallow and deep aquifer, respectively. These data indicate that a release of this 1,1,2,2-tetrachloroethane and possibly other less halogenated ethanes has occurred at this facility.

Petroleum Hydrocarbon Contamination

Wichita Brass and Aluminum (WBA) was formerly occupied by the Golden Rule Refinery. Petroleum hydrocarbon impacts to groundwater have been observed at the facility (see tables). The presence of petroleum hydrocarbons has altered the groundwater environment resulting in some degree of dechlorination of aliphatic compounds such as TCE and 1,1,2,2-PCA, and other compounds present at the facility.

Other Chlorinated VOCS

In addition to 1,1,2,2-PCA, other chlorinated VOCs that have been detected in groundwater at WBA including TCE, *cis*-1,2-DCE, vinyl chloride (VC), 1,2 dichloropropane, chloromethane, and chlorobenzene. Downgradient of the facility at sample location GP#55-01, the chlorinated VOCs 1,1,1-TCA, 1,1-DCA, 1,1-DCE, carbon tetrachloride, chloroform, TCE, *cis*-1,2-DCE, VC, and *trans*-1,2-DCE have been detected (see tables). Further work is required to determine the relationship of contaminants at GP#55-01 to releases at WBA.

WBA History

Past practices at the property where WBA resides include petroleum refining, landfill, solvent recovery, drum recycling and current use as a metals foundry. Numerous sludge pits have been documented at the facility and according to information request response documentation; almost anything could be dumped into the area known as 'The Tar Pits.'

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south and south-southeast, respectively. Facility specific water level data are lacking.

References

USGS 1984, *Site Investigation Report*. Prepared by the United States Geological Survey for Kansas Department of Health and Environment Bureau of Environmental Remediation.

USGS 1986, *Narrative Report for the Site Investigation of the Former Golden Rule Refinery*, Prepared by the United States Geological Survey for Kansas Department of Health and Environment Bureau of Environmental Remediation.

USGS 1986, *Narrative Report for the Site Investigation of Wichita Brass and Aluminum*. Prepared by the United States Geological Survey for Kansas Department of Health and Environment Bureau of Environmental Remediation.

CDM 2000, Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas. Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Vogel, Criddle, and McCarty, 1987, *Transformations of Halogenated Aliphatic Compounds*, Environmental Science and Technology, Vol. 21, No. 8, pp 722 - 736.

Polk Directory Review and RCRA Information Summary

Polk Search Results

Reference ID	Location	1951	1961	1965	1970	1975	1980	1984-1985	1990	1995-1996	2000
Former Coastal Boneyard Facility For all of 02A: Need Soil investigation, Title search, and RCRA. When was the fence placed at the East end of the property?	412 E. 29th St. N.	Wichita Brass and Aluminum Foundary		Quality Drum Service (barrel dealer); Quality Solvent Co (chem mfr); Wichita Brass & Alum. (foundry)	Quality Solvent Co.; Wichita Brass & Aluminum Foundary	Quality Solvent Co; Wichita Brass & Alum	Wichita Brass & Aluminum Foundary Inc.	Wichita Brass & Aluminum Foundary Inc.	Wichita Brass & Aluminum Foundary Inc.	Wichita Brass & Aluminum Foundary Inc.	Wichita Brass & Aluminum Foundary (nfer froundaries nec)

Potential source at property known as: 412 E. 29th N.

Current Owner/Business: Wichita Brass & Aluminum

Contact Person: Keith Howell

Mailing Address: 412 E. 29th N.
Wichita, KS 67219

Phone Number: (316) 838-4286

Other information

Name of Company:		Wichita Brass & Aluminum
Name and/or Contact Person:		
Street Address of Company:		**412 E. 29th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		Former Costal Boneyard Facility
Phone Number of Contact:		
History:	1951	Wichita Brass & Aluminum Foundry
	1961	
	1965	Quality Drum Service (barrel dealer); Quality Solvent Co (chem. Mfr); Wichita Brass & Aluminum (foundry)
	1970	Quality Solvent Co; Wichita Brass & Aluminum Foundry
	1975	Quality Solvent Co; Wichita Brass & Aluminum
	1980	Wichita Brass & Aluminum
	1984/5	Wichita Brass & Aluminum Foundry Inc.
	1990	Wichita Brass & Aluminum Foundry Inc.
	1995/6	Wichita Brass & Aluminum Foundry Inc.
	2000	Wichita Brass & Aluminum Foundry (nfer foundries nec)

RCRA Info:

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: B -00153-00UP Pin: 098330330000400A
Page: 1

Name WICHITA BRASS & ALUMINUM FOUNDRY INC
Situs 412 E 29TH ST N
WICHITA KS 67219

Tax	7,145.93
Specials	498.13
Total	7,644.06

Phone
Mail BOX 4144
To WICHITA KS 67204-0144

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 118594
USD-259-TD-NIC

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

DEPARTMENT OF HEALTH AND ENVIRONMENT

Division of Environment

RECEIVED
OCT 1981
BUREAU OF ENVIRONMENTAL SANITATION

M E M O R A N D U M

October 12, 1981

TO: SUPERFUND SITES FILE

FROM: Dale T. Stuckey, Field Representative DTS

SUBJECT: Investigation of Oil Sludge Pits Associated with Past Refinery Operations in Wichita. Section 4, T27S, R1E.

Primarily from a few off-hand remarks made by Mike Carter of the Wichita Brass and Aluminum Foundry and his father, Emmett Carter, I learned of the existance of two past refinery operations in the general vicinity of 29th Street and Broadway in Wichita. One went by the name of Golden Rule Refinery and was located in the northeast corner of the 29th street and Broadway intersection. It apparently went out of business in the late 1930's, probably 1938 or 1939. The other refinery went by the name of Barnsdall Refinery and was bounded by 29th street on the north, 25th street on the south, Broadway and the railroad tracks on the west, and St. Francis street on the east. This refinery went out of business about 1955. There were some oil sludge pits associated with each site.

GOLDEN RULE REFINERY

The Golden Rule Refinery was situated where Wichita Brass and Aluminum Foundry is located now. It was run by an Elden or Elbert Rule. When he went out of business he sold the land to a Walt Stevens who in turn, in 1941, sold the land to Emmett Clark. That year Emmett started up his foundry operation. Both Mike and Emmett Carter remember there being a general dump area just west of their property and east of the railroad tracks back in the mid-1940's. Initially Mike thought he remembered it containing some oil sludge but later he stated he didn't really remember what was in the pit. He believed it was closed out around 1946. During the time when I first made contact with Mike while investigating his company's abandoned lacquer reclamation project with its associated backlog of solvent and paint waste drums, he informed me that directly underneath the area over which the drums were scattered was a sizeable oil sludge pit. But in later conversations with him and his father, I was told they didn't think that there was, in fact, any oil sludge buried under their property. It was their feeling that all the old waste material associated with the refinery and with the dump had been burned off. Mike did mention, however,

that if one did some digging around out by the old stills, one would be likely to run into some oily dirt. In scraping down through old layers of dried paint sludge in this area, he had himself encountered some.

Visible on the enclosed 1938 aerial photograph is a cluster of possible oil sludge pits around two tanks on the western edge of the Golden Rule Refinery. This area corresponds to the old salvage and lacquer reclamation area located at the Wichita Brass and Aluminum Foundry currently. Also visible on this photograph, just north of the aforementioned area, is what appears to be a long sausage-shaped pit. This property is presently owned by a Dolese Concrete Company. On September 23, 1981 I made a brief reconnaisance of this area along with Kent Rowe of the Wichita-Sedgwick County Department of Community Health. In a location corresponding with that of the sausage-shaped pit we found a large mound of concrete. We later spoke with an employee of Dolese, who though declining to give us his name, told us that the concrete had been poured back in 1953. In 1951 he remembered there being oil in a pit there. He said that it had about a one foot soil cover on top and was fairly deep. One of the company's trucks had somehow gotten into it and was buried. It can be seen from the enclosed 1950 aerial photograph that this pit was indeed still there in 1950, though the refinery operation itself had been completely dismantled and there was no sign of any of the other pits.

BARNSDALL REFINERY

A check of plat records in the Sedgwick County Clerk's office showed that Barnsdall Oil Company's property was transferred over to Bareco Oil Company on August 8, 1935. Whether this was just a name change or an actual change of ownership is not known. On April 11, 1955 Bareco Oil Company's property was transferred over to Industrial Development Inc.

Oil sludge pits associated with the old Barnsdell and/or Bareco Oil Refinery were more numerous and the investigation in regards to them more involved, than was the case for the Golden Rule refinery. Basically there were two major pits on their property and I attempted to trace the destiny of these as best I could.

* * *

The major pit at the northwest corner of the property was square in outline, appeared to have a surface area of about one acre, and first shows up on the 1950 aerial photograph. It also appears in the 1960 photograph but is absent in the 1968 series. On August 1, 1962 this northwest corner property was deeded from Industrial Development Inc. to Kansas Paint and Color, Inc. Kansas Paint and Color owned the land up until January 6, 1975 when they deeded it to Glickman, Inc. This plat of land is currently referred to as K.P.&C. addition. I had a brief phone conversation with the plant manager (he declined to give his name) of Kansas Paint and Color on September 23, 1981 in connection with this pit. He said that his company had hired a contractor to

clean it out around 1965. All the water was pumped out and dumped and the oil sludge was dredged out and hauled off to an adjacent tract of land south of there, spread out over the ground and buried. Some of this oil sludge was also hauled off and used to stabilize dusty county roads. He declined to give any more specifics on how the sludge was handled and the exact location of where it was buried.

In conversation with both Mike and Emmett Carter it was confirmed to me that there was indeed a large oil sludge pit just south of their property and on the other side of 29th street back in the 60's. They remembered it having caught fire in 1959 and that a fire truck from Boeing Aircraft had to be used to put it out. They were also under the impression that the oil sludge had been cleaned out in the mid-60's. Mike remembered seeing them come in with an auger to dig it out and he believed that they had excavated a series of trenches running east-west, in a location somewhat southeast of the original pit, into which the oil sludge was dumped, mixed with dirt and covered.

I also had a brief phone conversation on September 29 with Steve Potucek of the Wichita Planning Commission concerning this northwest pit. He told me that Kansas Paint and Color had originally bought the land with the intent of setting up a metals reclamation operation, and that $35,000 was shelled out to clean up the oil sludge pit.

* * *

The second major pit was located about 200 yards due south of the northwest pit, was also about one acre in size,and was rectangular in outline. Emmett Carter believes that all this oil sludge was dug out, spread over a wide area in the same general vicinity and buried. The pit shows up on the 1960, 1968 and 1974 aerial photographs. This tract of land was owned by Industrial Development, Inc. up until September 17, 1973 when Johnnie Darr deeded the land to Frank H. Ise. Johnnie Darr had apparently obtained the land as a result of Industrial Development, Inc. having failed to pay its taxes. On July 25, 1974 Frank H. Ise deeded the land to James Gardner (former city commissioner). On August 12, 1974 James Gardner deeded the land to Wichita Metals, Inc., a firm that operates a car crusher on the site. ~~I spoke~~ with Dean Kline of Kansas Metals, Inc. by phone of September 24. He informed me that when construction began on the car crusher in 1974, there were no pits on the property. Since the 1974 aerial photograph was dated March, 1974, it appears that this main pit and all smaller associated pits were cleaned out sometime between March and August 12, 1974 - a period of time when the land was owned by James Gardner. I spoke with Mr. Gardner by phone on September 29 in an effort to gather facts about any cleanup operations but he refused to divulge any information whatsoever. It was his feeling that any kind of publicity on this matter would shed negative light on all associated parties.

In the above paragraph I mentioned that there were some smaller pits in this area. The pits I am referring to can most clearly be seen in the 1960 aerial photograph. There were two, irregular in outline, between the north and south major pits, and there were two south of southern major

pit. The boomerang shaped pit at the southeast corner of the southern major pit is about where the car crusher is sitting now. Emmett and Mike Carter remember that a horse got mired down in some oil sludge close to this location sometime back in the '50's. The long pit running east-west and situated just southeast from the northern major pit, was sitting in close proximity to where a fence line runs now which encloses Kansas Metals property. On September 23 Kent Rowe and myself discovered what, appeared to be, an oil sludge pit with an upper coating of dirt at this same general location. The sludge was very thick and could be walked over while sinking in slowly. Several skeletons of dead animals were entrained on the surface. Enclosed are a series of Polaroid snapshots taken of the area. Most all of this material was sitting on land which is now owned by Mike Carter, though the eastern most extremity of the sludge was on land which is being leased from Mike Carter by Roofing Service Company. It is possible that the waste originated from the roofing company's operations, but it appeared to me to be more of a refinery waste product. I believed I could detect some refinery odor while probing around in the sludge. On September 28 I revisited this site and collected a sample of the sludge in a mason jar. It should be presently undergoing heavy metals analysis in our Topeka lab.

CONCLUSION

This pretty much concludes the information I have gathered on this subject to date. The problem which arises, is that, though it appears all the oil sludge was handled in a way in which microbial breakdown would be encouraged (i.e. - through mixing with dirt), my assessment is gathered second-hand and I have no hard facts to go on regarding the clean up operations. The people that would know the specifics, the plant manager at Kansas Paint and Color and James Gardner, have shown no willingness to make the information available to me. In my mind, the course that needs to be taken, is for a higher official than myself to attempt extracting information from these two sources and if this fails, for field work, in the form of augering or drilling, to commence on revealing the location of the sludge, its physical and chemical characteristics and any threat it may pose to the ground water. The water table in the area of concern is only 15 to 20 feet deep.

Likewise the possibility of buried oil sludge on the old Golden Rule Refinery property needs to be looked into. It is conceivable that the old sausage-shaped pit previously mentioned might still be in existance underneath tons of concrete.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: October 27, 1981
Time Received: 11:15 am
Date Completed: November 30, 1981

LLI Project No.: 81-7449

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Soil

Sample Identification	Analysis	Results
One Foot Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter
Six Inch Depth	EP Toxicity	
	Chromium	< 0.25 mg/liter
	Lead	< 0.25 mg/liter

The above soil samples were taken by Mr. Dale Stuckey (KDHE Employee) in late october 198 at the location he determined to be the worst as far as leaking drums. The results of the EP Toxicity analysis indicate that no hazardous materials had leaked to the 6 inch nor to the 1 foot depth and were probably not ground water contaminants.

Comments:

Michael W. Carter
President

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

Department of Health and Environment
Division of Environment

PHOTO MOUNTING SHEET

Name of Site: Unauthorized Hazardous Waste Site at Wichita Aluminum Foundry

Location: City Wichita County Sedgwick Legal

No. 1

Date: Aug. 18, 1981 Time: 10:00 a.m.

General Direction Faced: East

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at one of the drums in which wastes is actually oozing out onto the ground.

No. 2

Date: Aug. 18, 1981 Time: 10:00 A.M.

General Direction Faced: West

Weather Conditions: Fair

Type of Camera: Polaroid

Additional Comments: A look at a small portion of the dump site showing drums stacked high at the left and several drums scattered in the center.

LANGSTON LABORATORIES, INC.

Laboratory Report

Date Received: September 14, 1981
Time Received: 8:00 am
Date Completed: September 24, 1981

LLI Project No.: 81-7149

Submitted by: Wichita Brass and Aluminum Foundry
P. O. Box 4144
Wichita, KS 67204
Attn: Mr. Mike Carter
P. O. No.:

Sample Description: Composite Waste Paint Sludge Collected September 10, 1981

Sample Identification	Analysis	Results
Sludge	Specific Gravity	1,658 g/ml
	Dissolved Sulfide	< 3 mg/liter
	Free Cyanide	51 mg/kg
	Total Cyanide	57 mg/kg
	Total Arsenic	4.4 mg/kg
	Total Barium	113 mg/kg —
	Total Cadmium	22 mg/kg —
	Total Chromium	600 mg/kg
	Total Lead	2,400 mg/kg 5/mg
	Total Mercury	0.09 mg/kg ok
	Total Selenium	< 1 mg/kg
	Total Silver	0.65 mg/kg
	EP Toxicity	
	Arsenic	< 0.25 mg/liter
	Barium	< 5.0 mg/liter
	Cadmium	0.16 mg/liter
	Chromium - Hexavalent	108 mg/liter
	Chromium	116 mg/liter 5 mg/liter
	Lead	< 0.25 mg/liter
	Mercury	< 0.01 mg/liter
	Selenium	< 0.05 mg/liter
	Silver	< 0.25 mg/liter

RECEIVED
AUG 27 1987
BUREAU OF ENVIRONMENTAL REMEDIATION

Comments:

Approved: Alan Kerschen
Alan Kerschen
Laboratory Director

2005 West 103rd Terrace Leawood, KS 66206 913/341-7800

STATE OF KANSAS
DIVISION OF ENVIRONMENT
TOPEKA, KANSAS

Job No. _____

Date Aug. 18, 1981

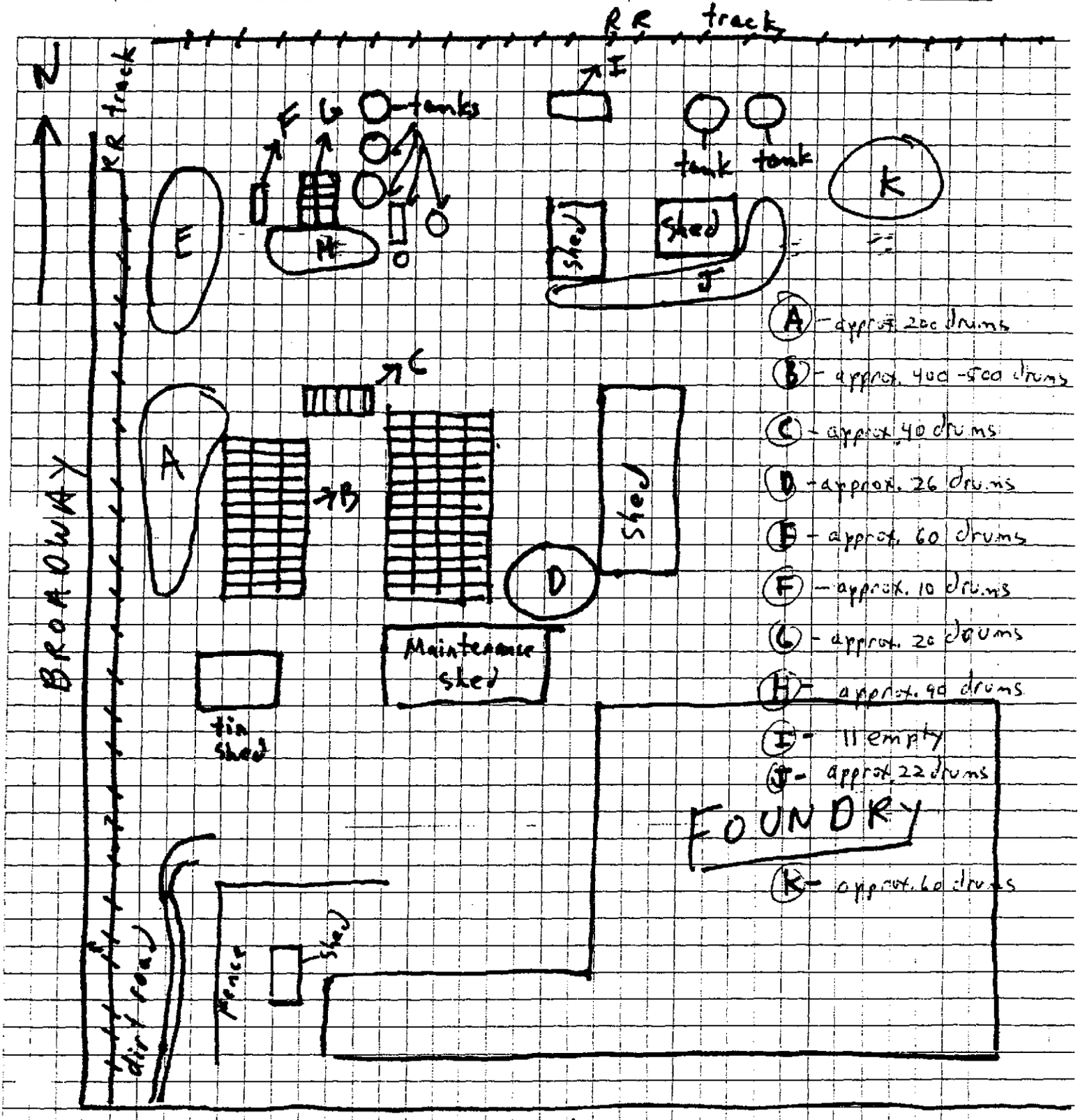
Sheet _____ of _____

Project _____

By Neal T. Stumbaugh

Subject Wichita Brass and Aluminum Foundry Complaint

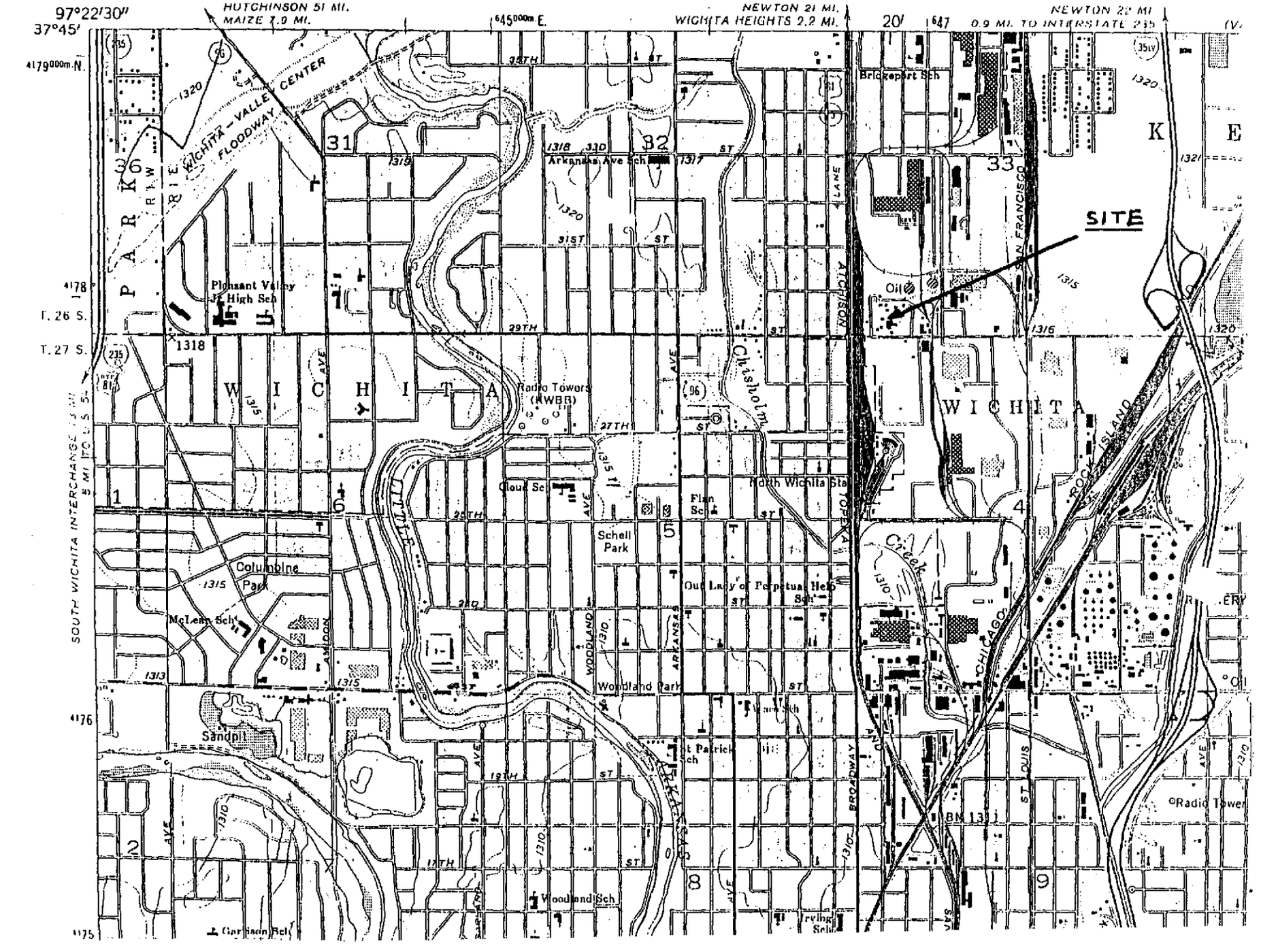
Ck'd. _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Wichita Brass + Aluminum Foundry, Wichita.

STAT



11.6
Wichita Brass + Alum

United States Department of the Interior

GEOLOGICAL SURVEY
Water Resources Division
1950 Constant Avenue - Campus West
Lawrence, Kansas 66046

May 20, 1986

RECEIVED
BUREAU OF
MAY 29 1986
WASTE
MANAGEMENT

Ms. Emily Roth
Bureau of Waste Management, Superfund Section
Kansas Department of Health and Environment
Forbes Field, Bldg. 321
Topeka, Kansas 66620

Dear Emily,

Please find enclosed the final site investigation package for Wichita Brass and Aluminum, the former Golden Rule refinery, and the former Barnsdall Refinery. Your review comments and requests of April 10, 1986, were considered and incorporated into the final reports. The final package includes the following:

1. Narrative reports for each site, including an Executive Summary for each report.

2. Complete laboratory analysis of samples collected during the fall of 1985.

3. EPA's Site Investigation forms for each site.

4. EPA's Hazard Ranking Score for the composite sites and documentation.

Thank you very much for your time and cooperation.

Sincerely,

Robert J. Hart

Robert J. Hart
Hydrologist

cc: Joseph Rosenshein, USGS
John Stamer, USGS
Jim Power, KDHE
Karl Birns, KDHE

INFORMATION REQUEST - ATTACHMENT B

1. MICHAEL W. CARTER, PRESIDENT
   WICHITA BRASS AND ALUMINUM FOUNDRY, INC.
   412 EAST 29TH STREET, NORTH
   P.O. BOX 4144
   WICHITA, KANSAS 67204-0144
   316 838-4286

2. MANUFACTURING AND PROCESSING ACTIVITIES

   No information is available on the activities of the Golden Rule Refinery.

   Wichita Brass and Aluminum Foundry, Inc. (SIC Code 3440) has operated continuously at this location since 1943, and has manufactured aluminum and magnesium alloy sand and permanent mold castings for Wichita's aircraft industry as well as other commercial customers. No chlorinated organic solvents have been used in this operation.

3. No hazardous wastes listed have been used at Wichita Brass and Aluminum Foundry, Inc.

   See attached manifests on previous clean-up activities (1981 & 1988)

4. A. See No. 3 above (manifests).
   B. Unknown.
   C. See attached manifests.
   D. No. 16 - SITE HISTORY.
   E. See attached manifests.
   F. See attached manifests.

5. No knowledge of spills, leaks or releases.

6. No such system has ever existed to our knowledge.

INFORMATION REQUEST - ATTACHMENT B

7. Enclosed please find copies of our Comprehensive General Liability insurance policies for:

   08-01-86 to 08-01-87
   08-01-87 to 08-01-88
   08-01-88 to 08-01-89

   These policies were acquired through Alpha Omega Insurance in Wichita, Kansas. All previous years' insurance back to approximately 1960, were acquired through the Harrison Insurance Agency in Wichita. That agency has gone out of business and copies of those policies are not available.

8. Tax Returns are enclosed for years 1983, 1984, 1985, 1986, 1987.

9. Financial Statements are enclosed for years 1984, 1985, 1986, 1987, 1988.

10. See No. 12 below.

11. Articles of Incorporation and Corporation By-Laws are enclosed.

12. MICHAEL W. CARTER, President, Director, 50% Shareholder
    VICTOR D. CARTER, Vice President, Director, 50% Shareholder
    JENNIFER J. CARTER, Secretary-Treasurer, Director
    VICKIE S. CARTER, Assistant Secretary-Treasurer, Director

    This is the entire corporate structure.

13. None to our knowledge.

14. None to our knowledge.

15. None to our knowledge.

INFORMATION REQUEST - ATTACHMENT B

16. SITE HISTORY - (NO KNOWLEDGE PRIOR TO GOLDEN RULE REFINERY)
Golden Rule oil refinery operated on this site until approximately 1943, when the east 200 feet frontage was purchased by Wichita Brass and Aluminum Foundry, which began operations there at that time (See attached letter of July 10, 1946). Numerous oil sludge pits were on the property and are still encountered when digging.

The west 287 feet of the property was bought from Golden Rule refinery by a Walt Stevens prior to 1946 and the open sludge ponds shown in aerial photographs were used as a landfill until approximately 1955. Mr. Stevens sold the property in the early 1960's to his son-in-law, Wilbur Durham, a Compton, California, doctor, who then sold the property to the above-mentioned foundry in approximately 1965.

The solvent recovery operation was operated by an unknown individual until it was purchased in approximately 1959 by Emmett L. Carter, who operated it until 1964 on a part time basis and then only sporadically until 1971 when it ceased operation. In 1981, the KDHE oversaw the clean-up operation associated with the removal of all waste solvents remaining as well as the associated sludges and drums at a cost in excess of $30,000. EPA toxicity tests were completed at that time, which indicated no contamination of soil at the 6-inch or the 12-inch depth (See attached Langston Lab report and manifests).

In 1988, the dismantling of the solvent recovery operation was completed in conjunction with the possible sale of this property by Wichita Brass and Aluminum Foundry, Inc. During this effort, three (3) tanks were found to have paint sludge in the bottom. The tanks were removed in compliance with local, state, and federal laws at a cost in excess of $40,000 (See attached manifests).

17. No knowledge of any.

INFORMATION REQUEST - ATTACHMENT B

18. No other records are available to the best of our knowledge.

19. No such area exists to our knowledge, except for the landfill operated by Walt Stevens prior to 1955 as stated in #16 - SITE HISTORY.

20. Wichita Brass and Aluminum Foundry, Inc. occupies the same property as the Golden Rule Oil Company. This is in the Chisholm Creek drainage and was subject to area-wide flooding three or four times per year during the 1930's, 1940's and 1950's. Such patterns of flooding could have redistributed surface materials and even have carried many materials away, such as hydrocarbon products and by-products.

    Aerial photographs of the area taken in 1938, 1950, 1960, 1963, 1968, 1974, and 1977, indicate our property as well as the property adjacent east, north and south, to be occupied by many open pits containing hydrocarbon by-products. Only God knows what may or may not have been disposed of over nearly forty years...or what may have been moved by flood waters to or from the 29th and Mead site. The 29th and Mead site was "out of town", in an industrial area, and we are sure that under those circumstances 20, 30, 40 or even 50 years ago, it was acceptable practice to dump almost anything into the area known as "The Tar Pits" (Reference John's Sludge Pond and Super Refined Oil Response Actions). Under the circumstances that prevailed many years ago, prior to the existance of RCRA, CERCLA, and the Superfund, it may not be surprising to find such a large area of varied contamination.

THE GOLDEN RULE OIL COMPANY

WICHITA, KANSAS

July 10, 1916

Wichita Brass and Bushing,
Wichita,
Kansas.

Attention of E. L. CURTIS
and
E. L. MORLEY

Dear Sirs:

This letter will be a receipt to you for $2,050.00 paid by you today as balance due on lease sold to you, except $2,000.00 which I am to carry by note and mortgage to be paid on or before one year at five per cent interest. It being understood that the requirements made by your attorney on abstract of title are not yet completed by us but are to be completed and turned to you when completed.

Very truly yours,

Elbert B. Rule

Elbert B. Rule

120 West First Street,

Wichita, P. Kansas.

State of Kansas . . . John Carlin, Governor

DEPARTMENT OF HEALTH AND ENVIRONMENT

Joseph F. Harkins, Secretary

Forbes Field
Topeka, Kansas 66620
913-862-9360

August 19, 1981

Michael Carter
President
Wichita Brass and Aluminum Foundry, Inc.
412 E. 29th St. N
Box 4144
Wichita, KS 67204

Dear Mr. Carter:

As you became aware yesterday, there is a definite problem regarding the shut down lacquer thinner reclamation unit with its associated backlog of drums. Though most of these drums appeared empty at the time of my investigation, there was a substantial number which still contained free liquid, sludge, or dry residue. I can only assume, from what you told me and from the odor in the air, that some of these still contain solvent and/or paint sludge or residue. Under K.A.R. 28-29-39 solvents of the nature used as lacquer thinner have been designated as listed hazardous wastes while paint sludges may or may not be considered hazardous, depending on the concentration of heavy metals which are detected in the sludge or residue by virtue of a standard Extraction Procedure (EP toxicity) test.

It is important to understand that you have a real and immediate problem with these abandoned waste drums. They are in a very seriously deteriorated condition and it can be seen that several have corroded through and the contents leaked out onto the ground. I saw several that were in the actual process of leaking during the time of my visit. Though there is an associated fire risk with the remaining solvent, the most serious danger is one of groundwater contamination. Since the operation was shut down eight years ago probably most of the damage has already been done, however, that does not justify an attitude of letting the remaining sources of contamination run their course.

What our department needs to see is some action taken to alleviate the problem by Wednesday August 26, 1981. First and foremost, empty drums, that is those which contain less than a two-inch bottom layer of waste, need to be seperated from non-empty drums. The empty drums can be thrown off to one side and the non-empty drums can also be moved to a central location, unless it is apparent that movement will cause the drum to rupture. It is probable that a solvent recovery firm can be contracted to suck off any free solvent the waste paint solids however, will have to be analyzed to determine hazardousness. unless a reasonable assumption can be made that it is hazardous without testing. One important thing to remember is that under no condition must any of these drums, empty or otherwise, leave the site without our department's prior knowledge and approval.

Our department, and specifically myself, will serve as a consultant during clean up operations. I would like to be on hand to monitor the clean up from the date of initiation. I will be in contact with you periodically, in the next few days, and will, hopefully, be able to answer questions as they come up after the segregation of drums has been completed.

Thank you.

Respectfully,

Dale T. Stuckey

Dale T. Stuckey
Field Services Section
Bureau of Environmental Sanitation

DTS:jlw

The Reid Supply Company

811 E. Indianapolis
Wichita, Kansas 67211
267-1231
(AC 316)

950 Liberty
Kansas City, Missouri 64101
842-4440
(AC 816)

CONTRACT FOR PICK-UP AND RESALE OF SOLVENT

GENERATOR: Wichita Brass & Aluminum

412 E. 29th N. Wichita, Ks. 67219

GENERATOR EPA ID NO.: Emergency Number

Transporter and Recycling Facility: The Reid Supply Company

Transporter and Recycling Facility EPA NO.: KSD 007246846

This agreement made this 25th day of August, 19 81, between the GENERATOR above-named and The Reid Supply Company, Inc., an approved Transporter and Recycling Facility for hazardous wastes.

WHEREAS the GENERATOR has on hand certain quantities of hazardous materials and wastes and has requested that The Reid Supply Company pick-up said wastes and remove the same from the premises of GENERATOR indicated above, and

WHEREAS, The Reid Supply Company is presently involved in the business of transporting and recycling such hazardous wastes;

IT IS THEREFORE AGREED, for and in consideration of the promises hereafter made by both parties, that:

1. Reid Supply Company agrees to pick-up at the GENERATOR'S location set out above the following quantities of waste solvents for the price set out below:

Waste Solvent @ $1.50 /~~drum~~ gal. TOTAL minimum 2000 gal.

_____ @ _____ /drum TOTAL _____

Bulk Pick Up

2. The waste solvents so obtained from GENERATOR shall either be resold by Reid Supply Company to another recycling facility or recycled and reprocessed by Reid Supply Company at its own facilities.

3. GENERATOR ~~hereby agrees~~ may agree to repurchase from Reid Supply Company any recycled waste solvent generated by Reid Supply Company in its recycling operation in the quantities and at the prices set out below:

_____ @ _____ /drum TOTAL _____

_____ @ _____ /drum TOTAL _____

4. GENERATOR ~~hereby agrees~~ may agree to purchase from The Reid Supply Company reconditioned drums for storage and transportation of waste solvents, said drums conforming to DOT standards 17ESTC in the quantities and at the cost set out below:

Reid Yellow	@	$18.25/drum	TOTAL	$18.25 per drum
	@	/drum	TOTAL	

5. GENERATOR ~~hereby agrees~~ may agree to purchase from Reid Supply Company at such future times as it may require, new or virgin solvents marketed by Reid Supply Company at such times and in such quantities as GENERATOR shall require in its daily business operation.

The price of said solvents shall be determined by Reid Supply Company and shall fluctuate from time to time depending on cost to Reid Supply Company and manufacturers price increases. Reid Supply Company hereby reserves the right to cancel and rescind this contract in the event that GENERATOR does not purchase from Reid Supply Company new or virgin solvents as herein provided.

6. GENERATOR hereby warrants to Reid Supply Company that all drums of waste solvent which will be made available to Reid Supply Company for pick-up and recycling shall conform to all applicable local, state, and federal requirements for the storage and identificati of hazardous wastes, and specifically that;

a. The waste solvents will be stored in DOT approved 17ESTC containers;

b. The drums containing hazardous waste solvents shall be properly labeled in accordance with all applicable laws.

7. It shall be the responsibility of GENERATOR to obtain and properly complete the required EPA hazardous waste manifest form (7-BLS-C). It is further specifically understood and agreed that Reid Supply Company shall be under no obligation whatsoever to pick-up hazardous waste solvents as provided herein unless GENERATOR shall have obtained a GENERATOR EPA number and have properly labeled all hazardous waste solvents offered to Reid Supply Company.

8. It is further understood and agreed that Reid Supply Company is not involved in the transportation, handling, reprocessing, or sale of any radioactive waste material and in this regard, should Reid Supply Company determine that any hazardous waste solvents ~~offered to Reid~~ Supply Company contains any radioactive material, either before or after pick-up from GENERATOR, Reid Supply Company reserves the right to return any such waste to GENERATOR, whereupon, GENERATOR shall be responsible for disposing of said waste and, in addition, shall reimburse Reid Supply Company for any costs incurred in the transportation or handling of said radioactive waste.

GENERATOR By: _____

FOR REID SUPPLY COMPANY, INC.
Gene E. Stamm, General Manager

NIES

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 746
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-1

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐

EPA I.D. No. KSP 000000005

Business Name WICHITA BRASS AND ALUMINUM FOUNDRY, INC.

Business Address 412 E. 29th St. North

Pickup Address/Location Same

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838 - 4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:

Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. ☐☐☐☐☐☐

Site Location 8808 No. 127th St East, Valley Center, Kans EPA I.D. No. KSD 070902952

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazzard Class
100449	D007		1 2 3 4 5	Hazardous Waste Solid NOS	ORM-E
	F003		1 2 3 4 5	Contaminated Earth	
			1 2 3 4 5		
			1 2 3 4 5		
			1 2 3 4 5		

*Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions

Date of Shipment Dec 1 81

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Michael W Carter
Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070902952

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Hauler License No. ☐☐☐☐

Business Address 8808 N. 127th St. East Truck License No. ☐☐☐☐☐☐☐

Phone Number (316) 744-1286 Date Received December 3, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name Hauler License No. ☐☐☐☐

Business Address Truck License No. ☐☐☐☐☐☐☐

Phone Number ( ) Date Received

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Disposal Location

Discrepancies Noted

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site RETURN TO GENERATOR Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Date Shipped to Final TSDF

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

NIES

SAVE THE LAND

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 748
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-2

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐

EPA I.D. No. KSP000000005

Business Name WICHITA BRASS & ALUMINUM FOUNDRY, INC.

Business Address 417 E. 29th St. North

Pickup Address/Location SAME

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838 - 4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:

Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. K S 1 8 3

Site Location 8808 No. 127th St. East, Valley Center, Kansas EPA I.D. No. KSD 070902952

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazard Class
100449	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

*Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions

Date of Shipment December 3, 1981

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070902952

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Hauler License No. ☐☐☐☐

Business Address 8808 No. 127th St. East Valley Center, Ks Truck License No. ☐☐☐☐☐☐☐

Phone Number (316) 744-9286 Date Received December 3, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name Hauler License No. ☐☐☐☐

Business Address Truck License No. ☐☐☐☐☐☐☐

Phone Number ( ) Date Received

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Disposal Location

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site RETURN TO GENERATOR [illegible] Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Date Shipped to Final TSDF

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

NIES

SAVE THE LAND

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, Inc.
8808 North 127th Street East / P.O. Box 745
Wichita, Kansas 67201

HAZARDOUS WASTE MANIFEST

Manifest No WBA-3

CONTROLLED INDUSTRIAL WASTE SHIPPING MANIFEST

Please type or print clearly

Generator/Shipper

Disposal Plan No. ☐☐☐☐☐

EPA I.D. No. 000000005 KSP-

Business Name WICHITA BRASS AND ALUMINUM FOUNDRY, INC.

Business Address 412 East 29th Street, North

Pickup Address/Location Same

Authorized Agent Michael W. Carter Title President

EMERGENCY TELEPHONE NUMBERS: (316) 838-4286

CHEMTREC: (800) 424-9300

NATIONAL EMERGENCY RESPONSE CENTER: (800) 424-8802

Destination:

Waste Receiving Site NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Permit No. KS199

Site Location 8808 No. 127th Street East, Valley Center, Kansas EPA I.D. No. KSD 070902952

Waste Code State	Waste Code Federal	Quantity	Units*	Proper DOT Shipping Name	DOT Hazzard Class
100449	D007		123456	Hazardous Waste Solid NOS	ORM-E
	F003		123456	Contaminated Earth	
			123456		
			123456		
			123456		

Circle one: (1) Gallons (2) Pounds (3) Tons (4) Drums (55 gal.) (5) Cubic Yards (6) Barrels (42 gal.)

Special Instructions

Date of Shipment December 1, 1981

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, the Environmental Protection Agency, and the Department of Health.

Signature of Authorized Agent

Hauler No. 1

EPA I.D. No. KSD 070902952

Hauler Name KANSAS INDUSTRIAL ENVIRONMENTAL SERVICES, INC. Hauler License No. ☐☐☐☐

Business Address 8808 N. 127th Street, East Truck License No. ☐☐☐☐☐☐☐

Phone Number (316) 744-1286 Date Received December 2, 1981

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Hauler No. 2

EPA I.D. No.

Hauler Name Hauler License No. ☐☐☐☐

Business Address Truck License No. ☐☐☐☐☐☐☐

Phone Number ( ) Date Received

I hereby certify that the above described waste materials were received for transport to the above designated destination.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 1

EPA I.D. No.

Waste Receiving Site RETURN TO GENERATOR ABOVE Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Disposal Location

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

Treatment/Storage/Disposal Facility No. 2

EPA I.D. No.

Waste Receiving Site Permit No. ☐☐☐☐☐☐☐

Site Location

Phone Number ( ) Date Received Date Shipped to Final TSDF

Discrepancies Noted:

This site is the (primary ☐) (alternate ☐) facility for (transient storage ☐) (final treatment/disposal ☐)

I certify that the materials described above, in the quantities stated, are hereby received and accepted by me. I further certify that they will be handled, stored, treated, and or disposed of in accordance with the Generator's Disposal Plan and my site permit.

Signature of Authorized Agent

H.R.I. WASTE SAMPLE ANALYSIS

HYDROCARBON RECYCLERS, INC.
2525 New York
Wichita, Kansas 67219
(316) 267-5742

Detailed Analysis X
Confirmation Analysis ___

Appl 8/5/88

Generator Wichita Brass & Aluminium Code # W-21 Date Received ___
Address 412 E. 29th N. P.O. Box ___ Phone # ___
City/State Wichita KS Zip Code 67219 Contact ___
Sample Labeled as Waste Paint Related Material Pickup Date ___
Manifest Document # ___

PHYSICAL/VISUAL ANALYSIS OF WASTE SAMPLE

Color ___ Phase: Unilayer ___ Bilayer ___ Multilayer ___
Odor ___ Water ___% Solvent ___% Solids ___%

RCRA HAZARDOUS WASTE DETERMINATION

Ignitability: Flashpoint ___ °F/°C
Corrosivity: pH ___
Reactivity: ___

EP Toxicity (ppm.)
Barium ___
Cadmium ___
Chromium ___
Lead ___

TCLP (ppm.)
Acetone ___
MEK ___
Toluene ___
Xylene ___

ANALYSIS PER DISPOSAL METHOD

KILN FUEL OR DISTILLATION

Gas Chromatograph: % Solvent

Methyl Ethyl Ketone	3.8
1,1,1 - Trichlorethane	0.2
Trichlorethylene	0.2
Methyl Isobutyl Ketone	1.1
Toluene	14.1
Butyl Acetate	1.1
Ethyl Benzene	1.3
Xylene	5.9
Styrene	9.1
Cyclohexanone	41.3
Isophorone	4.9
Butyl Cellosolve	1.3
C_9-C_{13} Alkyl Benzenes	1.7
C_7-C_{10} Aliphatics	14.0
Benzene	<0.1

Energy Content 13400 BTU/lb.
Halogen 1.5 % by weight
Halogen [Bielstein] ___ 1000 ppm.
pH 6 Specific Gravity 1.10
PCB's <50 ppm. Compatibility ___

INCINERATION OR HAZARDOUS WASTE LANDFILL

Organic Solvent Content (ppm.)
Acetone ___ MEK ___ Toluene ___ Xylene ___
Total Organic Solvent Content [sniffer] (ppm.) ___
Halogen [Bielstein] ___ 1000 ppm. Corrosivity: pH ___
Specific Gravity ___ Compatibility ___

WASTE WATER, COOLANTS, AND OIL

Flashpoint ___ °F/°C Corrosivity: pH ___ BS&W ___%
Total Organic Solvent Content [sniffer] (ppm.) ___
Halogen [Bielstein] ___ 1000 ppm. Specific Gravity ___
PCB (oil)(ppm.) ___ Compatibility ___
Total Heavy Metals (ppm.):
Barium ___ Chromium ___
Cadmium ___ Lead ___

Comments: Ash - 1%

Chemist: Steve Lovensheimer Date 8-15-88 Approval: Stephen M Keiter Date 8/30/88

RECOMMENDATION: Kiln Fuel X Distillation ___ Incineration ___ H. W. Landfill ___ Water/Oil ___

COPIES: Generator, Operator, Chemist, File (original)

1/88

U.S. POLLUTION CONTROL, INC.

HAZARDOUS WASTE PROFILE SHEET

5600

EXHIBIT A TO _____ Contract Dated _____

As prescribed by the Resource Conservation and Recovery Act (Public Law 98-580 Sec. 3004), a detailed chemical and physical analysis must be submitted before we can handle your waste stream. This information is necessary to help us evaluate whether we can safely and economically transport and dispose of your controlled industrial wastes in an environmentally sound manner. Be as complete as possible. If an area is not applicable, mark as such. Should a laboratory analysis be available, please attach it to this form. We can arrange analytical laboratory services, if needed, for an appropriate fee. All information we receive will be held in strictest confidence to protect your interests. **SAMPLE WILL NOT BE PROCESSED UNLESS ALL AREAS OF THIS SHEET ARE PROPERLY FILLED IN.**

Purchase Order No. _____ Sales Representative _____

I. Generator Information

( ) Check if small quantity Generator per CFR-40

Name of Company: WICHITA BRASS & ALUM

US EPA ID: K S D

Facility Address: 417 E. 29th, WICHITA, KS 67204

Invoicing Information: _____

Mailing Address: P.O. Box 4144

Technical Contact: MIKE CARTER — Title: PRES. — Phone (?) 838-4286

General Contact: _____ — Title: _____ — Phone ( )

II. Waste Stream General Information

Waste Name: WASTE PAINT RELATED MAT'L

Process Producing Waste: ABANDONED TANK

ANTICIPATED VOLUME: 1000 gal per year ____ per month ____ per week ____ one time only X

Color: DARK — Odor: MILD

III. Waste Properties

Physical State @ 25°C: ( ) Liquid ( ) Powder ( ) Solid (X) Sludge

Layers: (X) Single Phase ( ) Bi-layered ( ) Multi-layered

Free Liquids: ( ) Yes (X) No

pH: N/A — Type Acid: N/A — Density: N/A

Normality: N/A — Type: N/A — Caustic: N/A

(X) Organic ( ) Inorganic

Flash Point: <140 °F

Chemical Composition (X) % ( ) PPM (List all known)

	Range Lower	Range Upper
TOLUENE	(0)	(50)
XYLENE	(0)	(50)
	( )	( )
	( )	( )
	( )	( )
	( )	( )
	( )	( )

Metals-EP Tox Test — Mg/l or PPM

Arsenic (As)	( )	Lead (Pb)	* (UNK)	Nickel (Ni)	( )
Barium (Ba)	( )	Vanadium (V)	( )	Zinc (Zn)	* (UNK)
Cadmium (Cd)	( )	Selinium (Se)	( )	Thallium (Ti)	( )
Chromium (Cr)	* (UNK)	Silver (Ag)	( )	Cobalt (Co)	( )
Mercury (Hg)	( )	Copper (Cu)	( )		

Possible Component (include unit of measure) NONE

Cyanides _____ 2, 4, D _____ Dioxin _____

Sulfides _____ Phenolics _____ Organic Chlorides _____

IV. PCB Oil: Type NO Concentration % ____ % ppm ____ PCB Equip: Type ____ Concentration % ____ % ppm ____

PCB Solids: Type ____ Concentration % ____ % ppm ____ Has equipment been drained and flushed according to 40 CFR Part 761? ____

Attach information for dimensions, weight and nameplate capacity for all equipment.

V. Hazardous Characteristics (From CFR-40)

U.S. EPA Hazardous Code(s): D001

Is the waste: ( ) Pyrophoric ( ) Infectious ( ) Water reactive ( ) Radioactive ( ) Pathogenic ( ) Explosive ( ) Pesticides/Herbicides ( ) Biological ( ) Shock sensitive ( ) Etological

VI. Shipping Information (From CFR-49)

Proper DOT Shipping Name: WASTE PAINT RELATED MATERIAL

DOT Hazard Class: FLAMMABLE — UN/NA Number: NA 1263 — Reportable Quantity: RQ=100 #

Method of Shipment: ( ) Bulk Liquids ( ) Bulk Solids ( ) Drums ( ) Other

Special Handling and Safety Instructions: FROM NORTH TANK.

I certify and warrant that the above information, the information attached, and the waste stream as described is true and correct to the best of my knowledge and ability and not willful or deliberate omissions exist and that all known and/or suspected hazards have been disclosed, and a sample representative of the waste stream has been or is being sent to the proper facility. Further, I certify the samples have been collected using the appropriate EPA sampling guidelines and acknowledge that the current sample profile fee will be charged by U.S. Pollution Control, Inc. and be paid by generator.

SALES ORDER

ORDER NUMBER 1817

C.S.I. mB

CONSERVATION SERVICES, INC.
2525 N. NEW YORK
WICHITA, KANSAS 67219
(316) 267-5742

DRUM DEL

DATE 9-27-88

SOLD TO:

SHIP TO: WICHITA BRASS & ALUM
412 E 29th NORTH
WICHITA, KS.

CUSTOMER NO.	P.O. NUMBER	TO BE SHIPPED	SHIP DATE	SHIP VIA	TERMS NET / 1%	FOB WHSE / DEST	PREP	COL	SALES
	MIKE	9-27	9-27	1	☒ / ☐	☐ / ☐	☐	☐	5

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	CODE	UNIT	TAXABLE YES	TAXABLE NO	DESCRIPTION
	40	40	DS	EACH		x	17-H STEEL DRUM
	45	45	MISC 38	EACH		x	DRUM GASKETS
							Returned 1 Drum Damaged on Previous Delivery.
							Victor D. Carter

FILLED BY	DELIVERED BY	GROSS WEIGHT

EMPTY'S RETURNED: JUGS ____ 15 GAL ____ 30 GAL ____ 55 GAL ____

PALLETS: SHIPPED ____ RETURNED ____

RECEIVED BY X _____

CODE B Balance of item back ordered
C Shipment of item considered complete
D We do not stock this item
S To be shipped separately

AN EQUAL OPPORTUNITY EMPLOYER

DEPOSIT CONTAINERS MUST BE RETURNED IN RE-USEABLE CONDITION WITHIN 90 DAYS FOR DEPOSIT REFUND.

PACKING SHEET & CUSTOMER'S COPY

SALES ORDER

ORDER NUMBER 1767

CONSERVATION SERVICES, INC.

2525 N. NEW YORK
WICHITA, KANSAS 67219
(316) 267-5742

DRUM DEL

DATE 9-12-88

SOLD TO

SHIP TO WICHITA BRASS & ALUMINUM
412 E. 29th NORTH
WICHITA KS 67219

CUSTOMER NO.	P.O. NUMBER	TO BE SHIPPED	SHIP DATE	SHIP VIA	TERMS NET	1%	FOB WHSE	DEST	PREP	COL	SALES
	MIKE CARTER	ASAP		USCI	☐	☐	☐	☒	☐	☐	

PRODUCT NUMBER	QUANTITY ORDERED	QUANTITY SHIPPED	CODE	UNIT	TAXABLE YES	TAXABLE NO	DESCRIPTION
	40		DS	EACH		X	17-H DRUMS

x Vicki D Tarlu

FILLED BY	DELIVERED BY	GROSS WEIGHT
	GD	

EMPTIES RETURNED: JUGS ____ 15 GAL ____ 30 GAL ____ 55 GAL ____

PALLETS: SHIPPED ____ RETURNED ____

RECEIVED BY X _____

CODE: B Balance of item back ordered
C Shipment of item considered complete
D We do not stock this item
S To be shipped separately

AN EQUAL OPPORTUNITY EMPLOYER

DEPOSIT CONTAINERS MUST BE RETURNED IN RE-USEABLE CONDITION WITHIN 90 DAYS FOR DEPOSIT REFUND.

PACKING SHEET & CUSTOMER'S COPY

STATE OF KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT
Forbes Field
Topeka, Kansas 66620-0001
Phone (913) 296-1500

Mike Hayden, *Governor*

Stanley C. Grant, Ph.D., *Secretary*
Gary K. Hulett, Ph.D., *Under Secretary*

September 27, 1988

Mike Carter
Wichita Brass & Aluminum
Foundry, Inc.
P.O. Box 4144
Wichita, Kansas 67204

Re: EPA I.D. Number: KSP000000144
412 East 29th North
Wichita, Kansas 67219

Dear Mr. Carter:

This is a follow-up letter to the telephone request of September 26, 1988 for a temporary EPA I.D. Number.

You have been assigned the number KSP000000144 with the effective date of October 3, 1988 and the expiration date of November 2, 1988.

We understand the number assigned is for the purpose of disposal of approximately 150 barrels of paint sludge.

I have enclosed a blank notification form 8700-12. You should complete the form and return it to this department no later than ten (10) days from receipt of this letter.

You should submit a copy of all hazardous waste manifests to me after shipment is complete. If you have any questions, please feel free to call me at (913) 296-1607.

Sincerely,

John Paul Goetz, P.E., Chief
Hazardous Waste Section
Bureau of Waste Management

sc/jpg.ltr
C Dale Stuckey

Please print or type with ELITE type (12 charact r inch) in the unshaded areas only

STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT

Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law (*Section 3010 of the Resource Conservation and Recovery Act*).

For Official Use Only

Comments

Installation's EPA ID Number	Approved	Date Received (yr. mo. day)	County
KSP000000144 (T/A C 1)			

I. Name of Installation

WICHITA BRASS & ALUM FDRY INC

II. Installation Mailing Address

Street or P.O. Box	City or Town	State	ZIP Code
BOX 4144	WICHITA	KS	67204

III. Location of Installation

STREET ADDRESS OR LOCATION FROM KNOWN REFERENCE POINT	City or Town	State	ZIP Code
412 E 29TH STREET NORTH	WICHITA	KS	67204

IV. Installation Contact

Name and Title (*last, first, and job title*)	Phone Number (*area code and number*)
CARTER MICHAEL PRES	316 838 4286

V. Ownership

A. Name of Installation's Legal Owner	B. Type of Ownership (*enter code*)
WICHITA BRASS & ALUM	P

VI. Type of Regulated Waste Activity (*Mark 'X' in the appropriate boxes. Refer to instructions.*)

A. Hazardous Waste Activity

- [X] 1a. Generator
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5. Market or Burn Hazardous Waste Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

NOTE: If generator, you must complete section X.E. on back side of form.

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel (*enter 'X' and mark appropriate boxes below*)
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer (*or On site Burner*) Who First Claims the Oil Meets the Specification

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OCT 5 1988
BUREAU OF WASTE MANAGEMENT

VII. Waste Fuel Burning: Type of Combustion Device (*enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.*)

[ ] A. Utility Boiler [ ] B. Industrial Boiler [ ] C. Industrial Furnace

VIII. Mode of Transportation (*transporters only — enter 'X' in the appropriate box(es)*)

[ ] A. Air [ ] B. Rail [ ] C. Highway [ ] D. Water [ ] E. Other (*specify*)

X. First or Subsequent Notification

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

[X] A. First Notification [ ] B. Subsequent Notification (*complete item C*)

C. Installation's EPA ID Number: KSP000000144

Form 8700-12 (Rev. 11-85) Previous edition is obsolete.

Continue on reverse

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSP 000000144

Manifest Document No.: 00001

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD 981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD 007246846

G. State Facility's ID

H. Facility's Phone

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Material, Flammable Liquid NA 1263 RQ=100 lbs		40	DM	16,000 #	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

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BUREAU OF WASTE MANAGEMENT

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Michael W. Carter
Signature: Michael W. Carter
Month 10 Day 5 Year 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GARY DORMAN
Signature: Gary Dorman
Month 10 Day 5 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Ronald K. Robertson
Signature: Ronald K. Robertson
Month 10 Day 6 Year 88

GENERATOR — TRANSPORTER — FACILITY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: KSP 000000144

Manifest Document No.: 00002

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.		Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100lbs	40	DM	16,000	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

OCT 19 1988

BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: X MICHAEL W CARTER | Signature: Michael W. Carter | Month 10 Day 06 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month 10 Day 6 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: David R Harris | Signature: David R Harris | Month 10 Day 06 Year 88

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. 60646 (312) 478-0900

EPA Form 8700-22 (Rev. 9/86) Previous editions are obsolete.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. KSP 000000144

Manifest Document No. 00003

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100 lbs.		40	DM	16,000#	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

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BUREAU OF WASTE MANAGEMENT

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Printed/Typed Name: MICHAEL W. CARTER | Signature: Michael W. Carter | Month 10 Day 06 Year 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month 10 Day 6 Year 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: RONALD K. ROBINSON | Signature: Ronald K. Robinson | Month 10 Day 18 Year 88

Please print or type. (Form designed for use on elite (itch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. KSP 000000144

Manifest Document No. 00004

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Wichita Brass and Aluminum Foundry, Inc.
P.O. Box 4144 Wichita KS 67204

4. Generator's Phone (316) 838-4286

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: USPCI

6. US EPA ID Number: OKD981514474

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
HRI
2549 New York
Wichita KS 67219

10. US EPA ID Number: KSD007246846

G. State Facility's ID

H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Materials, Flammable Liquid NA 1263 RQ=100 lbs.		15	DM	6,000	P	F003 F005
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

OCT 19 1988

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Printed/Typed Name: MICHAEL W. CARTER | Signature: Michael W. Carter | Month Day Year: 10 06 88

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: GARY DORMAN | Signature: Gary Dorman | Month Day Year: 10 6 88

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: David R Harris | Signature: David R Harris | Month Day Year: 10 7 88

SCAN SCREEN U.S.T. TANK INFORMATION ENTER Q-QUIT: _

ENTER INFORMATION CODE: _ ENTER SEQUENCE #: ___
(OPTIONS=T,C)

412 E 29th St N

FACILITY #: 42280 FACILITY NAME: WICHITA BRASS AND ALUMINUM FOUND

SEQ NO	TNK NO	EST YR	CAP. IN GAL	PETROLEUM	OUT OF SERVICE	STATUS OF TANK
001	A001	1978	001200	GASOLINE	REMOVED	PERM. OUT

Excerpts from Report(s) Prepared by Others

Environmental Protection Agency

Federal Response
Washington, DC 20460

EPA Form 2070-13
July, 1981

EPA

Potential Hazardous Waste Site

Site Inspection Report

Wichita Brass ; Al

Wichita Brass and Aluminum Wichita, Kansas

A paint lacquer and thinner reclamation facility existed on about 3 to 5 acres on property which is now owned by Wichita Brass and Aluminum. The reclamation facility operated at least during the 1950's through 1973. Spent solvents and paints from local body shops, as well as from large manufacturing firms such as Boeing and Cessna aircraft, were processed on the site. After the facility ceased operation in 1973, drums of unprocessed paint and solvents were stored on the west edge of the property owned by Wichita Brass and Aluminum. More than 1,300 drums were stored on the site, with many of the drums leaking and corroded as of August 1981. Under direction of the State, the drums were removed from the site in 1981 to the then approved Furley waste disposal facility. The former reclamation facility is also located on property that was used for petroleum refining (the former Golden Rule refinery) so that refinery wastes are also a potential source of environmental contaminants.

The investigation of the Wichita Brass and Aluminum site, conducted between November 14 and November 16, 1984, by the U.S. Geological Survey, was directed at determining whether air or water contamination had occurred due to past activities at the solvent reclamation facility. The investigation of this site involved placement of 6 monitoring wells (1 upgradient and 5 downgradient wells) and measurement of terrain conductivity to locate possible oil sludge pits and measurement of total ionizable vapors around the site. No ionizable vapors were detected higher than background concentrations at any area measured on the site. Background total vapor concentrations were approximately 0.3 ppm. However, all wells drilled on the property were monitored throughout the drilling process for total

ionizable vapors. Material which came up on the auger flights produced from 3-7 ppm of total organic vapors when measured approximately .5 to 1 inch from the waste. A concentration of 40 parts per million (ppm) of ionizable vapors were detected from monitor well number 4 after the casing cap was removed. Vapors from the other well casings were less than 10 ppm. Volatile organic analyses of water samples indicated contamination with a variety of organic chemical compounds. Material on the auger flights was visibly contaminated with oily residues. Black asphaltic material was present in all holes drilled on the property owned by Wichita Brass and Aluminum. Although no asphaltic material was found on property owned by Derby Pipeline where monitor well #6 was placed, water collected from this well contained several volatile organic compounds at concentrations ranging from 1.6 ug/L of benzene to more than 1,900 ug/L of TCE (trichloroethylene).

Results of these analyses indicate contamination with several hazardous organic and inorganic chemicals. There were an insufficient number of water samples to determine the actual source of the contamination--contaminants could have originated either from the solvent reclamation facility or the oil refinery. Although drinking water is supplied by Wichita from wells several miles northwest of this area, several domestic wells and many lawn irrigation wells (estimate more than 100) are located within 1 mile of the site. Based on files with the Oil Field Section of the Kansas Department of Health and Environment, there is a domestic well located within 1/4 mile northeast of the site. There is potential for movement of contaminants from the site (and the adjacent industrial area) and into existing local supply wells. The site and possibly the surrounding area should be considered for further investigation by the State.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Wichita Brass and Aluminum/Golden Rule Refinery	412 E. 29th St. North(26S-1E-SW¼SW¼S.33)

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Wichita	KS		Sedgwick		

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
__ __ __ . __	__ __ __ __ __ . __	☑ A. PRIVATE ☐ B. FEDERAL ____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
11 / 15 / 84 (MONTH DAY YEAR)	☐ ACTIVE ☑ INACTIVE	Pre 1955 / 1973 (BEGINNING YEAR / ENDING YEAR) ____ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR ____ (Name of firm) ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
T. B. Spruill	Hydrologist	USGS	(913) 864-4321

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO
C. Hansen	Hydrologist	USGS	(913) 864-4321
C. Perry	Hydrologist	USGS	(913) 864-4321
B. Hart	Hydrologist	USGS	(913) 864-4321
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Mike Carter	Owner	412 E. 29th St. North, Wichita	316-838-4286
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☑ PERMISSION ☐ WARRANT	0900	Partly cloudy, 50°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
D. Agapito	Kansas Dept. of Health and Environment	(913) 862-9360

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
T. Spruill	US. Dept of Interior	USGS	913-864-4321	12 / 18 / 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☑ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☐ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be measurements)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☑ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☑ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	no information		Tank bottom waste (asphalt) is bu
OLW	OILY WASTE	"		at locations on property. Some was
SOL	SOLVENTS			spread near the land surface.
PSD	PESTICIDES			Solvents detected in ground-water
OCC	OTHER ORGANIC CHEMICALS			samples
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			Iron&MN concentrations elevated

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling results)

Presence of sludge pits from old Golden Rule Refinery were identified from aerial photographs available from KDHE. Their presence was suggested by results from terrain conductivity measurements (see attached map): All drums containing paint sludges and solvents were removed from the site and haulted to the NIES Hazardous waste disposal facility.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 11-15/16-84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 75-100 — 04 NARRATIVE DESCRIPTION

1,1,1 Trichloroethane, trichloroethylene, phenol, benzene, trans 1,2 dichlorothylene, ethyl benzene, phenanthrene & anthracene, toluene, 1,1 dichloroethane were detected in groundwater on the site.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Chisolm Creek is located approximately ¼ mile west of site. The Little Arkansas River is located 1 mile west of the site.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Spot checks around the site with an HNU vapor Meter yielded background concentrations of approximately .3 ppm. Vapors from the site were not detected with the meter

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

There does not appear to be abnormally high fire or explosion hazard present. Drummed wastes are no longer stored on the site.

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~~less than~~ 5 — 04 NARRATIVE DESCRIPTION

Some solid chips of paint sludge from former lacquer thinner operation may be found drums storage area - however low direct contact potential for employees

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: ~ 30 (Acres) — 04 NARRATIVE DESCRIPTION

Soil samples were not collected but paint sludge residuum was observed around the former drum storage area indicated on the attached map. Oily material from the former oil refinery was observed in some of the cores (see map)

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 75-100 — 04 NARRATIVE DESCRIPTION

According to driller's log with the Kansas Dept. of Health and Environment, there are many domestic, irrigation and industrial wells (approximately 100 logs(except observatic wells)) - Approx. 15-25 wells are downgradient and are recorded as domestic wells. All installed since 1974.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: less than 5 — 04 NARRATIVE DESCRIPTION

Potential probably low

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Low potential.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed except in vicinity of former drum storage area. However, this area is used for disposal of wastes from the foundry operation.

01 ☑ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

Not observed

01 ☑ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not observed.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

No above ground waste storage. Asphaltic wastes from refinery still may be in pits or spread in certain areas around the site.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not observed. Possible contamination with oily residues.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not observed. No storage of drummed wastes.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 75-100

IV. COMMENTS

If contaminated groundwater moves toward Chisolm Creek or the Little Arkansas River or if groundwater is ever to be used in the future for supplies, there is a possibility that more people, plants or animals could be exposed.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

See attached chemical analyses of water samples from wells. Information on ground water flow gradient obtained from Lan and Miller (1965) KGS Bull. 176.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				No Current permits found
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
☐ A. SURFACE IMPOUNDMENT			☐ A. INCENERATION	☑ A. BUILDINGS ON SITE
☐ B. PILES			☐ B. UNDERGROUND INJECTION	
☐ C. DRUMS, ABOVE GROUND			☐ C. CHEMICAL/PHYSICAL	
☐ D. TANK, ABOVE GROUND			☐ D. BIOLOGICAL	
☐ E. TANK, BELOW GROUND			☐ E. WASTE OIL PROCESSING	06 AREA OF SITE
☐ F. LANDFILL			☐ F. SOLVENT RECOVERY	
☐ G. LANDFARM			☐ G. OTHER RECYCLING/RECOVERY	3-5 (Acres)
☐ H. OPEN DUMP			☐ H. OTHER (Specify)	
☐ I. OTHER (Specify)				

07 COMMENTS

Current owner disposes of some foundry wastes in area where drums were formerly stored for paint-lacquer thinner reclamation operation - no disposal permits known - Mr. Carter was granted temporary permit to transport hazardous wastes in Dec. 1981 (KSP000000005) to dispose of paint sludges to Furley, Kansas waste facility.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☑ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Oil sludge pits may serve as source for ground-water contaminants. Pits contain asphalt and associated contaminants.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☐ NO

02 COMMENTS

Some sludge wastes from refinery are possibly present at depths generally greater than 5 feet below land surface. Sludge may also have been spread on land surface.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

-Kansas Department of Health and Environment-Bureau of Waste Management Files.

-Site investigation.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None known.

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☑ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
Mike Carter believes some sludge was removed from sludge pits and spread on land surface.

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None

01 ☑ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
Paint sludge and solvents removed to Nies before December 31, 1981 by owner.

01 ☐ H. ON SITE BURIAL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
None Known.

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ L. ENCAPSULATION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ N. CUTOFF WALLS — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
" "

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. ENFORCEMENT INFORMATION

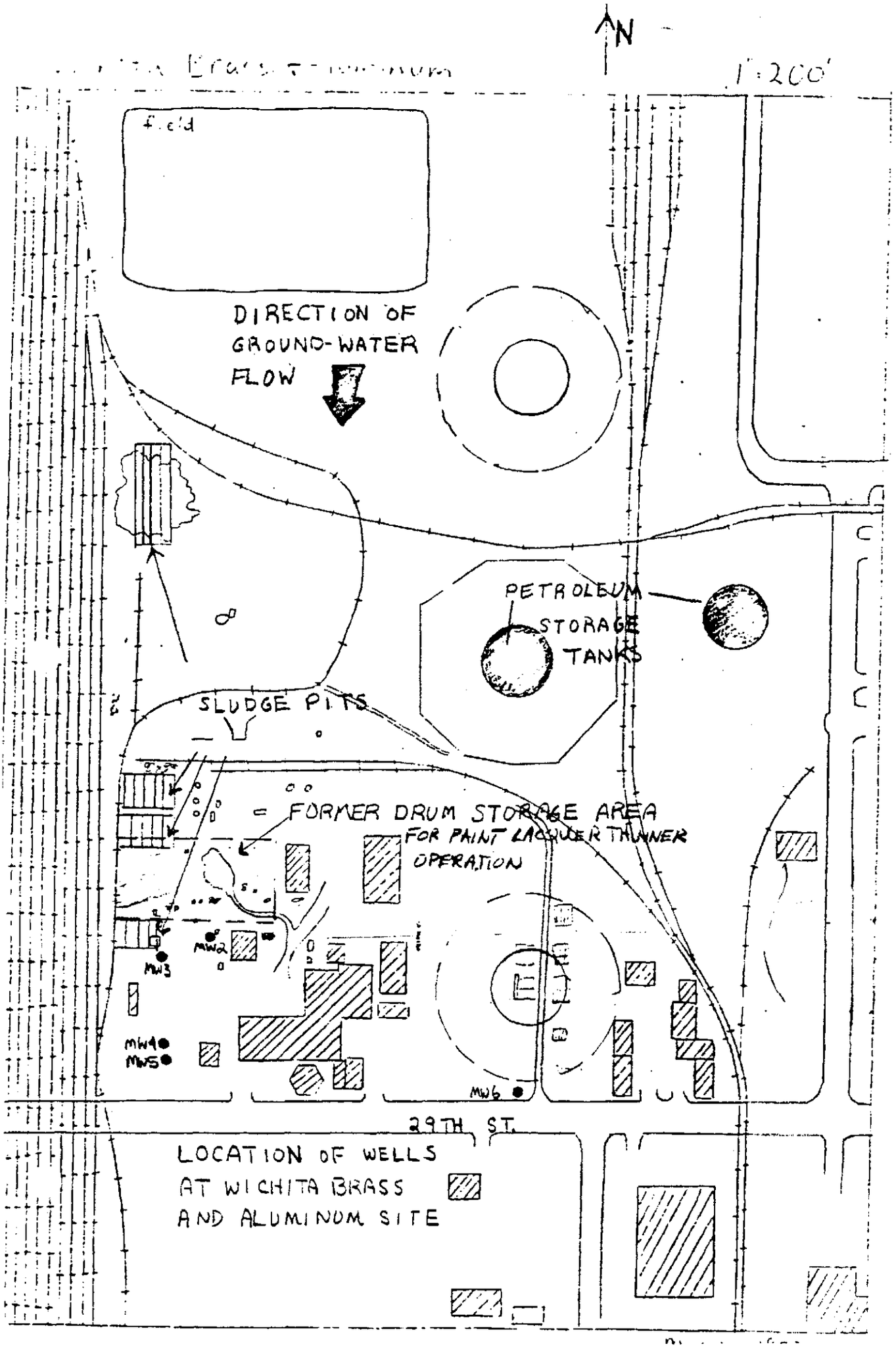
01 PAST REGULATORY/ENFORCEMENT ACTION ☑ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

Kansas Department of Health and Environment informed Mike Carter, the owner, of the problem with leaking drums of waste lacquers and paint thinners in a letter dated August 19, 1981. The owner had contents of drums shipped to the waste facility in Furley, Kansas. The wastes were removed from the site by the owner before December 31, 1981.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

KDHE files - Bureau of Waste ManageMent.


N
1"=200'
Field
DIRECTION OF
GROUND-WATER
FLOW
PETROLEUM
STORAGE
TANKS
SLUDGE PITS
= FORMER DRUM STORAGE AREA
FOR PAINT LACQUER THINNER
OPERATION
MW2
MW3
MW4
MW5
MW6
29TH ST.
LOCATION OF WELLS
AT WICHITA BRASS
AND ALUMINUM SITE

NARRATIVE REPORT FOR THE SITE INVESTIGATION OF

WICHITA BRASS AND ALUMINUM, WICHITA, KANSAS

RECEIVED
BUREAU OF
MAY 29 1986
WASTE
MANAGEMENT

T\ MIC\ NEW_DATA

1985

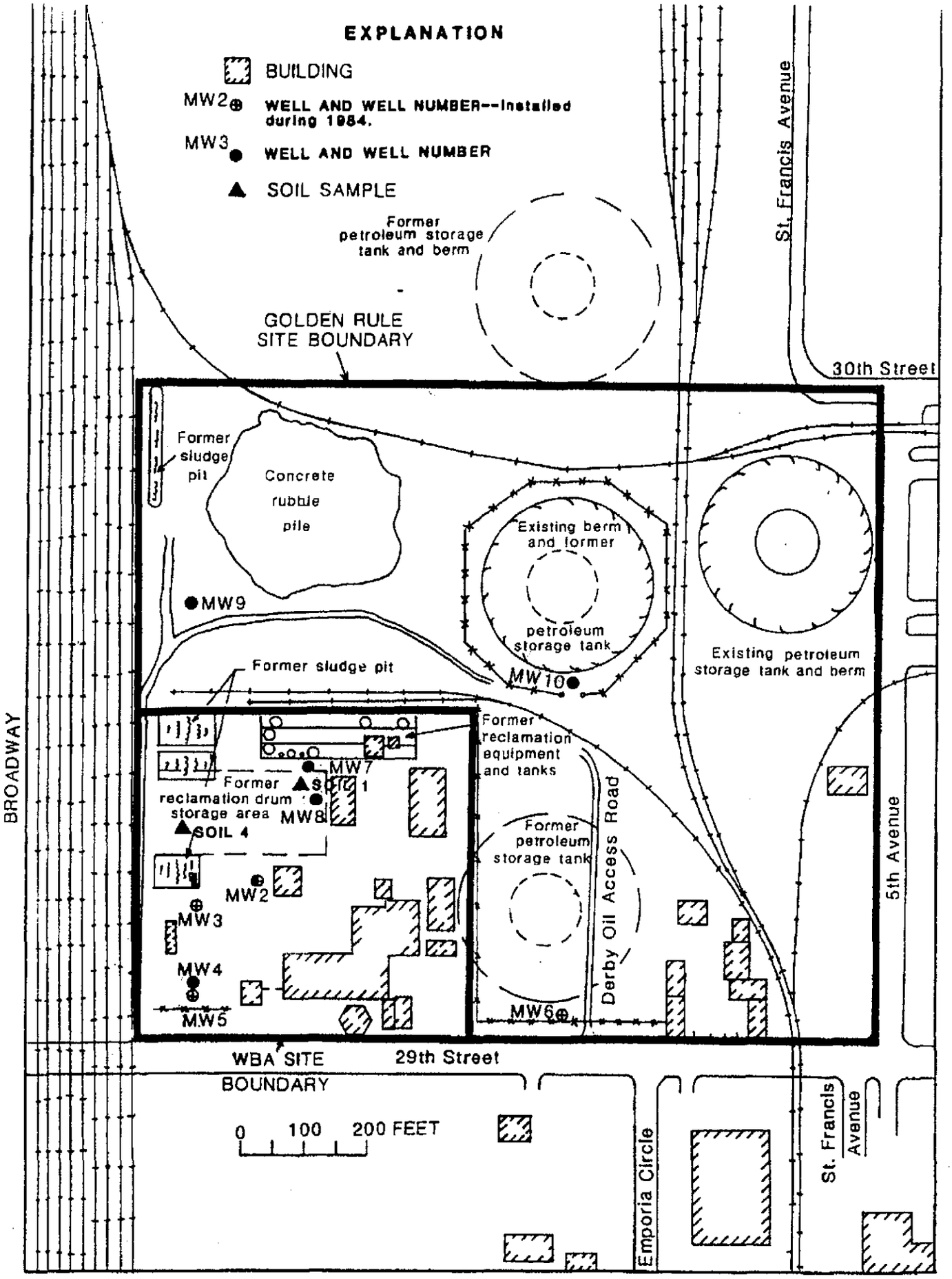
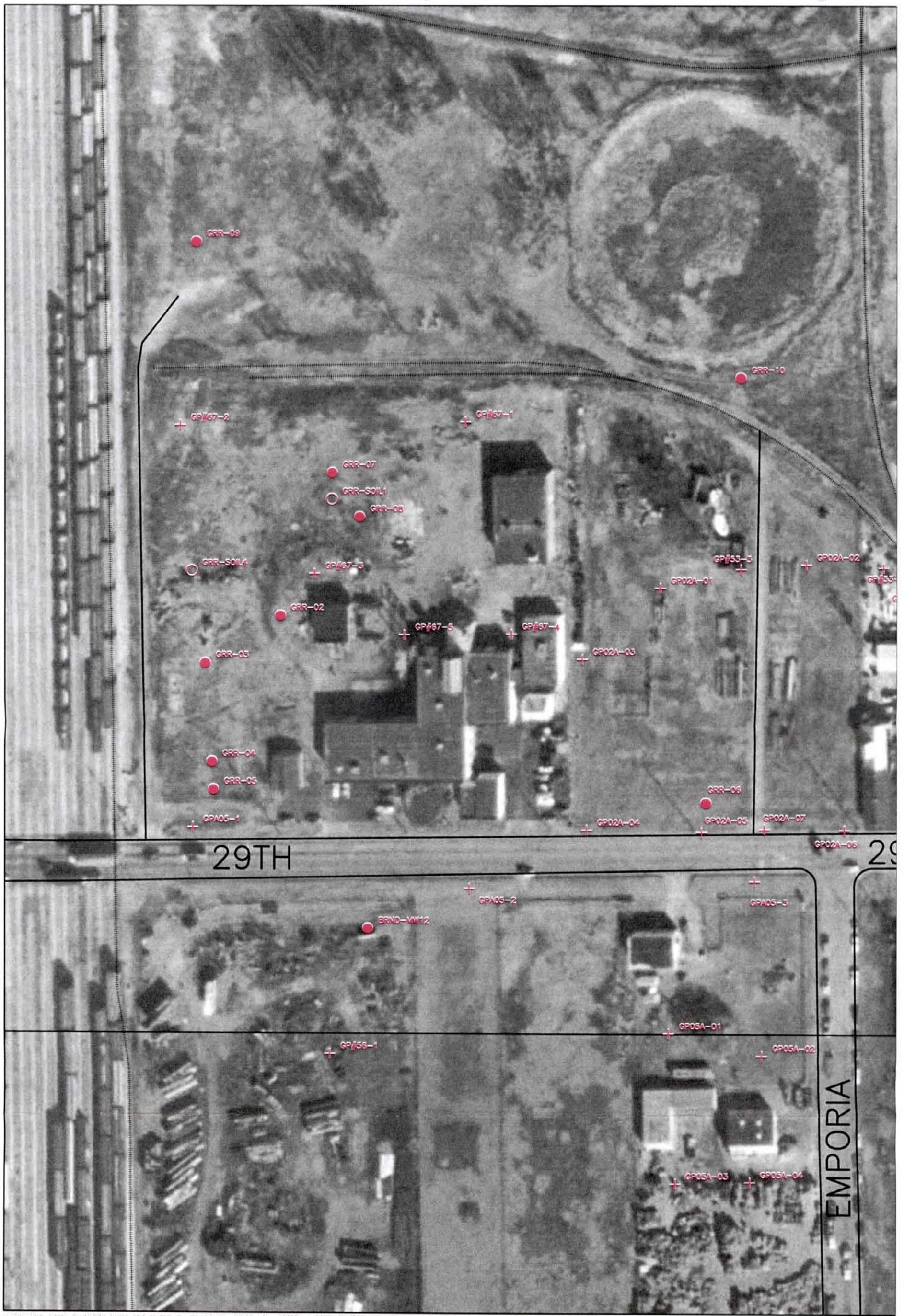


Figure 2. Location and detailed characteristics of the Wichita Brass and Aluminum site (WBA).

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Wichita Brass and Aluminum

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Wichita Brass and Aluminum

Table(s)
Analytical Data Table(s)

Table 1
Wichita Brass & Aluminum
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#67-1	S/20	01/15/98		µg/L	<1	<1	**2**	<1	<1	<1	<1	<1	<1	**3**	**7.4**
GP#67-1	D/39	01/15/98		µg/L	<1	<1	**1.3**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#67-2	S/20	01/15/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#67-2	D/37	01/15/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP#67-3	S/20	01/15/98		µg/L	<1	<1	**1.6**	**12**	<1	**1.1**	<1	<1	<1	**59**	**70.8**
GP#67-3	D/33	01/15/98		µg/L	<1	<1	<1	**6.1**	<1	<1	<1	<1	<1	<1	<5.4
GP#67-4	S/20	01/15/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**39**	**43.9**
GP#67-4	D/32	01/15/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**2.6**	**7**
GP#67-5	S/20	01/15/98		µg/L	<1	<1	<1	**3.6**	<1	<1	<1	<1	<1	**51**	**55.5**
GP#67-5	D/32	01/15/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-03	S/17	03/08/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-03	D/31	03/08/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-04	S/17	10/28/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02A-04	D/27	10/28/99		µg/L	<1	**64 JH**	**12**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA05-1	D/33	12/15/97		µg/L	<1	<1	<1	**6.3**	<1	**2.7**	<1	<1	<1	<1	<5.4
GRR-MW-04	S	12/02/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Table 2
Wichita Brass & Aluminum
North Industrial Corridor (NIC) Site
Monitoring Well Groundwater Analytical Results, VOCs by EPA Method 8260

Station			GRR-MW-04
Groundwater Depth Zone			S
Sample Date			12/2/97
QC Flag			
Compound	Apprev	Units	
1,1,1-Trichloroethane	TCA	µg/L	<1
1,1,2,2-Tetrachloroethane	1122PCA	µg/L	<1
1,1,2-Trichloroethane	112TCA	µg/L	<1
1,1-Dichloroethane	11DCA	µg/L	<1
1,1-Dichloroethene	11DCE	µg/L	<1
1,2-Dichlorobenzene	12DCB	µg/L	<1
1,2-Dichloroethane	12DCA	µg/L	<1
1,2-Dichloropropane	12DCP	µg/L	<1
1,3-Dichlorobenzene	13DCB	µg/L	<1
1,4-Dichlorobenzene	14DCB	µg/L	<1
Benzene	BEN	µg/L	<1
Bromodichloromethane	BDCM	µg/L	<1
Bromoform	BFM	µg/L	<1
Bromomethane	BM	µg/L	<1
Carbon tetrachloride	CT	µg/L	<1
Chlorobenzene	CBN	µg/L	<1
Chloroethane	CLE	µg/L	<1
Chloroform	CFM	µg/L	<1
Chloromethane	CM	µg/L	<1
cis-1,2-Dichloroethene	C12DCE	µg/L	<1
cis-1,3-Dichloropropene	C13DCP	µg/L	<1
Dibromochloromethane	DBCM	µg/L	<1
Ethylbenzene	EBN	µg/L	<1
m,p-Xylene	XYLMP	µg/L	<1.3
Methylene chloride	MECL	µg/L	<1
o-Xylene	XYLO	µg/L	<1.1
Tetrachloroethene	PCE	µg/L	<1
Toluene	TOL	µg/L	<1
trans-1,2-Dichloroethene	T12DCE	µg/L	<1
trans-1,3-Dichloropropene	T13DCP	µg/L	<1
Trichloroethene	TCE	µg/L	<1
Trichlorofluoromethane	TCFM	µg/L	<1
Vinyl chloride	VC	µg/L	<1

Table 3
Wichita Brass & Aluminum
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Analytical Results, VOCs by EPA Method 8260

STATION			GP#67-1	GP#67-1	GP#67-2	GP#67-2	GP#67-3	GP#67-3	GP#67-4	GP#67-4
Groundwater Depth Zone / Depth (feet)			S/20	D/39	S/20	D/37	S/20	D/33	S/20	D/32
Sample Date			01/15/98	01/15/98	01/15/98	01/15/98	01/15/98	01/15/98	01/15/98	01/15/98
QC Sample Flag										
Investigation			Phase 1	Phase 1	Phase 1	Phase 1	Phase 1	Phase 1	Phase 1	Phase 1
Compound	Abbrev.	Units								
1,1,1-Trichloroethane	TCA	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1122PCA	µg/L	<1	<1	<1	<1	<1	<1	**49**	<1
1,1,2-Trichloroethane	112TCA	µg/L	<1	<1	<1	<1	<1	<1	**6.4**	<1
1,1-Dichloroethane	11DCA	µg/L	<1	<1	<1	<1	**1.1**	<1	<1	<1
1,1-Dichloroethene	11DCE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	12DCB	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	12DCA	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	12DCP	µg/L	<1	<1	<1	<1	<1	<1	**4.3**	<1
1,3-Dichlorobenzene	13DCB	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	14DCB	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	BEN	µg/L	**3**	<1	<1	<1	**59**	<1	**39**	**2.6**
Bromodichloromethane	BDCM	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	BFM	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	BM	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	CT	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	CBN	µg/L	<1	<1	<1	<1	<1	<1	**4.8**	<1
Chloroethane	CLE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	CFM	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	CM	µg/L	<1	<1	<1	<1	<1	<1	**12**	<1
cis-1,2-Dichloroethene	C12DCE	µg/L	**2**	**1.3**	<1	<1	**1.6**	<1	<1	<1
cis-1,3-Dichloropropene	C13DCP	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	DBCM	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	EBN	µg/L	<1	<1	<1	<1	**2.8**	<1	**1.2**	<1
m,p-Xylene	XYLMP	µg/L	<1.3	<1.3	<1.3	<1.3	**2.3**	<1.3	<1.3	<1.3
Methyl-tert-butyl Ether	MTBE	µg/L								
Methylene chloride	MECL	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	XYLO	µg/L	**1.1**	<1.1	<1.1	<1.1	**3**	<1.1	**1.4**	<1.1
Tetrachloroethene	PCE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	TOL	µg/L	<1	<1	<1	<1	**3.7**	<1	<1	<1
trans-1,2-Dichloroethene	T12DCE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	T13DCP	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	TCE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	TCFM	µg/L	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	VC	µg/L	<1	<1	<1	<1	**12**	**6.1**	<1	<1

Bold text indicates results above analytical detection limits.

CDM

Table 3
Wichita Brass & Aluminum
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Analytical Results, VOCs by EPA Method 8260

STATION			GP#67-5	GP#67-5	GPA05-1	GP02A-03	GP02A-03	GP02A-04	GP02A-04
Groundwater Depth Zone / Depth (feet)			S/20	D/32	D/33	S/17	D/31	S/17	D/27
Sample Date			01/15/98	01/15/98	12/15/97	03/08/00	03/08/00	10/28/99	10/28/99
QC Sample Flag									
Investigation			Phase 1	Phase 1	Phase 1	Phase 2	Phase 2	Phase 2	Phase 2
Compound	Abbrev.	Units							
1,1,1-Trichloroethane	TCA	µg/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1122PCA	µg/L	**27**	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	112TCA	µg/L	**1.5**	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	11DCA	µg/L	<1	<1	**2.7**	<1	<1	<1	<1
1,1-Dichloroethene	11DCE	µg/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	12DCB	µg/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	12DCA	µg/L	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	12DCP	µg/L	**1.4**	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	13DCB	µg/L	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	14DCB	µg/L	<1	<1	<1	<1	<1	<1	<1
Benzene	BEN	µg/L	**51**	<1	<1	<1	<1	<1	<1
Bromodichloromethane	BDCM	µg/L	<1	<1	<1	<1	<1	<1	<1
Bromoform	BFM	µg/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	BM	µg/L	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	CT	µg/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	CBN	µg/L	**2.1**	<1	<1	<1	<1	<1	<1
Chloroethane	CLE	µg/L	<1	<1	**2.4**	<1	<1	<1	<1
Chloroform	CFM	µg/L	<1	<1	<1	<1	<1	<1	<1
Chloromethane	CM	µg/L	**6.5**	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	C12DCE	µg/L	<1	<1	<1	<1	<1	<1	**12**
cis-1,3-Dichloropropene	C13DCP	µg/L	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	DBCM	µg/L	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	EBN	µg/L	<1	<1	<1	<1	<1	<1	<1
m,p-Xylene	XYLMP	µg/L	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Methyl-tert-butyl Ether	MTBE	µg/L							
Methylene chloride	MECL	µg/L	<1	<1	<1	<1	<1	<1	<1
o-Xylene	XYLO	µg/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Tetrachloroethene	PCE	µg/L	<1	<1	<1	<1	<1	<1	<1
Toluene	TOL	µg/L	**1.1**	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	T12DCE	µg/L	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	T13DCP	µg/L	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	TCE	µg/L	<1	<1	<1	<1	<1	<1	**64 H**
Trichlorofluoromethane	TCFM	µg/L	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	VC	µg/L	**3.6**	<1	**6.3**	<1	<1	<1	<1

Bold text indicates results above analytical detec

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Appendix L-29
Wichita Terminal Elevator

PRP Evaluation Summary

Wichita Terminal Elevator
508 East 25th Street North (25th and Mead)

Potential Source Area PRP and Work Plan Addendum Map ID - 09A
Contaminants of Concern - CT and its degradation products
List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of Wichita Terminal Elevator

Carbon Tetrachloride Contamination

Data indicate that this area is a potential source of chlorinated VOC contamination. Groundwater sampling data have shown an increase in concentrations of carbon tetrachloride (CT) along the groundwater flow path through this area.

Groundwater samples collected the shallow (17 to 20 feet bgs) aquifer from Geoprobe location GP#-55-1, which is on the Wichita Terminal Elevator (WTE) property, during both Phase 1/1A and Phase 2 of the NIC RI contained CT concentrations of 3.5 μg/L and 17 μg/L, respectively. CT was also reported in some samples from the deep groundwater downgradient of the WTE facility. These were at Phase1/1A locations GP#48-3 and GP#35-3 during at 5.8 μg/L and 5.3 μg/L, respectively, and Phase 2 locations GP02B-05 and GP02B-06 at18 μg/L and 16 μg/L, respectively. CT was not reported in either shallow or deep groundwater samples collected upgradient of the WTE facility from Geoprobe locations GP10D-03, GP04B-11, GP04B-03 GP04B-12 and monitoring wells WND-04S, EXC-05B, EXC-06A and EXC-04B.

Groundwater Flow

The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south-southeast and south, respectively.

Reference

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Polk Search Results

Reference ID	Location	1951	1961	1965	1970	1975	1980	1984-1985	1990	1995-1996	2000
Wichita Terminal Elevator	508 E. 25th St. N.	No Listing	No Listing	No Listing	No Listing	No Listing	No Listing	(507)-Wichita Terminal Elevator; (508)-No Listing	Wichita Terminal Elevator Co.	Wichita Terminal Elevator Co.	No Listing

Potential source at property known as: 508 E. 25th N.

Current Owner/Business: Ross Industries Co. Inc.

Contact Person: Scott Harter

Mailing Address: % Cargill, Inc.
Box 2519
Wichita, KS 67201

Cargill, Inc. Property Tax
PO. Box 5626
Minneapolis, MN 55440-5626

Phone Number: (316) 291-2514 - local for Scott Harter

Other information:

Name of Company:		Wichita Terminal Elevator
Name and/or Contact Person:		
Street Address of Company:		**508 E. 25th Street North**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		508 E. 25th Street North
Phone Number of Contact:		
History:	1951	No Listing
	1961	No Listing
	1965	No Listing
	1970	No Listing
	1975	No Listing
	1980	No Listing
	1984/5	(507)-Wichita Terminal Elevator (508)-No Listing
	1990	Wichita Terminal Elevator Co.
	1995/6	Wichita Terminal Elevator Co.
	2000	No Listing

RCRA Info:

SEDGWICK COUNTY PROPERTY DATA LISTING

FAX TO: DORIS
PROPERTY ID: B -12941 PIN #: 122-04-0-24-02-001.00-
CTRL #: 132740

OWNER: ROSS INDUSTRIES CO INC
PROPERTY 2602 N SANTA FE
ADDRESS WICHITA KS 67214
MAILING % CARGILL, INC. PROPERTY TAX
ADDRESS PO BOX 5626
MINNEAPOLIS MN 55440-5626

TAX UNIT: 6787 WICHITA LAND USE: 518
LOAN CO: 00778 CARGILL, INC.

2001 MILL LEVY 116.554

2001 TAXES	BASE	SUP 4				(MORE)
GENERAL	18,771.02	0.00	0.00	0.00	0.00	
SPECIALS	1,993.00	0.00	0.00	0.00	0.00	
TOTAL	20,764.02	0.00	0.00	0.00	0.00	

SPECIALS BREAKDOWN

CODE	CERT #	DESCRIPTION	2002 PAYMENT	2002 THRU PAYOUT	BEG YR	END YR
67-28 W	37041	STORM SEWER			87	01
TOTAL PAYMENT			PRINCIPAL	INTEREST		

TOTAL SPECIALS DUE FOR 2002

2002	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
CU	102,300	541,900	644,200	25,575	135,475	161,050

2001	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
CU	102,300	541,900	644,200	25,575	135,475	161,050

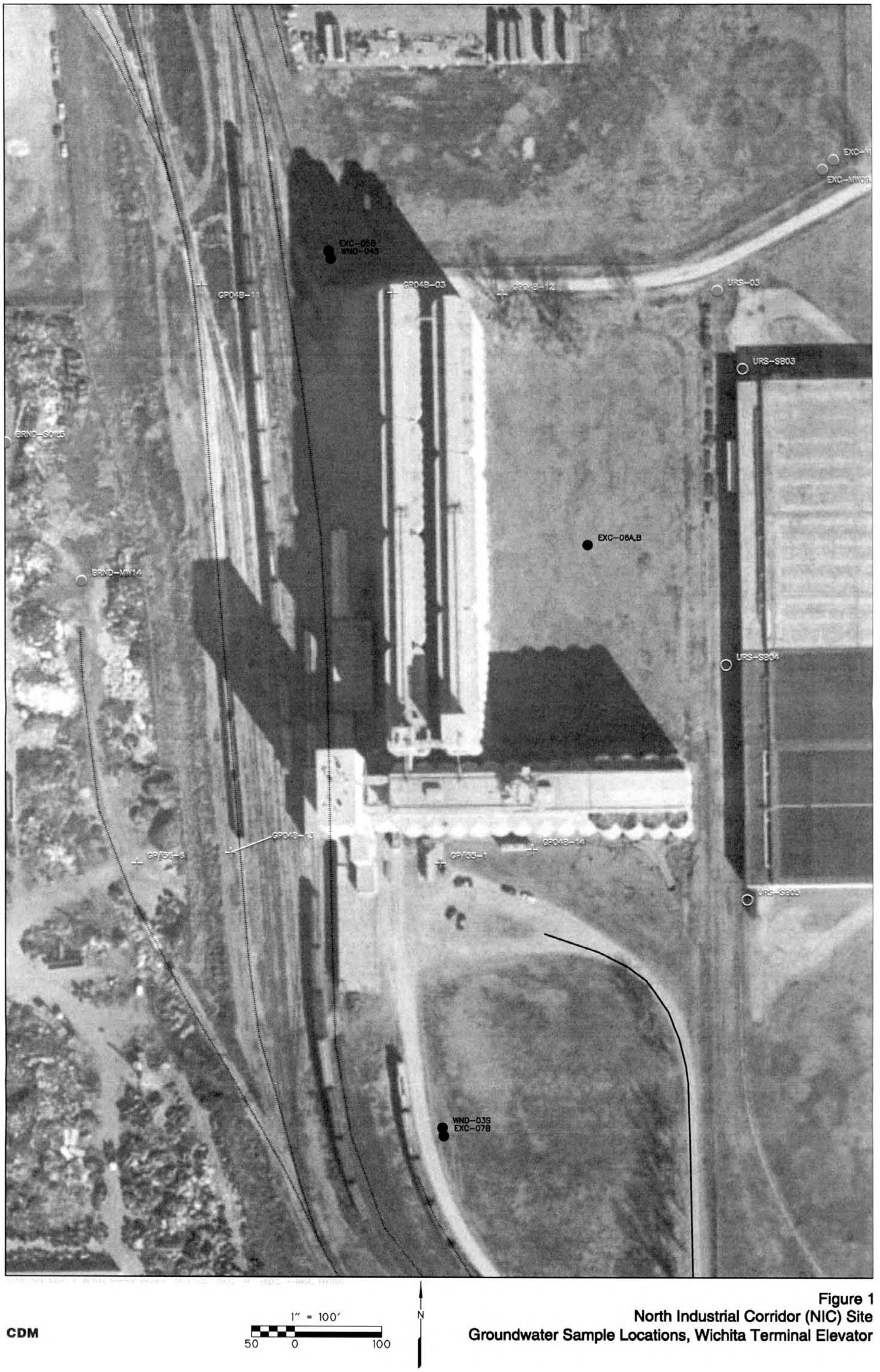
2000	APPRAISED VALUES			TAXABLE VALUES		
CLASS	LAND	BUILDING	TOTAL	LAND	BUILDING	TOTAL
CU	102,300	541,900	644,200	25,575	135,475	161,050

CAMA INFORMATION FRONT DEPTH YR BLT SQFT

LEGAL DESCRIPTION
VAC ODD & EVEN LOTS 1-96 INC. INC SANTA FE & VAC STS & LOT 93 ON SANTA FE & LOTS ON MEAD DED FOR ST MEAD AVE & VAC ODD LOTS 1-95 ALLEYS EXC LOT 95 & S 5 FT 95-96 & S 5 FT LOTS 93-94 ILLINOIS ADD.

No RCRA Information found at the time of review.

Figure(s)
Aerial Photographs and Sample Location Map(s)



CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Wichita Terminal Elevator

Table(s)
Analytical Data Table(s)

Wichita Terminal Elevator
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP#55-1	S/20	12/22/97		µg/L	<1	**600**	**81**	**1.3**	**17**	**5.4**	**39**	**3.5**	**1.8**	<1	<5.4
GP#55-1	S/20	10/19/99		µg/L	<1	**440**	**37**	<1	**11**	**1.9**	**13**	**9.2**	**4.2**	<1	<5.4
GP#55-1	S/20	11/04/99		µg/L	<1	**350 JH**	**33**	<1	**8.3**	**2.1**	**9.6**	**16**	**4.9**	<1	<5.4
GP#55-1	S/20	11/04/99	DUP	µg/L	<1	**320 JH**	**34**	<1	**9.5**	**2.1**	**9.6**	**17**	**4.5**	<1	<5.4
GP#55-1	D/43	12/22/97		µg/L	**1.9**	**940**	**120**	**3.6**	**27**	**8.2**	**64**	<1	<1	<1	<5.4
GP04B-03	M/26	11/05/99		µg/L	<1	**33**	**15**	<1	<1	<1	<1	<1	<1	<1	**5.6**
GP04B-03	D/41	11/05/99		µg/L	<1	**480 JH**	**66 JH**	**1.5**	**12**	**4**	**27**	<1	<1	<1	<5.4
GP04B-11	S/17	01/17/00		µg/L	<1	<1	**2.6**	**3.6**	<1	<1	<1	<1	<1	<1	<5.4
GP04B-11	D/32	01/17/00		µg/L	<1	**51**	**29**	**6.8**	<1	**6.6**	**4**	<1	<1	<1	<5.4
GP04B-12	D/40	11/04/99		µg/L	<1	**150 JH**	**16**	<1	**3.4**	**1.1**	**6.1**	<1	<1	<1	<5.4
GP04B-12	D/29	11/04/99		µg/L	<1	**180 JH**	**38**	<1	**4.3**	**2.5**	**8.1**	<1	<1	<1	<5.4
GP04B-13	S/17	01/17/00		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	**130**	**804**
GP04B-13	D/35	01/17/00		µg/L	<1	**57**	**40**	**11**	<1	**4.3**	**1.8**	<1	<1	<1	**87.9**
GP04B-14	S/20	11/04/99		µg/L	<1	**57**	**3.8**	<1	<1	<1	<1	**3.7**	**1.9**	<1	<5.4
GP04B-14	D/44	11/04/99		µg/L	**2.6**	**640 JH**	**98 JH**	**3.4**	**13**	**4.4**	**28**	<1	<1	<1	<5.4
EXC-MW-05B	D	06/15/98		µg/L	<1	**270**	**38**	<1	**5**	**2**	**17**	<1	<1	<1	**5.4**
EXC-MW-05B	D	05/02/01		µg/L	<1.0	**62**	**8.7**	<1.0	<1.0	<1.0	**2.4**	<1.0	<1.0	<1.0	**5.4**
EXC-MW-06A	S	06/16/98		µg/L	<1	**100**	**9.9**	<1	**2.2**	<1	**5.3**	<1	<1	<1	**5.4**
EXC-MW-06B	D	06/16/98		µg/L	<1	**92**	**7.1**	<1	**1.7**	<1	**5.3**	<1	<1	<1	**5.4**
EXC-MW-07B	D	06/16/98		µg/L	<1	**99**	**25**	<1	**2**	<1	**6.4**	<1	<1	<1	**5.4**
EXC-MW-07B	D	05/02/01		µg/L	<1.0	0	0	<1.0	<1.0	0	0	<1.0	<1.0	<1.0	**5.4**
WND-03S	S	06/16/98		µg/L	<1	**72**	**760**	**3.3**	<1	**6.9**	**25**	<1	<1	**7.4**	**84.3**
WND-03S	S	05/02/01		µg/L	<1.0	0	0	0	<1.0	0	0	<1.0	<1.0	0	<5.4
WND-04S	S	06/15/98		µg/L	**1.1**	**550**	**77**	**1.2**	**12**	**3.9**	**31**	<1	<1	<1	**5.4**
WND-04S	S	05/02/01		µg/L	<1.0	**120**	**41**	<1.0	**1.5**	<1.0	**5.1**	<1.0	<1.0	<1.0	**5.4**

PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-30
11th and State

PRP Evaluation Summary

11th and State

202 West 11th Street North, 1209/1211 N. Wellington Place and 1217-1225 North Wellington Place Street (11th and State)

Potential Source, Area 04F

Contaminants of Concern – TCE and its degradation products

List of Attachments

- Polk Directory Review and RCRA Information Summary
- Aerial Photograph and Sample Location Map
- Analytical Data Table(s)

CDM Evaluation of the 11th and State

The 11th and State Area (11S) consists of three contiguous facilities north of 11th Street between State Avenue and Wellington Place. These are the former Airama/AirKem Sales and Service of Kansas facility at 202 West 11th Street North, the former H&H Parts Company facility at 1209/1211 North Wellington Place and the Winding Specialist Company, Inc. facility at 1217-1225 North Wellington Place.

TCE Contamination

Data indicate that this area is a potential source of chlorinated VOC contamination. Groundwater sampling data have shown an increase in concentrations of TCE along the groundwater flow path through this area. The data are insufficient to differentiate between these contiguous properties.

During Phase 1/1A of the NIC RI TCE was reported down gradient from the 11S area in a shallow groundwater samples from Geoprobe locations GPA-29-6 and GPA-29-7 at 30 µg/L and 1.3 µg/L, respectively, but was not detected (TCE <1 µg/L) at location GPA-29-5, which was upgradient of these facilities but offset to the east. A second shallow groundwater sample collected from location GPA-29-6 during Phase 2 of the NIC RI contained TCE at 43 µg/L. Also during Phase 2 of the NIC RI, TCE was also reported in the shallow groundwater downgradient of these facilities at locations GP-04F-01 and GP-04F-03 at 340 µg/L, and 7.2 µg/L, respectively. Samples collected from the shallow groundwater upgradient of these facilities at locations GP02H-06 contained a TCE concentration of 5.8 µg/L. TCE has not been detected either the Phase1/1A or the Phase 2 collected from the deep groundwater upgradient of the facilities but was reported at concentrations of 1.1 µg/L, 5.4 µg/L, <1 µg/L and 1.2 µg/L, at downgradient locations GPA29-6 (Phase 1/1A), GP04F-01, GPA29-07 (Phase 1/1A) and GP04F-03, respectively.

In a September 17, 1990 a KDHE memorandum documents a history of TCE use by H&H Parts as a vapor degreaser and asserts that H&H Parts may have contaminated groundwater at their 1234 North Wellington Place facility (see Section 2.4.10.10).

Groundwater Flow

The water level monitoring network established for Phase 1/1A of the RI was of insufficient extent to delineate the groundwater flow direction in this portion of the site. The site-wide water table maps for March 2001 and August 2001 (Section 4 of the NIC RI Report) show groundwater flow in the area is to the south. Facility-specific water level data are lacking.

References

CDM 2000, *Phase 1/1A Technical Memorandum, North Industrial Corridor, Wichita, Kansas.* Prepared by Camp Dresser & McKee Inc. for the City of Wichita, Kansas.

Polk Directory Review and RCRA Information Summary

Polk Search Results

Reference ID	Location	1951	1961	1965	1970	1975	1980	1984-1985	1990	1995-1996	2000
1200 block of State	1220 State	No Listing	No Listing	Winding Specialits Co. Inc. (elec. Motors)	Winding Specialits Co. Inc. (elec. Motors)	Winding Specialists Co. Inc. (electronics & rewinding)	No Listing	No Listing	No Listing	No Listing	No Listing
1200 block of State	1211 Wellington	Bee Equipment (whse)	Ehrlich Electrical Machinery Co (elec. Motors)	Ehrlich Electrical Machinery Co (elec. Motors)	vacant	H & H Parts Co. Inc. (storage)	H & H Parts Co. Inc. (storage)	No Listing	No Listing	No Listing	No Listing
1200 block of State	1219 Wellington	residential	residential	residential	residential	Winding Specialits Inc. (aircraft)	residential	vacant	No Listing	No Listing	No Listing
1200 block of State	1217 Wellington	No Listing	No Listing	No Listing	No Listing	No Listing	No Listing	No Listing	Winding Specialists Co Inc. (addl space) (aircraft)	Winding Specialists Co Inc. (addl space) (aircraft)	No Listing
1200 block of State	1213 Wellington	No Listing	Superior Sealed Unit Service (ac)	No Listing	No Listing	No Listing	No Listing	No Listing	No Listing	No Listing	No Listing
1200 block of State	1234-36 Wellington	H & H Parts Co Inc. (welders)	H & H parts Co. (sht mtl fabricators)	H & h Parts Co. Inc. (aircraft & accessories)	H & h Parts Co. Inc. (aircraft & accessories)	H & h Parts Co. Inc. (aircraft & accessories)	H & h Parts Co. Inc. (aircraft & accessories)	H & h Parts Co. Inc. (aircraft & accessories)	H & H Parts Co Div. Of Chromalloy Gas Turbine Corp (aircraft accessories)	BG Aerostructure (aircraft accessories)	Apex Engineering (aircraft part equip)
1200 block of State	1225 N Wellington	residential	residential	residential	residential	No Listing	Winding Specialists Co. Inc.	Winding Specialists Co. Inc.	Winding Specialists Co. Inc.	Winding Specialists Co. Inc.	Winding Specialists Co. Inc.
1200 block of State	202 W 11th	No Listing	vacant	Airkem Sales & Service of Kansas (chem mfrs)	Airkem Sales & Service of Kansas (chem mfrs)	Airkem Sales & Service of Kansas (chem mfrs); Airkem Smoke odor Service	Airkem Sales & Service of Kansas (chem mfrs); Airkem Smoke odor Service	Airwik Professional Products (deodorants)	Airkem Professional Products (deodorants)	Airama Corp.	Airama Corp (svc establishment euip); S USA (warm air htg)

Potential source at property known as: 202 W. 11th

Current Owner/Business: Airama Corp.

Contact Person:

Mailing Address: 202 W. 11th
Wichita, KS 67214

Phone Number: (316) 265-8481

Other information: No RCRA Info Found
Polk description listed – "svc establishment equipment"
"S USA warm air mtg. 267-3465"

Name of Company:		Airama Corp
Name and/or Contact Person:		
Street Address of Company:		**202 W. 11th**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"202 W. 11th"
Phone Number of Contact:		
History:	1951	No Listing
	1961	Vacant
	1965	Airkem Sales & Service of Kansas (chem. mfrs)
	1970	Airkem Sales & Service of Kansas (chem. mfrs)
	1975	Airkem Sales & Service of Kansas (chem. mfrs); Airkem Smoke Odor Service
	1980	Airkem Sales & Service of Kansas (chem. mfrs); Airkem Smoke Odor Service
	1984/5	Airwik Professional Products (deodorants)
	1990	Airkem Professional Products (deodorants)
	1995/6	Airama Corp.
	2000	Airama Corp (svc establishment equip); S USA (warm air htg)

RCRA Info:

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: A -01388 Pin: 124170110601700
Page: 1

Name AIRKEM SALES & SER OF KS INC
Situs 202 W 11TH ST N
WICHITA KS 67203-3809

Tax	2,301.94
Specials	6.30
Total	2,308.24

Phone
Mail 202 W 11TH. ST.
To WICHITA KS 67203-3809

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 100667

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01388
Page: 2

Pin: 124170110601700
Name: AIRKEM SALES & SER OF KS INC

Legal Description
ODD LOTS 1 TO 7 WATER ST.
ALLEN'S RES. OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

No RCRA Information found at the time of review.

Potential source at property known as: 1234-36 Wellington
1220 State
1211 Wellington
1213 Wellington
1217 Wellington
1219 Wellington
1225 Wellington

Current Owner/Business: Apex Engineering

Contact Person: Steve Dwerlkotte

Mailing Address: 1234 N. Wellington St.
Wichita, KS 67203

Phone Number: (316) 262-1494

Other information:

Name of Company:		Winding Specialists Co. Inc.
Name and/or Contact Person:		
Street Address of Company:		**1220 State**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1200 block of State"
Phone Number of Contact:		
History:	1951	No Listing
	1961	No Listing
	1965	Winding Specialists Co. Inc. (elec. Motors)
	1970	Winding Specialists Co Inc. (elec motors)
	1975	Winding Specialists Co Inc. (electronics & rewinding)
	1980	No Listing
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

Name of Company:		H & H Parts
Name and/or Contact Person:		
Street Address of Company:		**1211 Wellington**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1200 Block of State"
Phone Number of Contact:		
History:	1951	Bee Equipment (whse)
	1961	Ehrlich Electrical Machinery Co (elec. motors)
	1965	Ehrlich Electrical Machinery Co (elec. motors)
	1970	Vacant
	1975	H & H Parts Co. Inc. (storage)
	1980	H & H Parts Co. inc. (storage)
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

Name of Company:		
Name and/or Contact Person:		
Street Address of Company:		**1213 Wellington**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1200 Block of State"
Phone Number of Contact:		
History:	1951	No Listing
	1961	Superior Sealed Unit Service (ac)
	1965	No Listing
	1970	No Listing
	1975	No Listing
	1980	No Listing
	1984/5	No Listing
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

Name of Company:		
Name and/or Contact Person:		
Street Address of Company:		**1217 Wellington**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1200 Block of State"
Phone Number of Contact:		
History:	1951	No Listing
	1961	No Listing
	1965	No Listing
	1970	No Listing
	1975	No Listing
	1980	No Listing
	1984/5	No Listing
	1990	Winding Specialists Co Inc. (addl space aircraft)
	1995/6	Winding Specialists Co Inc. (addl space aircraft)
	2000	No Listing

RCRA Info:

Name of Company:		
Name and/or Contact Person:		
Street Address of Company:		**1219 Wellington**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1200 Block of State"
Phone Number of Contact:		
History:	1951	Residential
	1961	Residential
	1965	Residential
	1970	Residential
	1975	Winding Specialists Inc. (aircraft)
	1980	Residential
	1984/5	Vacant
	1990	No Listing
	1995/6	No Listing
	2000	No Listing

RCRA Info:

Name of Company:		Winding Specialists Co. Inc.
Name and/or Contact Person:		
Street Address of Company:		**1225 N Wellington**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1200 Block of State"
Phone Number of Contact:		
History:	1951	Residential
	1961	Residential
	1965	Residential
	1970	Residential
	1975	No Listing
	1980	Winding Specialists Co. Inc.
	1984/5	Winding Specialists Co. Inc.
	1990	Winding Specialists Co. Inc.
	1995/6	Winding Specialists Co. Inc.
	2000	Winding Specialists Co. Inc.
RCRA Info:		

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: A -01389 Pin: 124170110601800
Page: 1

Name APEX ENGINEERING INC
Situs 1211 N WELLINGTON PL
WICHITA KS 67203

Tax	2,878.88
Specials	6.30
Total	2,885.18

Phone
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 100668
USO-259-TD-NIC

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01389
Page: 2

Pin: 124170110601800
Name: APEX ENGINEERING INC

Legal Description
LOTS 9-11-13 WATER ST.
ALLEN RES. OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: A -01390
Pin: 124170110601900
Page: 1

Name WILLS, GEORGE B REV TR
Situs
KS

Tax	279.73
Specials	9.45
Total	289.18

Phone
Mail 8219 CHAMPIONS
To WICHITA KS 67226-3326

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 100669

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01390
Page: 2

Pin: 124170110601900
Name: WILLS, GEORGE B REV TR

Legal Description
LOT 15 & S1/2 LOT 17 WATER ST.
ALLEN'S RES. OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: A -01391
Pin: 124170110602000
Page: 1

Name WILLS, GEORGE B ETUX
Situs 1217 N WELLINGTON PL
WICHITA KS 67203

Tax	2,659.18
Specials	9.45
Total	2,668.63

Phone
Mail 8219 CHAMPIONS
To WICHITA KS 67226-3326

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 100670

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

Paid to Apex Building

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01391
Page: 2

Pin: 124170110602000
Name: WILLS, GEORGE B ETUX

Legal Description
N 1/2 LOT 17 & LOT 19 WATER ST.
ALLENS RES. OF TURNERS ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: A -01392
Page: 1

Pin: 124170110602100

Name WINDING SPECIALISTS CO INC
Situs 1225 N WELLINGTON PL
WICHITA KS 67203

Phone
Mail 1225 WELLINGTON PL.
To WICHITA KS 67203-3822

Tax	2,287.72
Specials	9.45
Total	2,297.17

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554

Control 100671

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01392
Page: 2

Pin: 124170110602100
Name: WINDING SPECIALISTS CO INC

Legal Description
LOTS 21-23 WATER ST.
ALLEN'S RES. OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: A -01393 Pin: 124170110602200A
Page: 1

Name APEX ENGINEERING INC
Situs 1233 N WELLINGTON PL
WICHITA KS 67203

Tax	411.44
Specials	9.45
Total	420.89

Phone
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 100672

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01393
Page: 2

Pin: 124170110602200A
Name: APEX ENGINEERING INC

Legal Description
LOTS 25-27 WATER ST.
ALLEN'S RES OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: A -01393-0001 Pin: 124170110602200B
Page: 1

Name APEX ENGINEERING INC
Situs 1237 N WELLINGTON PL
WICHITA KS 67203

Tax	411.44
Specials	9.45
Total	420.89

Phone
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 100673

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
View Property Information
RKEMPTON
Function 06 Legal Description Level 01
Key No.: A -01393-0001 Pin: 124170110602200B
Page: 2 Name: APEX ENGINEERING INC

Legal Description
LOTS 29-31 WATER ST.
ALLEN'S RES OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: A -01393-001A Pin: 124170110602200C
Page: 1

Name APEX ENGINEERING INC
Situs
KS

Tax	100.59
Specials	9.45
Total	110.04

Phone
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 100674
USD-259-TD-NIC

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01393-001A
Pin: 124170110602200C
Page: 2
Name: APEX ENGINEERING INC

Legal Description
S 12 1/2 FT LOT 33 WATER ST.
ALLEN'S RES. OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: A -01394 Pin: 124170110602200D
Page: 1

Name APEX ENGINEERING INC
Situs
KS

Tax	115.16
Specials	9.45
Total	124.61

Phone
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 100675
USD-259-TD-NIC

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01394
Page: 2

Pin: 124170110602200D
Name: APEX ENGINEERING INC

Legal Description
LOT 33 EXC S 12 1/2 FT WATER ST.
ALLEN'S RES. OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
View Property Information RKEMPTON
Function 06 Ownership Level 01
Key No.: A -01395 Pin: 124170110602200E
Page: 1

Name APEX ENGINEERING INC
Situs
KS Tax 82.52
Specials
Phone Total 82.52
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax Unit 6787 WICHITA Levy 116.554
COUNTY-NIC
CITY OF WICHITA-NIC Control 100676
USD-259-TD-NIC
Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
View Property Information
RKEMPTON
Function 06 Legal Description Level 01
Key No.: A -01395 Pin: 124170110602200E
Page: 2 Name: APEX ENGINEERING INC

Legal Description
LOT 35 & S1/2 LOT 37 WATER ST.
ALLEN'S RES OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: A -01396
Pin: 124170110602200F
Page: 1

Name APEX ENGINEERING INC
Situs
KS
Phone
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax	82.52
Specials	
Total	82.52

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 100677

Add Keys

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01396
Page: 2

Pin: 124170110602200F
Name: APEX ENGINEERING INC

Legal Description
N1/2 LOT 37 & LOT 39 WATER ST.
ALLEN'S RES. OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

No RCRA Information found at the time of review.

Name of Company:		H & H Parts/Chromalloy/BG Aerostructure/Apex Engineering
Name and/or Contact Person:		
Street Address of Company:		**1234-36 Wellington**
City, State, and Zip Code:		Wichita, KS
Regarding the Following Property:		"1200 Block of State"
Phone Number of Contact:		
History:	1951	H & H Parts Co. Inc. (welders)
	1961	H & H Parts Co (sht mtl fabricators)
	1965	H & H Parts Co. Inc. (aircraft & accessories)
	1970	H & H Parts Co Inc. (aircraft & accessories)
	1975	H & H Parts Co. Inc. (aircraft & accessories)
	1980	H & H Parts Co Inc. (aircraft & accessories)
	1984/5	H & H Parts Co. Inc. (aircraft & accessories)
	1990	H & H Parts Co. Div Of Chromalloy Gas Turbine Corp (aircraft accessories)
	1995/6	BG Aerostructure (aircraft accessories)
	2000	Apex Engineering (aircraft part equip)
RCRA Info:		

TXRP0601
RKEMPTON
Level 01

View Property Information
Ownership

Function 06
Key No.: A -01399
Page: 1

Pin: 124170110700400F

Name APEX ENGINEERING INC
Situs 1234 N WELLINGTON PL
WICHITA KS 67203

Phone
Mail 1234 N WELLINGTON PL
To WICHITA KS 67203-3821

Tax	16,686.45
Specials	9.45
Total	16,695.90

Tax Unit 6787 WICHITA
COUNTY-NIC
CITY OF WICHITA-NIC
USD-259-TD-NIC

Levy 116.554
Control 100681

Add Keys THRU A-1404, A-1406-2, A-1406-3

PF1-Exit PF2-Previous Page PF3-Next Page PF9-History PF11-Cama PF12-Help
PF19-Previous Parcel PF20-Next Parcel

END OF DESC

TXRP0602
RKEMPTON
Level 01

View Property Information
Legal Description

Function 06
Key No.: A -01399
Page: 2

Pin: 124170110700400F
Name: APEX ENGINEERING INC

Legal Description
EVEN LOTS 10 THRU 44 INC ON WATER ST - LOT 50, W 21.51 FT LOT 52 &
LOT 56 ON 12TH ST ALLEN'S RESURVEY OF TURNER'S ADD.

PF7-Backward PF8-Forward PF19-Prev Parcel PF20-Next Parcel

BT 10-10
GP 10-11
JM 10/11

State of Kansas

Bill Graves Governor

Department of Health and Environment

James J. O'Connell Secretary

RECEIVED
OCT - 9 1996
South Central District

September 27, 1996

Norman Manning
Apex Engineering Incorporated
1234 Wellington Place
Wichita, KS 67203

Re: **EPA I.D. Number----KSD 007 236 425**
1234 Wellington Place---Wichita

Dear Mr. Manning:

This is to acknowledge that you have filed a **Subsequent** "Notification of Hazardous Waste Activity" Form for the installation located at the address above.

K.A.R. 28-31-4 (c) (1) states that whenever there is a change in the information originally submitted to obtain an EPA Identification Number, the generator shall update that information. The generator shall submit these changes to the department on a form supplied by the department. You have complied with this requirement.

We have updated our records to reflect the changes shown in facility name from B G Aerostructures to Apex Engineering Incorporated and legal owner.

If you need further assistance or have any questions pertaining to this matter, please contact this office at the address below or by calling 913/296-1617 or you can call me direct at 913/296-0005.

Sincerely,

Linda Prockish

Linda Prockish
Hazardous Waste Section
Bureau of Waste Management

LCP/cc

Enclosure

C Mark Bradbury - DEA/SCDO/Waste Programs

Division of Environment, Bureau of Waste Management, Forbes Field Building 740, Topeka, Kansas 66620-0001

Telephone: (913) 296-0005
Fax Number: (913) 296-8909

Formerly: B G Aerostructures

APPENDIX C

Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Date Received (for Official Use Only) Received Bureau of Waste Management

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification ☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007236425

II. Name of Installation (Include company and specific site name)

APEX ENGINEERING INCORPORATED

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203-

County Code: 173 County Name: SEDGWICK SCDD 02

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: 2234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203-

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): MANNING (first): NORMAN

Job Title: LEAD MAINTENANCE Phone Number (area code and number): 316-262-1494

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203-

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: STEVE DWERLKOTTE

Street, P.O. Box, or Route Number: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203-

Phone Number (area code and number): 316-262-1494

B. Land Type: P C. Owner Type: P D. Change of Owner: Yes ☒ No ☐ (Date Changed) Month Day Year: 08 31 96

KDHE FORM 8700-12 (7-90) PREVIOUS EDITION OBSOLETE.

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity

1. Generator (See Instructions)
   - ☐ Greater than 1000 kg/mo (2200 lbs)
   - ☒ 25 to 1000 kg/mo (55-2200 lbs)
   - ☐ Less than 25 kg/mo (55 lbs)
2. Transporter (Indicate Mode)
   - ☐ For own waste only
   - ☐ For commercial purposes

   Mode of Transportation
   - ☐ Air
   - ☐ Rail
   - ☐ Highway
   - ☐ Water
   - ☐ Other-specify _____
3. ☐ Treater, Storer, Disposer (at installation) Note: A permit is required for this activity. (See instructions.)
4. ☐ Hazardous Waste Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketers
   - ☐ Burner-indicate device(s) - Type of Combustion Device
     - ☐ Utility Boiler
     - ☐ Industrial Boiler
     - ☐ Industrial Furnace
5. ☐ Underground Injection Control

B. Used Oil Fuel Activities

1. ☐ Off-Specification Used Oil Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketer
   - ☐ Burner-indicate device(s)

   Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
2. ☐ Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles.

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic (List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminants)				
☒	☒	☐	D007	D008			

B. Listed Hazardous Wastes.

1	2	3	4	5	6
F001	F003	F005			
7	8	9	10	11	12

13	14	15	16	17	18
19	20	21	22	23	24

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature	Name and Official Title (type or print)	Date Signed
[signature]	Steve Dwerlkotte President/CEO	9-24-96

XI. Comments

MAIL COMPLETED FORM TO: KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
BUREAU OF AIR & WASTE MANAGEMENT
FORBES FIELD, BLDG. 740
TOPEKA, KS 66620-0001

1.0

State of Kansas

Joan Finney Governor

Department of Health and Environment

Robert Harder, Secretary

RECEIVED
JUN 7 1994

June 1, 1994

Norman Manning
B G Aerostructures Inc.
1234 Wellington Place
Wichita, KS 67203

Re: EPA I.D. Number KSD007236425

Dear Mr. Manning:

This letter is to acknowledge the subsequent Notification of Hazardous Waste Activity Form your firm submitted on May 18, 1994.

We have updated our records to reflect the change made in facility name from Chromalloy Aircraft Structures to B G Aerostructures Inc., contact person, legal owners name, generator status to a Kansas generator, and waste codes to include D002.

A subsequent notification shall be submitted to this office whenever the information originally submitted to obtain an EPA I.D. Number has changed. If I can be of further assistance, please contact me at (913) 296-0005.

Sincerely,

Linda Prockish

Linda Prockish
Hazardous Waste Section
Bureau of Waste Management

LCP/cm

C Mark Bradbury - DEA/SCDO/Waste Programs

Division of Environment, Bureau of Waste Management, Forbes Field Building 740, Topeka, Kansas 66620-0001

Telephone: (913) 296-0005
Fax Number: (913) 296-1592

formerly Chromalloy Aircraft Structures

Please refer to the instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

RECEIVED
Date Received (For official use only)
MAY 20 1994
WASTE MANAGEMENT

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification ☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007236425

II. Name of Installation (Include company and specific site name)

B G AEROSTRUCTURES INC

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203

County Code: 173 County Name: SEDGWICK SCDO 02

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): MANNING (first): NORMAN

Job Title: LEAD MAINTENANCE Phone Number (area code and number): 316-262-1494

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: ROBERT GILBERT

Street, P.O. Box, or Route Number: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203

Phone Number (area code and number): 316-262-1494

B. Land Type: P

C. Owner Type: P

D. Change of Owner: Yes ☒ No ☐ (Date Changed) Month Day Year: 05 01 94

KDHE FORM 8700-12 (7-90) PREVIOUS EDITION OBSOLETE.

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity

1. Generator (See instructions)
   - ☐ Greater than 1000 kg/mo (2200 lbs)
   - ☒ 25 to 1000 kg/mo (55-2200 lbs)
   - ☐ Less than 25 kg/mo (55 lbs)
2. Transporter (indicate Mode)
   - ☐ For own waste only
   - ☐ For commercial purposes

   Mode of Transportation
   - ☐ Air
   - ☐ Rail
   - ☐ Highway
   - ☐ Water
   - ☐ Other-specify
3. ☐ Treater, Storer, Disposer (at installation) Note: A permit is required for this activity. (See instructions.)
4. ☐ Hazardous Waste Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketers

   Burner-indicate device(s) - Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
5. ☐ Underground Injection Control

B. Used Oil Fuel Activities

1. ☐ Off-Specification Used Oil Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketer
   - ☐ Burner-indicate device(s)

   Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
2. ☐ Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles.

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic (List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminants)				
☒	☒	☐	D007	D008			

B. Listed Hazardous Wastes.

1	2	3	4	5	6
F001	F003	F005			
7	8	9	10	11	12

13	14	15	16	17	18
19	20	21	22	23	24

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature	Name and Official Title (type or print)	Date Signed
Robert Gilbert	Robert Gilbert President/CEO	5-18-94

XI. Comments

MAIL COMPLETED FORM TO: KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
BUREAU OF AIR & WASTE MANAGEMENT
FORBES FIELD, BLDG. 740
TOPEKA, KS 66620-0001

KDHE FORM 8700-12 (7-90) PREVIOUS EDITION IS OBSOLETE.

R G Aerostructures

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
Azzie Young, Ph.D., *Secretary*

Reply to: (913) 296-6898
Fax Number: (913) 296-1592

September 30, 1992

RECEIVED
SEP 30 1992

Dallan Brown
Chromalloy Aircraft Structures
1234 Wellington Place
Wichita, KS 67203

Re: EPA I.D. Number KSD007236425

Dear Mr. Brown:

This letter is to acknowledge the subsequent Notification of Hazardous Waste Activity Form your firm submitted on September 17, 1992.

We have updated our records to reflect the change made in facility name from H & H Parts Company to Chromalloy Aircraft Structures and additional waste code of D008.

A subsequent notification shall be submitted to this office whenever the information originally submitted to obtain an EPA I.D. Number has changed. If I can be of further assistance, please contact me at (913) 296-6898.

Sincerely,

Gigi Perry
Administrative Officer
Hazardous Waste Section
Bureau of Waste Management

C SCDO - BWM

APPENDIX C

Please refer to the instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

RECEIVED
Date Received (For Office Use Only)
SEP 22 1992
WASTE MANAGEMENT

Formerly - H.E.H. Parts C

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification ☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007236475

II. Name of Installation (Include company and specific site name)

CHROMALLOY AIRCRAFT STRUCTURES

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203

County Code: 173 County Name: SEDGWICK

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): BROWN (first): DALLAN

Job Title: FACILITY MANAGER Phone Number (area code and number): 316-262-1494

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: CHROMALLOY GAS TURBINE CORP

Street, P.O. Box, or Route Number: SAME

City or Town: State: Zip Code:

Phone Number (area code and number):

B. Land Type: P C. Owner Type: P D. Change of Owner: Yes ☐ No ☒ (Date Changed) Month Day Year

KDHE FORM 8700-12 (7-90) PREVIOUS EDITION OBSOLETE.

Change 1/4 Checker

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity

1. Generator (See Instructions)
   - [X] Greater than 1000 kg/mo (2200 lbs)
   - [X] 25 to 1000 kg/mo (55-2200 lbs)
   - [ ] Less than 25 kg/mo (55 lbs)
2. Transporter (Indicate Mode)
   - [ ] For own waste only
   - [ ] For commercial purposes

   Mode of Transportation
   - [ ] Air
   - [ ] Rail
   - [ ] Highway
   - [ ] Water
   - [ ] Other-specify
3. [ ] Treater, Storer, Disposer (at installation) Note: A permit is required for this activity. (See instructions.)
4. [ ] Hazardous Waste Fuel
   - [ ] Generator Marketing to Burner
   - [ ] Other Marketers
   - [ ] Burner-indicate device(s) - Type of Combustion Device
     - [ ] Utility Boiler
     - [ ] Industrial Boiler
     - [ ] Industrial Furnace
5. [ ] Underground Injection Control

B. Used Oil Fuel Activities

1. [ ] Off-Specification Used Oil Fuel
   - [ ] Generator Marketing to Burner
   - [ ] Other Marketer
   - [ ] Burner-indicate device(s)

   Type of Combustion Device
   - [ ] Utility Boiler
   - [ ] Industrial Boiler
   - [ ] Industrial Furnace
2. [ ] Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification.

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles.

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic (List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminants)				
[X]	[ ]	[ ]	D007	D008			

B. Listed Hazardous Wastes.

1: F001	2: F003	3: F005	4:	5:	6:
7:	8:	9:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature	Name and Official Title (type or print)	Date Signed
Dallen Brown	Facility Manager	9-17-92

XI. Comments

MAIL COMPLETED FORM TO: KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
BUREAU OF AIR & WASTE MANAGEMENT
FORBES FIELD, BLDG. 740
TOPEKA, KS 66620-0001

State of Kansas
Joan Finney, *Governor*

Department of Health and Environment
Azzie Young, Ph.D., *Secretary*

May 14, 1992

Reply to: South Central District Office
1919 N. Amidon, Suite 130
Wichita, Kansas 67203
Phone: (316) 838-1071
Fax: (316) 838-0042

RECEIVED
BUREAU OF
JUN 11 1992
AIR and WASTE
MANAGEMENT

Mr. Dallan Brown, Facility Manager
H & H Parts Company
1234 Wellington Place
Wichita, KS 67203

Re: Hazardous Waste Compliance Inspection
EPA Identification Number: KSD007236425

Dear Mr. Brown:

On April 23, 1992, your facility was inspected to determine compliance with state hazardous waste regulations.

The inspection revealed that your facility generates the following hazardous wastes as defined in 40 CFR, Part 261, Subparts C & D as adopted by K.A.R. 28-31-3:

1.	Paint Solvent/Sludge	D001, D007, D008, F003, F005
2.	Paint Booth Exhaust Filters	D007
3.	Heat Treats Salts w/chromium	D007
4.	1,1,1 Trichloroethane	F001

The quantity of hazardous waste generated is more than 1000 kilograms (approximately 2200 pounds) per month. Your facility is therefore considered an EPA generator and is regulated under K.A.R. 28-31-4, excluding K.A.R. 28-31-4(h) & (m).

The inspection identified the following items not in compliance with state regulations concerning generators of hazardous waste:

1. Notification of Regulated Waste Activity. The current information submitted to the Department has not been updated to include the D008 waste code. K.A.R. 28-31-4(c)(1). A blank form with instructions for completion is attached for your convenience.

2. Hazardous Waste Determination. Any person who generates a solid waste, as defined by 40 CFR 261.4, as in effect on July 1, 1989, shall determine if that waste is a hazardous waste...K.A.R. 28-31-4(b). A laboratory analysis of the paint booth exhaust filters which you've used to identify the filters as hazardous waste could not be provided at the time of inspection. Please send a copy of this analysis to me by June 15, 1992.

3. Contingency Plan. Your facility is required to maintain a copy of your Contingency Plan on site. 40 CFR 265.53(a). It was noted during the inspection that your Contingency Plan is currently being reviewed and revised where necessary. Please send a copy of this revised plan to me by June 15, 1992.

Please send a written response to me by June 15, 1992, which includes 1) A copy of the Notification of Regulated Waste Activity form you submit to our Topeka office, 2) A copy of the paint booth exhaust filters analysis, and 3) a copy of your revised Contingency Plan.

Thank you for your cooperation with the Hazardous Waste Management Program of Kansas. If you have questions regarding this letter, you may contact me at (316) 838-1071.

Respectfully,

Gilbert L. Perez
Environmental Technician
Inspection/Enforcement Section
Bureau of Air and Waste Management

GLP:ss

pc: Tom Gross, BAWM, Topeka
John Mitchell, BAWM, Topeka
SCD - File

Kansas Department of Health and Environment
Bureau of Air and Waste Management
Forbes Field, Topeka, Kansas 66620

Hazardous Waste Generator/Transporter Compliance Inspection Report

General

Time 11:00 a.m. Date April 23, 1992

Facility Name H & H Parts Company, Inc. EPA ID No. KSD007236425

Street 1234 Wellington Place City Wichita, KS Zip 67203

Mailing Address (If different than above) same

County Sedgwick Phone (316) 262 - 1494

Contact(s) Dallan (Don) Brown, Facilities Manager

Inspector(s) Gil Perez, SCDD, Wichita

Type of Business Metal Fabrication, largely aircraft related parts.

Has the company declared any information/processes as trade secrets (KSA 65-3447)? Yes (No)
If yes, explain.

Industrial Wastes Generated

(List hazardous wastes first)

Waste:	1,1,1 Trichloroethane from degreasing tank	1,1,1 Trichloroethane from cleanout of tank
If waste is hazardous, give HW ID Number:	F001	F001
Amount generated per month:	30 gal/mo ave	110 gal equiv at time of cleanout
Amount presently in storage:	none at time of inspection	none at time of inspection
Accumulation time:	under 90 days	under 90 days
Present disposal method:	EMI or HRI	HRI

Waste:	Heat Treat Salts (dragout from Tank)	Paint Booth Air Filters plus accum dust & debris
If waste is hazardous, give HW ID Number:	D007	D007
Amount generated per month:	20 gal/mo ave	1-55 gal 17-H DM equiv/60-90 days
Amount presently in storage:	none	1-55 gal 17-H DM
Accumulation time:	under 90 days	under 90 days
Present disposal method:	HRI	American Resources Recovery through EMI

Waste:	Water-soluble Cutting Fluids and Tramp Oils	Oil/Floor Dry Mix from around machines (clean-up).
If waste is hazardous, give HW ID Number:	na	na
Amount generated per month:	50 gal/mo ave	1-55 gal DM / mo ave
Amount presently in storage:	none at time of inspection	none at time of inspection
Accumulation time:	under 90 days	under 90 days
Present disposal method:	EMI*	EMI

*EMI is consulting to provide an on-site oil/water separation unit to provide local disposal of the oil portion through a waste oil reclaimer and the water portion disposed through the POTW w/permission.

Waste:	Mineral Spirits	Acetone
If waste is hazardous, give HW ID Number:	D001	D001/F003
Amount generated per month:	none generated to date	none, wastestream being eliminated
Amount presently in storage:	none	residual combined with WPRM
Accumulation time:	na	na
Present disposal method:	to be recycled when necessary	na (see WPRM - MEK & paint sludge)

Waste:	Caustic Wash Solution	MEK & Paint Sludge (WPRM)
If waste is hazardous, give HW ID Number:	D002	D001, D007, D008, F003, F005
Amount generated per month:	varies	50 gal/mo ave
Amount presently in storage:	none	2-55 gal DMS
Accumulation time:	na	under 90 days
Present disposal method:	Wichita PoTW w/permission	HRI

General Requirements (GGR)

I. Has the facility evaluated all potentially hazardous waste(s) to determine if it is hazardous? (KAR 28-31-4(b)) — (Yes) No

A. If waste(s) was tested, was the analysis conducted by a laboratory certified by KDHE? (KAR 28-31-4(b)(3)(A)) — (Yes) No NA

B. If waste(s) was tested, are the results kept for three years? (KAR 28-31-4(f)(1)(C))? — * (Yes) No NA

II. If hazardous waste(s) is disposed of via the sanitary sewer to a Publicly Owned Treatment Works (POTW), has written permission been obtained from the operator of the POTW? (KAR 28-31-3/40 CFR 261.4) — Yes No (NA)

III. If industrial waste(s) is disposed of at a permitted sanitary landfill, has a disposal authorization been obtained? (KAR 28-29-23) — Yes No (NA)

A. If yes, list the authorization number(s): _____

IV. Facility size classification:

☐ Not a Generator ☐ Small Qty. Generator ☐ Kansas Generator ☑ EPA Generator
☐ T/S/D Facility ☐ Transporter ☐ HW Burner/Marketer ☐ Used oil Burner/Marketer

*Analysis done on paint filters could not be found during inspection. Gen will send copy.

Hazardous Waste Determination Requirements: ☑ Adequate ☐ Inadequate

Notification Requirements (GGR)

V. Has generator notified KDHE and obtained an EPA Identification Number? (KAR 28-31-4(c)) — (Yes) No NA

VI. Is current notification accurate? (KAR 28-31-4(c)(1)) Need to add D008 code to Notif — Yes (No) NA

A. Is this facility marketing (selling) hazardous waste as a fuel? — Yes No (NA)

B. Is this facility marketing (selling) used oil as a fuel? — Yes No (NA)

(If yes, to either question A or B, complete Used Oil Fuel Marketers/Blenders Checklist.)

C. Is this facility burning hazardous waste as a fuel? — Yes No (NA)

D. Is this facility burning used oil as a fuel? — Yes No (NA)

Notification Requirements: ☐ Adequate ☑ Inadequate ☐ NA

(If small quantity generator, stop here.)

Manifests (GMR)

VII. Is a contractual agreement used in place of manifesting? (KAR 28-31-4(d)(7)(A-C)/40 CFR 262.20(e)(1-2))	Yes	No	
A: If yes, does the contractural agreement include the type of waste and frequency of shipments?	Yes	No	
B. If yes, is the vehicle used to transport the waste owned and operated by the reclaimer of the waste?	Yes	No	
C. If yes, is a copy of the agreement kept for a period of three years after termination of agreement?	Yes	No	NA
VIII. Is a current manifest showing revision date and burden disclosure statement used? (KAR 28-31-4(d)/40 CFR 262.20)	Yes	No	NA
A. If yes, does manifest(s) include:			
1. Generator EPA Identification Number (12 digit) and manifest document number (five digit)?	Yes	No	NA
2. Number of pages?	Yes	No	
3. Generator's name and mailing address?	Yes	No	
4. Generator's phone number?	Yes	No	
5. Transporter 1 Name?	Yes	No	
6. Transporter 1 EPA Identification Number?	Yes	No	
7. Transporter 2 Name?	Yes	No	NA
8. Transporter 2 EPA Identification Number?	Yes	No	NA
9. Name and site address of designated facility?	Yes	No	
10. Designated facility's EPA Identification Number?	Yes	No	
11. Waste Description (DOT shipping name, hazard class, and Identification Number)?	Yes	No	
12. Number and type of containers?	Yes	No	
13. Total quantity?	Yes	No	
14. Unit (weight or volume)?	Yes	No	
15. Special handling instructions?	Yes	No	NA
16. Generator's certification including waste minimization statement, generator's signature, and date?	Yes	No	
17. Name, signature, and date of transporter 1?	Yes	No	
18. Name, signature, and date of transporter 2?	Yes	No	NA
B. Does generator retain a copy of manifest(s) signed by both generator and transporter? (KAR 28-31-4(d)(4)(A-C))	Yes	No	
C. Does generator retain copy of manifest(s) signed and dated by T/S/D/ facility owner/operator for three years? (KAR 28-31-4(f)(1)(A))	Yes	No	
D. Has generator ever failed to receive a signed copy of a manifest within 45 days of initiating a shipment?	Yes	No	
1. If yes, was exception report(s) filed? (KAR 28-31-4(f)(4)(B))	Yes	No	NA
2. If yes, was copy retained for three years? (KAR 28-31-4(f)(1)(A))	Yes	No	NA

Manifesting Requirements: ☑ Adequate ☐ Inadequate ☐ NA

Land Disposal Restrictions Requirements (GLB)

I. Does facility generate any wastes subject to the land disposal restrictions requirements of 40 CFR 268, Subparts B and C? (Yes) No

List these wastes:

A. D001 D. F001

B. D007 E. F003

C. D008 F. F005

X. Is the waste(s) covered by a National Variance(s), Extension, or Petition? (40 CFR 268 5&6) Yes (No)

A. If yes, describe the variance, extension, or petition which applies:

XI. Is the waste covered by an exemption? (40 CFR 268.1(c)(2)) Yes (No)

A. If yes, does the generator provide a notice with the waste to the T/S/D facility stating that the waste is exempt from the land disposal restrictions? (40 CFR 268.7(a)(3)) ~~Yes No~~

XII. Does generator ship waste(s) covered by the Land Disposal Restrictions off-site for treatment or disposal? (Yes) No

A. If yes, does the generator provide a notification to the T/S/D facility that includes: EPA hazardous waste number(s), applicable treatment standards, manifest number(s), and waste analysis data, if available? (40 CFR 268.7) (Yes) No

B. If yes, is a copy of this notification kept for five years? (Yes) No

XIII. Does generator treat restricted waste(s) on-site so that they are below the land disposal restrictions standards? (If yes, fill out land disposal restrictions checklist.) Yes (No)

Land Disposal Restrictions Requirements:	☑ Adequate	☐ Inadequate	☐ NA

Pre-Transport Requirements (GPT)

XIV. Does generator package waste in accordance with DOT requirements? (KAR 28-31-4(e)(1)) (Yes) No NA

XV. Does generator label (flammable liquid, poison, etc.) each package in accordance with DOT requirements of 49 CFR 172.101 or 172.102? (KAR 28-31-4(e)(2)) (Yes) No NA

XVI. Does generator mark (consignee's or consignor's name and address, etc.) on each package in accordance with DOT requirements of 40 CFR 172 Subpart D? (KAR 28-31-4(e)(3)) (Yes) No NA

A. Does generator mark each container of 110 gallons or less as below? (KAR 28-31-4(e)(3)) (Yes) No NA

> Hazardous Waste—Federal Law Prohibits Improper Disposal.
> If found, contact the nearest police or public safety authority or the US EPA.
>
> Generator's Name and Address
>
> Manifest Document Number

XVII. Does generator have placards to offer to transporters in accordance with 49 CFR 172 Subpart F? (KAR 28-31-4(e)(4)) (Yes) No NA

XVIII. Does generator only use a transporter who is properly registered with the department? (KAR 28-31-4(c)(2)) — Yes (circled) No NA

Pre-Transport Requirements:	☑ Adequate	☐ Inadequate	☐ NA

Biennial Reports (GRR)

XIX. Has generator submitted a biennial report(s) to KDHE? (KAR 28-31-4(f)(2)) — Yes (circled) No NA

A. If yes, does generator retain copies for three years? (KAR 28-31-4(f)(1)(B)) — Yes (circled) No NA

(Note: compare quantities reported on last biennial report with the total quantity of all manifests for those years.)

Biennial Report Requirements:	☑ Adequate	☐ Inadequate

Special Conditions (GSC)

XX. Has generator received or transported any hazardous waste to or from a foreign source? (40 CFR Subpart E & F) — Yes No

A. If yes, has generator filed a notice with the Secretary of Health and Environment? — Yes No NA

B. Is waste manifested and signed by a foreign consignee? — Yes No NA

C. If generator transports waste out of the country, has confirmation of delivered shipment been received? — Yes No NA

Special Conditions Requirements:	☐ Adequate	☐ Inadequate	☐ NA

Storage Requirements (GPT)

XXI. Does generator temporarily store waste before transport? — Yes (circled) No

A. For 90 days or less? — Yes (circled) No NA

B. For more than 90 days? — Yes No (circled) NA

C. If waste is stored in containers:

1. Are containers marked with the words: "Hazardous Waste"? (KAR 28-31-4(g)(3) or (h)(1)(D)) — Yes (circled) No NA
2. Is the accumulation start date marked on each container? (KAR 28-31-4(g)(2) or (h)(1)(C)) — Yes (circled) No NA
3. Are all containers holding hazardous waste closed during storage except when necessary to add or remove waste? (KAR 28-31-4(g)(1) or (h)(1)(B)) — Yes (circled) No NA
4. Does generator conduct weekly inspections of containers for signs of leakage and/or deterioration caused by corrosion or other factors? (KAR 28-31-4(k)) — Yes (circled) No NA
   a. If yes, are these inspections documented in a log that includes date and time of inspection, full name of inspector, notations of observations, and date and nature of remedial actions? (KAR 28-31-4(k)/40 CFR 265.15(d)) — Yes (circled) No NA

5. Are containers holding ignitible or reactive waste(s) located at least 15 meters (50 feet) from the facility's property line? (EPA Generator and T/S/D Only) (KAR 28-31-4(g)(1) / 40 CFR 265.176) *Variance applied for and granted. — Yes * (No) NA
6. If waste in containers is incompatible with other materials stored nearby, are the containers separated from the other materials by means of a dike, berm, wall, or other means? (KAR 28-31-4(g)(1) or (h)(1)(B) / 40 CFR 265.177) — (Yes) No NA
7. Does generator have any satellite storage areas? (KAR 28-31-4(j)) — (Yes) No NA

If yes,

a. Is the waste stored in a container at or near the point of generation and under the control of the operator of the process generating the waste? — (Yes) No
b. Is the container in good condition and closed except to add or remove waste? — (Yes) No
c. Is the container marked with the words: "Hazardous Waste"? — (Yes) No
d. Is the container marked with the accumulation start date at the time it becomes full? — (Yes) No
e. Is the full container moved to the storage area within three days after it became full? — (Yes) No

(If waste(s) is placed in tanks, piles, or surface impoundments, complete the appropriate inspection checklist.)

Storage Requirements:	☑ **Adequate**	☐ **Inadequate**	☐ **NA**

Kansas Generator's Emergency Preparedness (GSQ)

XXII Has facility named one employee as emergency coordinator? (KAR 28-31-4(h)(1)(E)) — Yes No

A. Is the emergency coordinator available to respond to an emergency by reaching the facility within a short period of time? — Yes No

B. Is the emergency coordinator or his/her designee prepared to respond to any emergencies (fires, spills, or releases) that arise? — Yes No

C. Is the emergency coodinator familiar with the reporting requirements of KAR 28-31-4(h)(2)? — Yes No

XXIII. Is the following information posted next to at least one telephone which is immediately assessable in an emergency? (KAR 28-31-4(h)(1)(F))

A. Name and telephone of emergency coordinator? — Yes No

B. Location of fire extinguishers, fire alarms, or spill control material, if available? — Yes No

C. Telephone number of fire department unless the facility has a direct alarm? — Yes No NA

XXIV. Have employees been trained so that they are familiar with proper waste handling and emergency procedures that are relevant to their responsiblities during normal facility operations? (KAR 28-31-4(h)(1)(G)) — Yes No

A. Is this training documented in any way? — Yes No

Kansas Generator's Emergency Preparedness Requirements :	☐ **Adequate**	☐ **Inadequate**	☑ **NA**

(If Kansas generator, stop here.)

Preparedness and Prevention (GPT)

X. If appropriate, based upon the nature and quantity of waste(s) generated and stored at the facility, is the facility equipped with:

A. Internal communication or alarm system easily accessable in case of emergency? (KAR 28-31-4(g)(4)/40 CFR 265.32(a)) — Yes No NA

B. Telephone or hand-held two-way radio capable of summoning emergency response personnel? (KAR 28-31-4(g)(4)/40 CFR 265.32(b)) — Yes No NA

C. Portable fire extinguisher, fire control equipment, spill control equipment, and decontamination equipment? (KAR 28-31-4(g)(4)/40 CFR 265.32(c)) — Yes No NA

D. Is water of adequate volume provided for hose streams, foam producing equipment, sprinklers, etc.? (KAR 28-31-4(g)(4)/40 CFR 265.32(d)) — Yes No NA

E. Is this equipment (A-C above) tested and maintained to ensure its proper operation? (KAR 28-31-4(g)(4)/40 CFR 265.33) — Yes No NA

XXVI. Does a check of the facility show sufficient aisle space to allow unobstructed movement of personnel and equipment? (KAR 28-31-4(g)(4)/40 CFR 265.35) — Yes No NA

XXVII. If appropriate for the type(s) of waste handled, has the owner/operator made the following arrangements:

A. Familiarized the local emergency authorities with the facility, waste(s) handled, entrances and exits? (KAR 28-31-4(g)(4)/40 CFR 265.37(a)(1)) — Yes No NA

B. Designated one authority where one or more police or fire departments might respond to an emergency? (KAR 28-31-4(g)(4)/40 CFR 265.37(a)(2)) — Yes No NA

C. Made agreements with local emergency response teams, emergency response contractors, and equipment suppliers? (KAR 28-31-4(g)(4)/40 CFR 265.37(a)(3)) — Yes No NA

D. Familiarized local hospitals with the properties of hazardous waste(s) handled and types of injuries which could result from fires, explosions, or releases at the facility? (KAR 28-31-4(g)(4)/40 CFR 265.37(a)(4)) — Yes No NA

XXVIII. In cases where local authorities decline to enter into such arrangements, is the refusal entered in the operating record? (KAR 28-31-4(g)(4)/40 CFR 265.37(b)) — Yes No NA

Preparedness and Prevention Requirements:	☑ Adequate	☐ Inadequate	☐ NA

Personnel Training (GPT)

XXIX. Has the owner/operator established a hazardous waste management training program? (KAR 28-31-4(g)(4)/40 CFR 265.16) — Yes No

A. Is the program directed by a person trained in hazardous waste management? (40 CFR 265.16(a)(2)) — Yes No

B. Are new personnel trained within six months after their employment? (40 CFR 265.16(b)) — Yes No

C. Are new employees supervised until training is completed? (40 CFR 265.16(b)) — Yes No

D. After initial training, are employees trained on an annual basis? (40 CFR 265.16(c)) — Yes No

E. Does the facility maintain the following documents and records:

1. Job title and job description for each position related to hazardous waste management? (40 CFR 265.16(d)(1)&(2)) — Yes No
2. Description of type and amount of training to be given each person? (40 CFR 265.16(d)(3)) — Yes No
3. Records of training given to facility personnel? (40 CFR 265.16(d)(4)) — Yes No

Personnel Training Requirements:	☑ Adequate	☐ Inadequate

Contingency Plan (GPT)

X. Does the facility have a contingency plan? (KAR 28-31-4(g)(4)/40 CFR 265 Subpart D) Yes No

If yes,

A. Does the plan list the name(s), home address, and phone number of designated emergency coordinator(s) in the order in which they should be contacted? (40 CFR 265.52(d)) Yes No

B. Is an emergency coordinator available at all times? (40 CFR 265.55) Yes No

C. Does the plan describe emergency actions facility personnel must take to respond to fires, explosions, or releases of hazardous waste? (40 CFR 265.52(a)) Yes No

D. Does the plan describe arrangements made with emergency response agencies? (40 CFR 265.52(c)) Yes No

E. Does the plan include a list of all emergency equipment at the facility, its location, a physical description of each item on the list, and a brief outline of its capabilities? (40 CFR 265.52(e)) Yes No

F. Does the plan include an evacuation plan for facility personnel that describes signals and evacuation routes? (40 CFR 265.52(f)) Yes No

G. Have copies of the plan been provided to outside emergency response agencies and hospitals? (40 CFR 265.53) Yes No

The Contingency Plan for H & H Parts Company contained all the necessary information However, the format is under revision and a copy of the revised Plan is requested.

Contingency Plan Requirements:	☐ **Adequate**	☒ **Inadequate**

(If EPA generator, stop here.)

Transporter Requirements (TRR)

1. Does this facility transport hazardous waste? Yes No

   If yes,

   A. Are they registered as a hazardous waste transporter in the state of Kansas? (KAR 28-31-6 (b)) Yes No

   B. Does transporter comply with the manifest requirements of 40 CFR Part 263.20 except 263.20(h)? Yes No

   C. Does transporter retain a copy of the manifest for three years? (40 CFR 263.22(a)) Yes No

   D. Does this facility transport hazardous waste subject to the manifest exemption of KAR 28-31-4(d)(7)? Yes No

   If yes,

   1. Does the transporter record the name, address, and EPA ID Number of the generator; quantity of waste shipped; DOT shipping information; and the date the waste was accepted in a log or shipping paper? Yes No
   2. Does the transporter carry this record when transporting the waste to the reclamation facility? Yes No
   3. Does the transporter retain these records for a period of three years after the termination or expiration of the agreement? Yes No

Transporter Requirements:	☐ Adequate	☐ Inadequate	☐ NA

Additional Information and Conclusions:

H & H Parts uses the unique 5-digit "state manifest document number" on corresponding LDR notices. I advised them to use their own unique "generator manifest document no." as well for better tracking purposes.

Personnel Training had been conducted in 1991, however, at the time of inspection, the 1992 annualtraining had not been scheduled. H & H Parts was advised to conduct the required trainging in a timely manner and to give special attention to the requirements for hazardous waste management training.

From the perspective of previous inspection vs this inspection, H & H Parts has made significant progress in compliance, especially in the areas of documentation and actual waste management.

State of Kansas

Joan Finney Governor

Department of Health and Environment

Robert Harder, Secretary

June 1, 1994

Norman Manning
B G Aerostructures Inc.
1234 Wellington Place
Wichita, KS 67203

Re: EPA I.D. Number KSD007236425

Dear Mr. Manning:

This letter is to acknowledge the subsequent Notification of Hazardous Waste Activity Form your firm submitted on May 18, 1994.

We have updated our records to reflect the change made in facility name from Chromalloy Aircraft Structures to B G Aerostructures Inc., contact person, legal owners name, generator status to a Kansas generator, and waste codes to include D002.

A subsequent notification shall be submitted to this office whenever the information originally submitted to obtain an EPA I.D. Number has changed. If I can be of further assistance, please contact me at (913) 296-0005.

Sincerely,

Linda Prockish

Linda Prockish
Hazardous Waste Section
Bureau of Waste Management

LCP/cm

C Mark Bradbury - DEA/SCDO/Waste Programs

Division of Environment, Bureau of Waste Management, Forbes Field Building 740, Topeka, Kansas 66620-0001

Telephone: (913) 296-0005
Fax Number: (913) 296-1592

formerly Chromalloy Aviva, & Structures

Please refer to the instructions for filing this notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

RECEIVED
Date Received (For Official Use Only)
MAY 20 1994
OFFICE OF WASTE MANAGEMENT

I. Installation's EPA ID Number (Mark "X" in the appropriate box)

☐ A. First Notification ☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007236425

II. Name of Installation (Include company and specific site name)

BIG AEROSTRUCTURES INC

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203

County Code: 173 County Name: SEDGWICK SCDD 02

IV. Installation Mailing Address (See instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): MANNING (first): NORMAN

Job Title: LEAD MAINTENANCE Phone Number (area code and number): 316-262-1494

VI. Installation Contact Mailing Address (See instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

VII. Ownership (See instructions)

A. Name of Installation's Legal Owner: ROBERT GILBERT

Street, P.O. Box, or Route Number: 1234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203

Phone Number (area code and number): 316-262-1494

B. Land Type: P C. Owner Type: P D. Change of Owner: Yes ☒ No ☐ (Date Changed) Month Day Year: 05 01 94

KDHE FORM 8700-12 (7-90) PREVIOUS EDITION OBSOLETE.

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity

1. Generator (See instructions)
   - ☐ Greater than 1000 kg/mo (2200 lbs)
   - ☒ 25 to 1000 kg/mo (55-2200 lbs)
   - ☐ Less than 25 kg/mo (55 lbs)
2. Transporter (Indicate Mode)
   - ☐ For own waste only
   - ☐ For commercial purposes

   Mode of Transportation
   - ☐ Air
   - ☐ Rail
   - ☐ Highway
   - ☐ Water
   - ☐ Other-specify
3. ☐ Treater, Storer, Disposer (at installation) Note: A permit is required for this activity. (See instructions.)
4. ☐ Hazardous Waste Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketers

   Burner-indicate device(s) - Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
5. ☐ Underground Injection Control

B. Used Oil Fuel Activities

1. ☐ Off-Specification Used Oil Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketer
   - ☐ Burner-indicate device(s)

   Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
2. ☐ Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles.

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic (List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminants)				
☒	☒	☐	D007	D008			

B. Listed Hazardous Wastes.

1	2	3	4	5	6
F001	F003	F005			
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature	Name and Official Title (type or print)	Date Signed
Bob Gilbert	Robert Gilbert President/CEO	5-18-94

XI. Comments

MAIL COMPLETED FORM TO: KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
BUREAU OF AIR & WASTE MANAGEMENT
FORBES FIELD, BLDG. 740
TOPEKA, KS 66620-0001

KDHE FORM 8700-12 (7-90) PREVIOUS EDITION IS OBSOLETE.

B G Aerostructures
1234 Wellington Place
[illegible]

State of Kansas

Joan Finney Governor

Department of Health and Environment

Robert Harder, Secretary

June 28, 1994

John Ballinger
~~Chromalloy Aircraft Structures~~ BG Aerostructures, Inc
1234 Wellington Place
Wichita, KS 67203

Re: Variance Request Number 90-05
EPA I.D. Number KSD007236425

Dear Mr. Ballinger:

In accordance with K.A.R. 28-31-13(b) the public comment period regarding your request for a renewal of the variance for K.A.R. 28-31-4(g)(1) and 40 CFR 265.176 has been completed. No public comments were received.

Therefore, in accordance with K.A.R. 28-31-13(c) your request for a renewal variance is approved. The variance shall become effective on June 30, 1994 and shall remain in effect until June 30, 2001.

A written request must be submitted prior to the expiration date in order to extend the variance as required by K.A.R. 28-31-13(c).

If you have any questions regarding this matter please contact Ms. Candy Williamson at (913) 296-6898 who is most familiar with this subject.

Sincerely,

Robert C. Harder,
Secretary

CMW/cm

C Mark Bradbury - DEA/SCDO/Waste Programs

ivision of Environment, Bureau of Waste Management, Forbes Field Building 740, Topeka, Kansas 66620-0001
Telephone: (913) 296-6898
Fax Number: (913) 296-1592

Printed on Recycled Paper

CONCURRENCE SHEET
For
Bureau of Waste Management

This concurrence sheet with attachments is being circulated for your review and concurrence on the following issues(s):

Variance from K.A.R. 28-31-4 (g)(1) and 40 CFR 265.176, which requires the storage of containers holding ignitable hazardous waste must be located at least 15 meters (50 feet) from the facility's property line.

Company or Institution: ~~Chromalloy Aircraft Structures~~ - BG Aerostructures Inc.

Mailing Address: 1234 Wellington Place
Wichita, KS 67203

Location Address (if different from above): _____

CONCURRENCES

RECEIVED
JUN 27 1994
SECRETARY OF
DEPT. of HEALTH & ENVIRONMENT

Check Originating Section:

_____ Technical Support Section

X Hazardous Waste Section

_____ Solid Waste Section

_____ Administration

UNIT	Author	Unit Chief	Section Chief			Bureau Manager	Legal Office	Office of General Council	Division Director	Sec.
			TS	HW	SW					
NAME	Sandy Williams			[illegible]		Bill Bider	Bill Anderson		Jones	RCH
DATE	6/20/94			6/20/94		6-21-94	6-21-94		24 JUN 94	6/27/94

Revised 10/26/93

Department of Health and Environment
Approval of Variance from Hazardous Waste Regulations

Therefore, in accordance with K.A.R. 28-31-13(b), KDHE announces its decision to approve this request for a variance and not to include any special conditions. The variance shall become effective on June 30, 1994 and shall remain in effect until June 30, 2001.

Robert C. Harder,
Secretary of Health and Environment

State of Kansas

Joan Finney Governor

Department of Health and Environment

Robert Harder, Secretary

current as of 27 June 96

June 1, 1994

Norman Manning
B G Aerostructures Inc.
1234 Wellington Place
Wichita, KS 67203

Re: EPA I.D. Number KSD007236425

Dear Mr. Manning:

This letter is to acknowledge the subsequent Notification of Hazardous Waste Activity Form your firm submitted on May 18, 1994.

We have updated our records to reflect the change made in facility name from Chromalloy Aircraft Structures to B G Aerostructures Inc., contact person, legal owners name, generator status to a Kansas generator, and waste codes to include D002.

A subsequent notification shall be submitted to this office whenever the information originally submitted to obtain an EPA I.D. Number has changed. If I can be of further assistance, please contact me at (913) 296-0005.

Sincerely,

Linda Prockish

Linda Prockish
Hazardous Waste Section
Bureau of Waste Management

LCP/cm

C Mark Bradbury - DEA/SCDO/Waste Programs

Division of Environment, Bureau of Waste Management, Forbes Field Building 740, Topeka, Kansas 66620-0001

Telephone: (913) 296-0005
Fax Number: (913) 296-1592

Printed on Recycled Paper

B.G. Aerostructures

Weekly Drum Inspection Check list

		Yes	No
1.	Are stored drums closed? (If no explain in comments section, example - bungs or lids in place?)	✓	
2.	Are drums in good condition? (Example - rust, leaks, corrosion, etc.)	✓	
3.	Is the waste compatible with the drums and/or drum liners?	✓	
4.	Are drums holding igniteable or reactive waste located in accordance with KDHE variance number 90-05? (Effective June 30, 1994 and remains in effect untill June 30, 2001.)	✓	
5:	Are drums holding incompatible waste kept apart by physical barrier or sufficient distance?	✓	
6.	Is there sufficient isle space between drum rows to perform inspections?	✓	
7.	Are drums properly labeled?	✓	
8.	Is beginning accumulation date on label?	✓	
9.	Is fire control equipment and spill control equipment present in drum storage area?	✓	
10.	Is this equipment tested to assure its proper operation?	✓	

Comments:

time?

Print Name _____ Date 6-17-96 Signature _____

Inventory of Safety Storage Building

New Material - Side One	Quantity in Gallons
Methyl Ethyl Keytone	55
Trichloroethylene	70
Isopropyl Alcohol	0

Hazardous Waste - Side Two	Quantity in Gallons
Waste Paint Filter Material - Solid	55
Waste Paint Flammable liquid	0
Waste Trichloroethylene	0

Environmental Management, Inc.
P.O. Box 3940
Edmond, OK 73083-3940

Shipping Ticket

1. Generator's US EPA ID No.: N/A
Manifest Document No.: 96C11
2. Page 1 of 1
Document Number: 06056

3. Generator's Name and Mailing Address
BG Aerostructures
1234 Wellington Place / Wichita, KS 67203
4. Generator's Phone (316) 262-1494

A.
B. State Generator's ID

5. Transporter 1 Company Name: McCorkle Truck Lines
6. US EPA ID Number: OKD044378784
C. State Transporter's ID: 3375
D. Transporter's Phone: 405/677-8349

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Environmental Management, Inc.
Rt. 1, Box 102A
Guthrie, OK 73044
10. US EPA ID Number: OKD982293334
G. State Facility's ID: 42003
H. Facility's Phone: 405/282-8510

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Nonhazardous Coolant and Oil	004	DM	01600	G	
b. Nonhazardous Floor Dry and Oil	001	DM	00350	G	
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY CONTACT: E.M.I. 405/282-8510 24 HRS.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.

Printed/Typed Name: Norman Manning
Signature: Norman Manning
Date (Month Day Year): 03 14 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Tim Dewburn
Signature: [illegible]
Date (Month Day Year): 03 14 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date (Month Day Year):

FACILITY

Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: H.W. Montgomery
Signature: H.W. Montgomery
Date (Month Day Year): 03 14 96

Environmental Management, Inc.
P.O. Box 3940
Edmond, OK 73083-3940

Shipping Ticket

1. Generator's US EPA ID No. [illegible] 96002 | Manifest Document No.
2. Page 1 of 1
Document Number 06311

3. Generator's Name and Mailing Address
[illegible]
1234 Washington Place / Wichita, KS 67203
4. Generator's Phone (316) 264-1494

A.
B. State Generator's ID

5. Transporter 1 Company Name: Wichita Truck Lines
6. US EPA ID Number: [illegible]
C. State Transporter's ID 3373
D. Transporter's Phone 405/677-8340

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Environmental Management, Inc.
Pt. 1, Box 102A
Guthrie, OK 73044
10. US EPA ID Number: [illegible]
G. State Facility's ID 62003
H. Facility's Phone 405/282-8510

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14 Unit Wt/Vol	I. Waste No.
a. Nonhazardous Coolant and Oil	002	DM	400	G	
b. Nonhazardous Floor Dry and Oil	001	DM	350	G	
c.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY CONTACT: E.M.I. 405/282-8510 24 HRS.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.

Printed/Typed Name: Norman Blanton | Signature | Date: Month 06 Day 24 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Tim Newhouse | Signature | Date: Month 06 Day 24 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Date: Month Day Year

PERMA-FIX
ENVIRONMENTAL SERVICES

CERTIFICATE OF MATERIAL HANDLING

Perma-Fix of Memphis Incorporated is a corporation organized under the state of Tennessee.

Therefore, under the authority of the state of Tennessee Department of Environment and Conservation, we hereby certify that this waste, as defined on said Hazardous Waste Manifest Number was received by Perma-Fix of Memphis Incorporated (EPA I.D. Number TND99-127-9480) and processed in accordance with 40 CFR 265.

Manifest #: 96001
Received Date: 03/14/96

Treatment Method and Code: A-T50 B-M053

Issued to:
BG AEROSTRUCTURES
1234 WELLINGTON PLACE
WICHITA, KS 67203

Pamela Sullivan
Pamela Sullivan
Customer Service

P.O. BOX 1533 · MEMPHIS, TN 38101 · TEL. (901) 774-2340 · FAX (901) 774-9953
EPA-PERMITTED TSD FACILITY (TND991279480) · HAZARDOUS WASTE MANAGEMENT · TRANSPORTATION

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. K S D 0 0 7 2 3 6 4 2 5 — Manifest Document No. 96001

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Bo Aerostructures
1234 Wellington Place / Wichita, KS 67203

4. Generator's Phone (316) 262-1494

A. State Manifest Document Number: 03156

B. State Generator's ID

5. Transporter 1 Company Name: McCorkle Truck Lines, Inc.

6. US EPA ID Number: O K D 0 4 4 3 7 8 7 8 4

C. State Transporter's ID: 3375

D. Transporter's Phone: 405/677-8349

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Perma-Fix of Memphis, Inc.
901 E. Bodley
Memphis, TN 38106

10. US EPA ID Number: T N D 9 9 1 2 7 9 4 8 0

G. State Facility's ID: TND991279480

H. Facility's Phone: 901/774-2050

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Material, 3, UN1263, P.G. II (EPA D001, D007, D008, F003, F005) RQ 1 lb.	X	001	DM	00500	P	F005 D008, F003 D001, D007
b.	Hazardous Waste Solid, N.O.S. (Contains Chromium) 9, NA3077, P.G. III (EPA D007) RQ 10 lbs.	X	001	DM	00145	P	D007
c.							
d.							

J. Additional Descriptions for Materials Listed Above
11a) 01056EM
11b) 01287EM

K. Handling Codes for Wastes Listed Above
T50
M053

15. Special Handling Instructions and Additional Information

EMERGENCY CONTACT: E.M.I. 405/282-8510 24 HRS.

****INVOICE TO:** Environmental Management, Inc. / P.O. Box 3940 / Edmond, OK 73083-3940

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: Norman Manning — Signature: [signature] — Month Day Year: 03 14 96

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: Tim Newburn — Signature: [signature] — Month Day Year: 03 14 96

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Month Day Year

FACILITY — 19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. — Printed/Typed Name: Pam Colvin — Signature: [signature] — Month Day Year: 03 21 96

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. K S D 0 0 7 2 3 6 4 2 5 — Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
BG Aerostructures
1234 Wellington Place / Wichita, KS 67203

4. Generator's Phone (316) 264-1494

A. State Manifest Document Number 03184

B. State Generator's ID

5. Transporter 1 Company Name
McCorkle Truck Lines

6. US EPA ID Number O K D 0 4 4 3 7 8 7 8 4

C. State Transporter's ID 3375

D. Transporter's Phone 405/677-6349

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Perma-Fix of Memphis, Inc.
901 E. Bedley
Memphis, TN 38106

10. US EPA ID Number T N D 9 9 1 2 7 9 4 8 0

G. State Facility's ID TND991279480

H. Facility's Phone 901/774-2050

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Paint Related Material, 3, UN1263, P.G. II (EPA D001, D007, F003, F005, D008) RQ 1 lb.	X	001	DM	1500	P	D008 F003, F005 D001, D007
b.	Waste Trichloroethylene, 6.1, UN1710, P.G. III (EPA F002, D040) RQ 100 lbs.	X	001	DM	1700	P	F002, D040
c.							
d.							

Additional Descriptions for Materials Listed Above
11a) 01056
11b) 01166

K. Handling Codes for Wastes Listed Above
S01, S02, T50

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT: E.M.I. 405/282-8510 24 HRS.

**INVOICE TO: Environmental Management, Inc. / P.O. Box 3940 / Edmond, OK 73083-3940

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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GENERATOR

Printed/Typed Name: Norman Manning | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials | Month Day Year

Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

LDR Applicability

1. Does the waste identified on this form meet all applicable treatment standards? YES___ NO ✓

   If yes, complete the applicable certification statement below; if no, complete item 2 below.

2. Is the waste identified above affected by a case by case extension under 40 CFR 268.5 or a nationwide variance under 40 CFR 268 Subpart C or an exemption under § 268.6 or an extension under § 268.1(c)? YES___ NO ✓

   If yes, complete item 3 below; if no, complete signature section below.

3. Describe any extension that applies to waste in this shipment including dates and applicable waste codes and complete signature section below.

Certification Statements - Restricted Waste Meeting Treatment Standards

Mark appropriate box and complete signature section below.

Generator Certification

☒ I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR part 268, subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(a)(2)(ii))

Lab Pack Certification

☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes which have not been excluded under appendix IV to 40 CFR part 268 or solid wastes not subject to regulation under 40 CFR part 261. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment. (§ 268.7(a)(8))

Treatment Process Performance Standards Certification

☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268, subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(i))

Treatment Standards Certification

☐ I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(ii))

Combustion (Incineration/Fuels Substitution) Certification

☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR part 264, subpart O or 40 CFR part 265, subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents, despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(iii))

Decharacterization Certification

☐ I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(iv))

Alternative Standards for Debris Certification

☐ I certify under penalty of law that the debris have been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment. (§ 268.7(d)(3)(iii))

Notification/Certification Signature Section

I, the undersigned, certify all information included in this LDR Notification/Certification, including (if applicable), the certification indicated above, is true, accurate, and complete.

Name:	Title: Lead Mgr.	Date: 6-4-96

Check the applicable treatment standard for the regulating constituent(s), TC waste constituent(s), underlying constituent(s), under the applicable waste subcategory (i.e., Treatment Standards for Hazardous Waste or UTS and waste water/non-waste water; or California List).

	Treatment Standards for Hazardous Wastes				Universal Treatment Standards mg/kg* unless noted mg/l TCLP			
Waste Constituent(s)	Waste Water		Non-Waste Water		Waste Water		Non-Waste Water	
Acetone					0.28		160	
Benzene					0.14		10	
N-Butyl Alcohol					5.6		2.6	
Carbon Disulfide					3.8		4.8 mg/l TCLP	
Carbon Tetrachloride					0.057		6.0	
Chlorobenzene					0.057		6.0	
Cresol-Mixed Isomers: Cresylic Acid					NA		NA	
o-Cresol					0.11		5.6	
m-Cresol					0.77		5.6	
p-Cresol					0.77		5.6	
Cyclohexanone					0.36		0.75 mg/l TCLP	
m-Dichlorobenzene					0.036		6.0	
Ethyl acetate					0.34		33	
Ethyl ether					0.17		160	
Ethyl benzene					0.057		10	
Isobutyl alcohol					5.6		170	
Methanol					5.6		0.75 mg/l TCLP	
Methylene chloride					0.089		30	
Methyl ethyl ketone					0.28		36	
Methyl isobutyl ketone					0.14		33	
Methyl methacrylate					0.14		160	
Nitrobenzene					0.068		14	
2-Nitropropane		INWETOX or CHOXDI; or CARBN: INCIN		INCIN	NA		NA	
Pyridine					0.014		16	
1,2,4,5-Tetrachlorobenzene					0.055		14	
Tetrachloroethylene					0.056		6.0	
Toluene					0.080		10	
1,1,1-Trichloroethane					0.054		6.0	
1,1,2-Trichloroethane					0.054		6.0	
Trichloroethylene					0.054		6.0	
Trichloromonofluoromethane					0.020		30	
1,1,2-Trichloro-1,2,2-trifluoroethane					0.057		30	
2-Ethoxyethanol		BIODG; or INCIN		INCIN	NA		NA	
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)					0.32		30	
Arsenic					1.4		5.0 mg/l TCLP	
Barium					1.2		7.6 mg/l TCLP	
Cadmium					0.69		0.19 mg/l TCLP	
Chromium (Total)			X		2.77	X	0.86 mg/l TCLP	
Lead					0.69		0.37 mg/l TCLP	
Mercury-Nonwastewater from Retort					NA		0.20 mg/l TCLP	
Mercury-All Others					0.15		0.025 mg/l TCLP	
Selenium					0.82		0.16 mg/l TCLP	
Silver					0.43		0.30 mg/l TCLP	

California List Constituent(s) - Treatment Standard	Prohibition
Cyanides - Cyanides Destruction/Stabilize	1,000
Arsenic - Metals Recovery/Solidification	500
Cadmium - Metals Recovery/Solidification	100
Chromium VI - Metals Recovery/Solidification	500
Lead - Metals Recovery/Solidification	500
Mercury - Metals Recovery/Solidification	20
Nickel - Metals Recovery/Solidification	134
Selenium - Metals Recovery/Solidification	100
Thallium - Metals Recovery/Solidification	130
Liquids with pH <= 2.0 - Neutralize/Stabilize	—
Liquids with PCBs - Incineration/High Efficiency Boiler	50 ppm
Wastes containing HOC - Incineration/Carbon Adsorption/Solvent Extraction	1,000 mg/kg

GENERATOR NOTIFICATION/CERTIFICATION
SHIPMENT OF WASTES SUBJECT TO
LAND DISPOSAL RESTRICTIONS (40 CFR PART 268)

GENERATOR: BG Aerostructures EPA I.D. No.: KSD007236425

MANIFEST NO.: 03184

This notification/certification is submitted by the generator referenced above to Perma-Fix Environmental Services, Inc. (Check location: ☐ Dayton, OH; ☐ Gainesville, FL.; ☒ Memphis, TN; or ☐ Tulsa, OK) in accordance with the Land Disposal Restrictions (effective December 19, 1994) specified under 40 CFR Part 268 Subpart D. The following information (including, where applicable, identification of hazardous constituents on page 2) is required for each shipment of EPA Hazardous Waste (mark and complete as applicable):

☒ I certify that this waste does not exhibit the characteristic of reactivity (D003)

☒ I certify that this waste does not exhibit any pesticide characteristic (D012, D013, D014, D015, D016, D017)

EPA Wastes Codes: F002 D040 _____ _____ _____ _____

☐ For EPA Characteristic Waste Codes: D001, High TOC Ignitable Subcategory.

If applicable, identify EP Toxic metals on Page 2 of this form and check one of the following:

☐ I certify that this waste has been treated in accordance with the applicable technology as specified in 40 CFR 268.40, Treatment Standards for Hazardous Wastes (attach supporting data and check one of the following):

☐ RORGS ☐ CMBST

☐ I notify that this waste has not been treated in accordance with the applicable technology as specified in 40 CFR 268.40, Treatment Standards for Hazardous Wastes and must be treated by the specified technology (check one of the following) prior to land disposal;

☐ RORGS ☐ CMBST

☐ For EPA Characteristic Waste Codes: D001 (except High TOC), D002, D012 through D043.

Underlying hazardous constituents are any constituents in 40 CFR 268.48 which are reasonably expected to be present at levels above the Universal Treatment Standards (UTS) as specified in § 268.48, Table UTS at the point of generation. The UTS apply to the underlying hazardous constituent(s) present in ignitable, corrosive, or TC characteristic wastes, as well as the individual constituent responsible for the TC designation. Identify the underlying constituent(s) on Page 2 of this form and check one of the following:

☐ I certify that this waste does not contain any underlying constituent(s) (identified in 40 CFR Part 268.48, Table UTS) at levels =/> than UTS levels at the point of generation. This certification is supported by:

☐ Analytical Data (attach applicable analytical data); or ☐ Generator knowledge.

☐ I certify that this waste contains, at the point of generation, only the underlying UTS constituent(s) indicated on page 2, at levels =/> than UTS levels. This certification is supported by:

☐ Analytical Data (attach applicable analytical data), or ☐ Generator knowledge; and

☐ I certify that this waste meets the Universal Treatment Standards for all underlying constituent(s) (identified on Page 2 of this form) reasonably expected to be present in the waste (attach supporting analytical data); or

☐ I notify that this waste does not meet the UTS for the underlying constituent(s) (identified on Page 2 of this form), and therefore, must be treated to meet applicable UTS prior to land disposal.

☐ For EPA Metal Waste Codes: D004 through D011

Identify EP toxic metals on Page 2 of this form and check one of the following:

☐ I certify that this waste meets the Treatment Standards (TS) for the characteristic constituent(s) (identified on Page 2 of this form) present in the waste (attach supporting analytical data);

☐ I notify that this waste does not meet the TS for the characteristic constituent(s) (identified on Page 2 of this form), and therefore, must be treated to meet applicable TS prior to land disposal.

☐ For EPA Waste Codes (mark one):

☐ Spent Solvents (F001, F002, F003, F004, and F005);
☐ Multisource Leachate (F039); or
☐ Other listed waste.

For Multisource Leachate (F039), identify underlying hazardous constituent(s) on Page 2 of this form and/or for all listed wastes check one of the following:

☐ I certify that this waste meets the Treatment Standards for Hazardous Waste (40 CFR 268.40) for all regulated hazardous constituent(s) (identified on Page 2 of this form) in the waste (attach supporting analytical data);

☐ I notify that this waste does not meet the Treatment Standards for Hazardous Waste (40 CFR 268.40) for all regulated hazardous constituent(s) (identified on Page 2 of this form), and therefore, must be treated to meet applicable treatment standards prior to land disposal.

☐ RCRA Section 3004(d) California List Wastes:

List the prohibited constituent(s) (and prohibition levels) on Page 2 of this form and check one of the following:

☐ I certify that this waste contains less than the prohibition levels of California List Constituent(s) (insert information on Page 2 of this form) in the waste (attach supporting analytical data);

☐ I notify that this waste contains more than the prohibition levels of California List Constituent(s) (insert information on Page 2 of this form), and therefore, must be treated to meet applicable treatment standards prior to land disposal.

LDR Applicability

1. Does the waste identified on this form meet all applicable treatment standards? YES___ NO X

   If yes, complete the applicable certification statement below; if no, complete Item 2 below.

2. Is the waste identified above affected by a case by case extension under 40 CFR 268.5 or a nationwide variance under 40 CFR 268 Subpart C or an exemption under § 268.6 or an extension under § 268.1(c)? YES___ NO X

   If yes, complete Item 3 below; if no, complete signature section below.

3. Describe any extension that applies to waste in this shipment including dates and applicable waste codes and complete signature section below.

Certification Statements - Restricted Waste Meeting Treatment Standards

Mark appropriate box and complete signature section below.

Generator Certification

☒ I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR part 268, subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(a)(2)(ii))

Lab Pack Certification

☐ I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes which have not been excluded under appendix IV to 40 CFR part 268 or solid wastes not subject to regulation under 40 CFR part 261. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment. (§ 268.7(a)(8))

Treatment Process Performance Standards Certification

☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268, subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(i))

Treatment Standards Certification

☐ I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(ii))

Combustion (Incineration/Fuels Substitution) Certification

☐ I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR part 264, subpart O or 40 CFR part 265, subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents, despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(iii))

Decharacterization Certification

☐ I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (§ 268.7(b)(5)(iv))

Alternative Standards for Debris Certification

☐ I certify under penalty of law that the debris have been treated in accordance with the requirements of 40 CFR 268.45. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment. (§ 268.7(d)(3)(iii))

Notification/Certification Signature Section

I, the undersigned, certify all information included in this LDR Notification/Certification, including (if applicable), the certification indicated above, is true, accurate, and complete.

Name: [illegible]	Title: Lead Materiat	Date:
X		

Check the applicable treatment standard for the regulating constituent(s), TC waste constituent(s), underlying constituent(s), under the applicable waste subcategory (i.e., Treatment Standards for Hazardous Waste or UTS and waste water/non-waste water; or California List).

	Treatment Standards for Hazardous Wastes				Universal Treatment Standards mg/kg unless noted mg/l TCLP			
Waste Constituent(s)	Waste Water		Non-Waste Water		Waste Water		Non-Waste Water	
Acetone			X		0.28	X	160	
Benzene					0.14		10	
N-Butyl Alcohol					5.6		2.6	
Carbon Disulfide					3.8		4.8 mg/l TCLP	
Carbon Tetrachloride					0.057		6.0	
Chlorobenzene					0.057		6.0	
Cresol-Mixed Isomers: Cresylic Acid					NA		NA	
o-Cresol					0.11		5.6	
m-Cresol					0.77		5.6	
p-Cresol					0.77		5.6	
Cyclohexanone					0.36		0.75 mg/l TCLP	
m-Dichlorobenzene					0.036		6.0	
Ethyl acetate					0.34		33	
Ethyl ether					0.12		160	
Ethyl benzene					0.057		10	
Isobutyl alcohol					5.6		170	
Methanol					5.6		0.75 mg/l TCLP	
Methylene chloride					0.089		30	
Methyl ethyl ketone			X		0.28	X	36	
Methyl isobutyl ketone					0.14		33	
Methyl methacrylate					0.14		160	
Nitrobenzene					0.068		14	
2-Nitropropane		IWETOX or CHOXD; IS CARBN; INCIN		INCIN	NA		NA	
Pyridine					0.014		16	
1,2,4,5-Tetrachlorobenzene					0.055		14	
Tetrachloroethylene					0.056		6.0	
Toluene					0.080		10	
1,1,1-Trichloroethane					0.054		6.0	
1,1,2-Trichloroethane					0.054		6.0	
Trichloroethylene					0.054		6.0	
Trichloromonofluoromethane					0.020		30	
1,1,2-Trichloro-1,2,2-trifluoroethane					0.057		30	
2-Ethoxyethanol		BIODG; or INCIN		INCIN	NA		NA	
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)			X		0.32	X	30	
Arsenic					1.4		5.0 mg/l TCLP	
Barium					1.2		7.6 mg/l TCLP	
Cadmium					0.69		0.19 mg/l TCLP	
Chromium (Total)					2.77		0.86 mg/l TCLP	
Lead					0.69		0.37 mg/l TCLP	
Mercury-Nonwastewater from Retort					NA		0.20 mg/l TCLP	
Mercury-All Others					0.15		0.025 mg/l TCLP	
Selenium					0.82		0.16 mg/l TCLP	
Silver					0.43		0.30 mg/l TCLP	

California List Constituent(s) - Treatment Standard	Prohibition
Cyanides - Cyanides Destruction/Stabilize	1,000
Arsenic - Metals Recovery/Solidification	500
Cadmium - Metals Recovery/Solidification	100
Chromium VI - Metals Recovery/Solidification	500
Lead - Metals Recovery/Solidification	500
Mercury - Metals Recovery/Solidification	20
Nickel - Metals Recovery/Solidification	134
Selenium - Metals Recovery/Solidification	100
Thallium - Metals Recovery/Solidification	130
Liquids with pH < or = 2.0 - Neutralize/Stabilize	—
Liquids with PCBs - Incineration/High Efficiency Boiler	50 ppm
Wastes containing HOC - Incineration/carbon Adsorption/Solvent Extraction	1,000 mg/kg

GENERATOR NOTIFICATION/CERTIFICATION -
SHIPMENT OF WASTES SUBJECT TO
LAND DISPOSAL RESTRICTIONS (40 CFR PART 268)

GENERATOR: BG Aerostructures EPA I.D. No.: KSD007236425

MANIFEST NO.: 03184

This notification/certification is submitted by the generator referenced above to Perma-Fix Environmental Services, Inc. (Check location: ☐ Dayton, OH; ☐ Gainesville, FL; ☒ Memphis, TN; or ☐ Tulsa, OK) in accordance with the Land Disposal Restrictions (effective December 19, 1994) specified under 40 CFR Part 268 Subpart D. The following information (including, where applicable, identification of hazardous constituents on page 2) is required for each shipment of EPA Hazardous Waste (mark and complete as applicable):

☒ I certify that this waste does not exhibit the characteristic of reactivity (D003)

☒ I certify that this waste does not exhibit any pesticide characteristic (D012, D013, D014, D015, D016, D017)

EPA Wastes Codes: D001 D007 F003 F005 D008 _____

☒ For EPA Characteristic Waste Codes: D001, High TOC Ignitable Subcategory.

If applicable, identify EP Toxic metals on Page 2 of this form and check one of the following:

☐ I certify that this waste has been treated in accordance with the applicable technology as specified in 40 CFR 268.40, Treatment Standards for Hazardous Wastes (attach supporting data and check one of the following):

☐ RORGS ☐ CMBST

☐ I notify that this waste has not been treated in accordance with the applicable technology as specified in 40 CFR 268.40, Treatment Standards for Hazardous Wastes and must be treated by the specified technology (check one of the following) prior to land disposal;

☐ RORGS ☐ CMBST

☐ For EPA Characteristic Waste Codes: D001 (except High TOC), D002, D012 through D043.

Underlying hazardous constituents are any constituents in 40 CFR 268.48 which are reasonably expected to be present at levels above the Universal Treatment Standards (UTS) as specified in § 268.48, Table UTS at the point of generation. The UTS apply to the underlying hazardous constituent(s) present in ignitable, corrosive, or TC characteristic wastes, as well as the individual constituent responsible for the TC designation. Identify the underlying constituent(s) on Page 2 of this form and check one of the following:

☐ I certify that this waste does not contain any underlying constituent(s) (identified in 40 CFR Part 268.48, Table UTS) at levels =/> than UTS levels at the point of generation. This certification is supported by:

☐ Analytical Data (attach applicable analytical data); or ☐ Generator knowledge.

☐ I certify that this waste contains, at the point of generation, only the underlying UTS constituent(s) indicated on page 2, at levels =/> than UTS levels. This certification is supported by:

☐ Analytical Data (attach applicable analytical data), or ☐ Generator knowledge; and

☐ I certify that this waste meets the Universal Treatment Standards for all underlying constituent(s) (identified on Page 2 of this form) reasonably expected to be present in the waste (attach supporting analytical data); or

☐ I notify that this waste does not meet the UTS for the underlying constituent(s) (identified on Page 2 of this form), and therefore, must be treated to meet applicable UTS prior to land disposal.

☒ For EPA Metal Waste Codes: D004 through D011

Identify EP toxic metals on Page 2 of this form and check one of the following:

☐ I certify that this waste meets the Treatment Standards (TS) for the characteristic constituent(s) (identified on Page 2 of this form) present in the waste (attach supporting analytical data);

☒ I notify that this waste does not meet the TS for the characteristic constituent(s) (identified on Page 2 of this form), and therefore, must be treated to meet applicable TS prior to land disposal.

☒ For EPA Waste Codes (mark one):

☐ Spent Solvents (F001, F002, F003, F004, and F005);
☐ Multisource Leachate (F039); or
☐ Other listed waste.

For Multisource Leachate (F039), identify underlying hazardous constituent(s) on Page 2 of this form and/or for all listed wastes check one of the following:

☐ I certify that this waste meets the Treatment Standards for Hazardous Waste (40 CFR 268.40) for all regulated hazardous constituent(s) (identified on Page 2 of this form) in the waste (attach supporting analytical data);

☒ I notify that this waste does not meet the Treatment Standards for Hazardous Waste (40 CFR 268.40) for all regulated hazardous constituent(s) (identified on Page 2 of this form), and therefore, must be treated to meet applicable treatment standards prior to land disposal.

☐ RCRA Section 3004(d) California List Wastes:

List the prohibited constituent(s) (and prohibition levels) on Page 2 of this form and check one of the following:

☐ I certify that this waste contains less than the prohibition levels of California List Constituent(s) (insert information on Page 2 of this form) in the waste (attach supporting analytical data);

☐ I notify that this waste contains more than the prohibition levels of California List Constituent(s) (insert information on Page 2 of this form), and therefore, must be treated to meet applicable treatment standards prior to land disposal.

NOTICE OF COMPLIANCE/NON-COMPLIANCE

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Division of Environment
Waste Management Program

Hazardous Waste: Complaint( ) LDF( ) TSF( ) GEN( ) KG(X) SQ( ) TRA( ) UOM( ) UOB( ) NOT A GEN( )
Solid Waste: Complaint( ) SLF( ) TRF( ) ILF( ) CDL( ) HHW( ) OBS( ) UOS( ) WTT( ) WTP( ) WTM( ) YWC( ) MED( )

TO: BG Aerostructures, Inc. (Wellington St Plant) 6/27/96
Facility Name Date

1234 Wellington Place Wichita Ks 67203 316-262-1496
Address City State Zip Code

KSD007236425
EPA Identification No.

Solid Waste Permit No.

This inspection was conducted to determine compliance with the state and federal solid and hazardous waste statutes and regulations.

☒ **Violations As Follows** ☐ **No Violations Identified**

Citation	Description of Violation
GPT KAR-28-31-4(j)	One satellite accum DM was equipped w/an inadequate funnel - need to replace w/appropriate funnel
GPT KAR-28-31-4(b)	need to post emergency information per regulation. -- KDHE will provide sample form. --
GPT	
GPT KAR 28-31-4(k)	weekly insp log from needs to list "TIME" of insp. Also please post full name of inspector

☒ **Other Comments/Concerns:**
Training documentation suggested for affected employees. Prepare an Agenda (topics covered related to RCRA) & sign-in sheet

This notice is provided to call immediate attention to those areas of non-compliance. This notice does not constitute a compliance order issued by KDHE and may not be a complete listing of all violations which may be identified as a result of this inspection. **Your facility must submit in writing within 30 days of receipt of this notice a description of all corrective actions taken and/or a schedule for completion of necessary corrective actions to be taken.** Any corrective actions taken by your facility will be considered in subsequent enforcement follow-up.

Your response must be submitted to:

Kansas Department of Health and Environment
Bureau of District Operation
Waste Management Programs
130 S Market Suite 6050
Wichita, Kansas 67202-3802

Received JUL 1996 Bureau of Waste Management

If you have any questions concerning this Notice or wish to discuss your response, you may call me at (316) 337-6020 or Bureau of Waste Management in the Topeka Office at (913) 296-1604.

This Notice was prepared by

Gil Perez, BDO, Wichita

Date 6/27/96

I, the undersigned hereby acknowledge that I have received and read this Notice.

Printed Name: Norman Manning

Signature: [signature]

Title: Lead Maintenance

Date: 6/27/96

COPIES: White-Facility; Yellow-Bureau of Waste Management; Blue-District

Kansas Department of Health and Environment
Bureau of Air and Waste Management
Forbes Field, Topeka, Kansas 66620

Hazardous Waste Generator/Transporter Compliance Inspection Report

General

Time 9:00 a.m. Date 27 June 96

Facility Name B G Aerostructures, Inc. (Wellington St Plant) EPA ID No. KSD 007236425

Street 1234 Wellington Place City Wichita, KS Zip 67203

Mailing Address (If different than above)

County Sedgwick Phone (316) 262-1494

Contact(s) Norman (Chip) Manning, Lead Maintenance

Inspector(s) Gil Perez, BDO, Wichita

Type of Business OEM/AEM of aircraft parts

Has the company declared any information/processes as trade secrets (KSA 65-3447)? Yes No
If yes, explain.

Industrial Wastes Generated

(List hazardous wastes first)

Waste:	Waste Paint Related Material	Hazardous Waste Solid N.O.S.
If waste is hazardous, give HW ID Number:	D001, D007, D008, F003, F005	D007
Amount generated per month:	50 # ave /mo.	20 # ave /mo.
Amount presently in storage:	1 DM	none
Accumulation time:	6 mo ave	6 mo + ave
Present disposal method:	Perma-Fix - Memphis, TN.	Perma-Fix - Memphis, TN.

Waste:	Coolant & Oil	Floor Dry & Oil
If v e is hazardous, give . iW ID Number:	Non-hazardous	Non-hazardous.
Amount generated per month:	100-150 gallon/mo ave	10-15 gallon mo/ave
Amount presently in storage:	110 gallon	none
Accumulation time:	6 mo. +	6 mo +
Present disposal method:	EMI, Guthrie, OK	EMI, Guthrie, OK

General Requirements (GGR)

. Has the facility evaluated all potentially hazardous waste(s) to determine if it is hazardous? (KAR 28-31-4(b)) — (Yes) No

A. If waste(s) was tested, was the analysis conducted by a laboratory certified by KDHE? (KAR 28-31-4(b)(3)(A)) — (Yes) No NA

B. If waste(s) was tested, are the results kept for three years? (KAR 28-31-4(f)(1)(C))? — (Yes) No NA

I. If hazardous waste(s) is disposed of via the sanitary sewer to a Publicly Owned Treatment ''orks (POTW), has written permission been obtained from the operator of the POTW? (KAR -31-3/40 CFR 261.4) — Yes No (NA)

Yes No (NA)

II. If industrial waste(s) is disposed of at a permitted sanitary landfill, has a disposal authorization been obtained? (KAR 28-29-23) — Yes No (NA)

A. If yes, list the authorization number(s): _____

V. Facility size classification:

☐ Not a Generator ☐ Small Qty. Generator ☑ Kansas Generator ☐ EPA Generator
☐ T/S/D Facility ☐ Transporter ☐ HW Burner/Marketer ☐ Used oil Burner/Marketer

Hazardous Waste Determination Requirements: ☑ Adequate ☐ Inadequate

Notification Requirements (GGR)

. Has generator notified KDHE and obtained an EPA Identification Number? (KAR 28-31-4(c)) — (Yes) No NA

I. Is current notification accurate? (KAR 28-31-4(c)(1)) — (Yes) No NA

A. Is this facility marketing (selling) hazardous waste as a fuel? — Yes (No) NA

B. Is this facility marketing (selling) used oil as a fuel? — Yes (No) NA

(If yes, to either question A or B, complete Used Oil Fuel Marketers/Blenders Checklist.)

C. Is this facility burning hazardous waste as a fuel? — Yes No (NA)

Is this facility burning used oil as a fuel? — Yes No (NA)

Notification Requirements: ☑ Adequate ☐ Inadequate ☐ NA

(If small quantity generator, stop here.)

Land Disposal Restrictions Requirements (GLB)

IX. Does facility generate any wastes subject to the land disposal restrictions requirements of 40 CFR 268, Subparts B and C? (Yes) No

List these wastes: D001, D007, D008, F003, F005, P040, F002

A. _____ D. _____

B. _____ E. _____

C. _____ F. _____

X. Is the waste(s) covered by a National Variance(s), Extension, or Petition? (40 CFR 268 5&6) Yes (No)

A. If yes, describe the variance, extension, or petition which applies:

_____

_____

XI. Is the waste covered by an exemption? (40 CFR 268.1(c)(2)) Yes (No)

A. If yes, does the generator provide a notice with the waste to the T/S/D facility stating that the waste is exempt from the land disposal restrictions? (40 CFR 268.7(a)(3)) Yes No (NA)

XII. Does generator ship waste(s) covered by the Land Disposal Restrictions off-site for treatment or disposal? (Yes) No

A. If yes, does the generator provide a notification to the T/S/D facility that includes: EPA hazardous waste number(s), applicable treatment standards, manifest number(s), and waste analysis data, if available? (40 CFR 268.7) (Yes) No

B. If yes, is a copy of this notification kept for five years? (Yes) No

XIII. Does generator treat restricted waste(s) on-site so that they are below the land disposal restrictions standards? (If yes, fill out land disposal restrictions checklist.) Yes (No)

Land Disposal Restrictions Requirements: ☑ Adequate ☐ Inadequate ☐ NA

Pre-Transport Requirements (GPT)

IV. Does generator package waste in accordance with DOT requirements? (KAR 28-31-4(e)(1)) (Yes) No NA

V. Does generator label (flammable liquid, poison, etc.) each package in accordance with DOT requirements of 49 CFR 172.101 or 172.102? (KAR 28-31-4(e)(2)) (Yes) No NA

VI. Does generator mark (consignee's or consignor's name and address, etc.) on each package in accordance with DOT requirements of 40 CFR 172 Subpart D? (KAR 28-31-4(e)(3)) (Yes) No NA

A. Does generator mark each container of 110 gallons or less as below? (KAR 28-31-4(e)(3)) (Yes) No NA

> Hazardous Waste – Federal Law Prohibits Improper Disposal.
> If found, contact the nearest police or public safety authority or the US EPA.
>
> Generator's Name and Address
>
> Manifest Document Number

VII. Does generator have placards to offer to transporters in accordance with 49 CFR 172 Subpart F? (KAR 28-31-4(e)(4)) (Yes) No NA

5. Are containers holding ignitible or reactive waste(s) located at least 15 meters (50 feet) from the facility's property line? (EPA Generator and T/S/D Only) (KAR 28-31-4(g)(1) / 40 CFR 265.176) — Yes No NA
6. If waste in containers is incompatible with other materials stored nearby, are the containers separated from the other materials by means of a dike, berm, wall, or other means? (KAR 28-31-4(g)(1) or (h)(1)(B) / 40 CFR 265.177) — Yes No NA
7. Does generator have any satellite storage areas? (KAR 28-31-4(j)) — Yes No NA

If yes,

a. Is the waste stored in a container at or near the point of generation and under the control of the operator of the process generating the waste? — Yes No
b. Is the container in good condition and closed except to add or remove waste? — Yes No *
c. Is the container marked with the words: "Hazardous Waste"? — Yes No
d. Is the container marked with the accumulation start date at the time it becomes full? — Yes No
e. Is the full container moved to the storage area within three days after it became full? — Yes No

(If waste(s) is placed in tanks, piles, or surface impoundments, complete the appropriate inspection checklist.) * inadequate funnel used.

Storage Requirements:	☐ Adequate	☑ Inadequate	☐ NA

Kansas Generator's Emergency Preparedness (GSQ)

XXII. Has facility named one employee as emergency coordinator? (KAR 28-31-4(h)(1)(E)) — Yes No

Is the emergency coordinator available to respond to an emergency by reaching the facility within a short period of time? — Yes No

B. Is the emergency coordinator or his/her designee prepared to respond to any emergencies (fires, spills, or releases) that arise? — Yes No

C. Is the emergency coodinator familiar with the reporting requirements of KAR 28-31-4(h)(2)? — Yes No

XXIII. Is the following information posted next to at least one telephone which is immediately assessable in an emergency? (KAR 28-31-4(h)(1)(F))

A. Name and telephone of emergency coordinator? — Yes No
B. Location of fire extinguishers, fire alarms, or spill control material, if available? — Yes No
C. Telephone number of fire department unless the facility has a direct alarm? — Yes No NA

XIV. Have employees been trained so that they are familiar with proper waste handling and emergency procedures that are relevant to their responsibilities during normal facility operations? (KAR 28-31-4(h)(1)(G)) — Yes No

A. Is this training documented in any way? — Yes No *

* Training documentation improvements were suggested on NOC.

Kansas Generator's Emergency Preparedness Requirements :	☐ Adequate	☑ Inadequate	☐ NA

(If Kansas generator, stop here.)

Additional Information for Inspection/Investigation

KDHE - Bureau of District Operations - Waste Management Programs

Facility: B G Aerostructures, Inc. (Wellington St Plant) Contact: Norman Manning
Address: 1234 Wellington Place Tele: (316) 262 - 1494

I conducted a routine compliance evaluation inspection of this facility on June 27, 1996, to determine compliance to hazardous waste management regulations. The facility was, in part, chosen due to the history of the site being under investigation/monitoring by our Bureau of Waste Management.

B G Aerostructures, Inc. is the former location of H & H Parts which is under BWM order to effect a soil contamination study and clean-up. Mr. Doug Aldrich, Terracon Env., Inc. (316-262-0281), is the contact for the remediation project. H & H Parts has been issued the temporary EPA ID # KSP000000654 for completion of the project.

I cited the facility for several violations (Kansas Generator status) including failure to post emergency information, failure to list "time" of weekly inspections of hazardous waste storage and failure to keep a satellite container closed (inadequate funnel). I also entered a suggestion in the comments/concerns section of the NOC regarding the need to document training given to employees involved in hazardous waste management.

In addition to the Wellington St location there is a B G Aerostructures facility at 1812 W 2nd in Wichita. Adding some confusion to this inspection, the former H & H Parts/Chromalloy tenant also had a second operation located on W. 2nd Street, however, the street address was slightly different (1802 W 2nd) even though these second sites were within one contiguous building. The confusion came in sorting out the different EPA ID numbers assigned the sites; the new RCRIS information data base recently provided me by BWM helped sort this out.

An inspection of the 1812 W 2nd facility was conducted the next day, June 28, 1996. Similar violations were cited.

G. Perez, BDO, Wichita

formerly Chromalloy Aircraft Structures

Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).

Notification of Regulated Waste Activity

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

RECEIVED
Date Received (For Official Use Only)
MAY 20 1994
WASTE MANAGEMENT

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☐ A. First Notification ☒ B. Subsequent Notification (complete item C)

C. Installation's EPA ID Number: KSD007236425

II. Name of Installation (Include company and specific site name): BG AEROSTRUCTURES INC

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street: 234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203

County Code: 173 County Name: SEDGWICK COUNTY

IV. Installation Mailing Address (See Instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last): DANNING (first): NORMAN

Job Title: FAO MAINTENANCE Phone Number (area code and number): 316-262-1494

VI. Installation Contact Mailing Address (See Instructions)

Street or P.O. Box: SAME

City or Town: State: Zip Code:

VII. Ownership (See Instructions)

A. Name of Installation's Legal Owner: ROBERT GILBERT

Street, P.O. Box, or Route Number: 234 WELLINGTON PLACE

City or Town: WICHITA State: KS Zip Code: 67203

Phone Number (area code and number): 316-262-1494

B. Land Type: P C. Owner Type: P D. Change of Owner: Yes ☒ No ☐ (Date Changed) Month Day Year: 05 01 94

HE RM 8700-12 (7-90) PREVIOUS EDITION OBSOLETE.

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity

1. Generator (See instructions)
   - ☐ Greater than 1000 kg/mo (2200 lbs)
   - ☒ 25 to 1000 kg/mo (55-2200 lbs)
   - ☐ Less than 25 kg/mo (55 lbs)
2. Transporter (Indicate Mode)
   - ☐ For own waste only
   - ☐ For commercial purposes

   Mode of Transportation
   - ☐ Air
   - ☐ Rail
   - ☐ Highway
   - ☐ Water
   - ☐ Other-specify
3. ☐ Treater, Storer, Disposer (at installation) Note: A permit is required for this activity. (See instructions.)
4. ☐ Hazardous Waste Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketers

   Burner-indicate device(s) - Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
5. ☐ Underground Injection Control

B. Used Oil Fuel Activities

1. ☐ Off-Specification Used Oil Fuel
   - ☐ Generator Marketing to Burner
   - ☐ Other Marketer
   - ☐ Burner-indicate device(s)

   Type of Combustion Device
   - ☐ Utility Boiler
   - ☐ Industrial Boiler
   - ☐ Industrial Furnace
2. ☐ Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification

IX. Description of Regulated Wastes (Use additional sheets if necessary)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles.

1. Ignitable (D001)	2. Corrosive (D002)	3. Reactive (D003)	4. Toxicity Characteristic (List specific EPA hazardous waste number(s) for the Toxicity Characteristic contaminants)				
☒	☒	☐	D007	D008			

B. Listed Hazardous Wastes.

1: F001	2: F003	3: F005	4:	5:	6:
7:	8:	9:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature	Name and Official Title (type or print)	Date Signed
Robert Gilbert	Robert Gilbert President/CEO	5-18-94

XI. Comments

MAIL COMPLETED FORM TO:

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT
BUREAU OF AIR & WASTE MANAGEMENT
FORBES FIELD, BLDG. 740
TOPEKA, KS 66620-0001

KDHE FORM 8700-12 (7-90) PREVIOUS EDITION IS OBSOLETE.

B G Aerostructures
[illegible]

Figure(s)
Aerial Photographs and Sample Location Map(s)

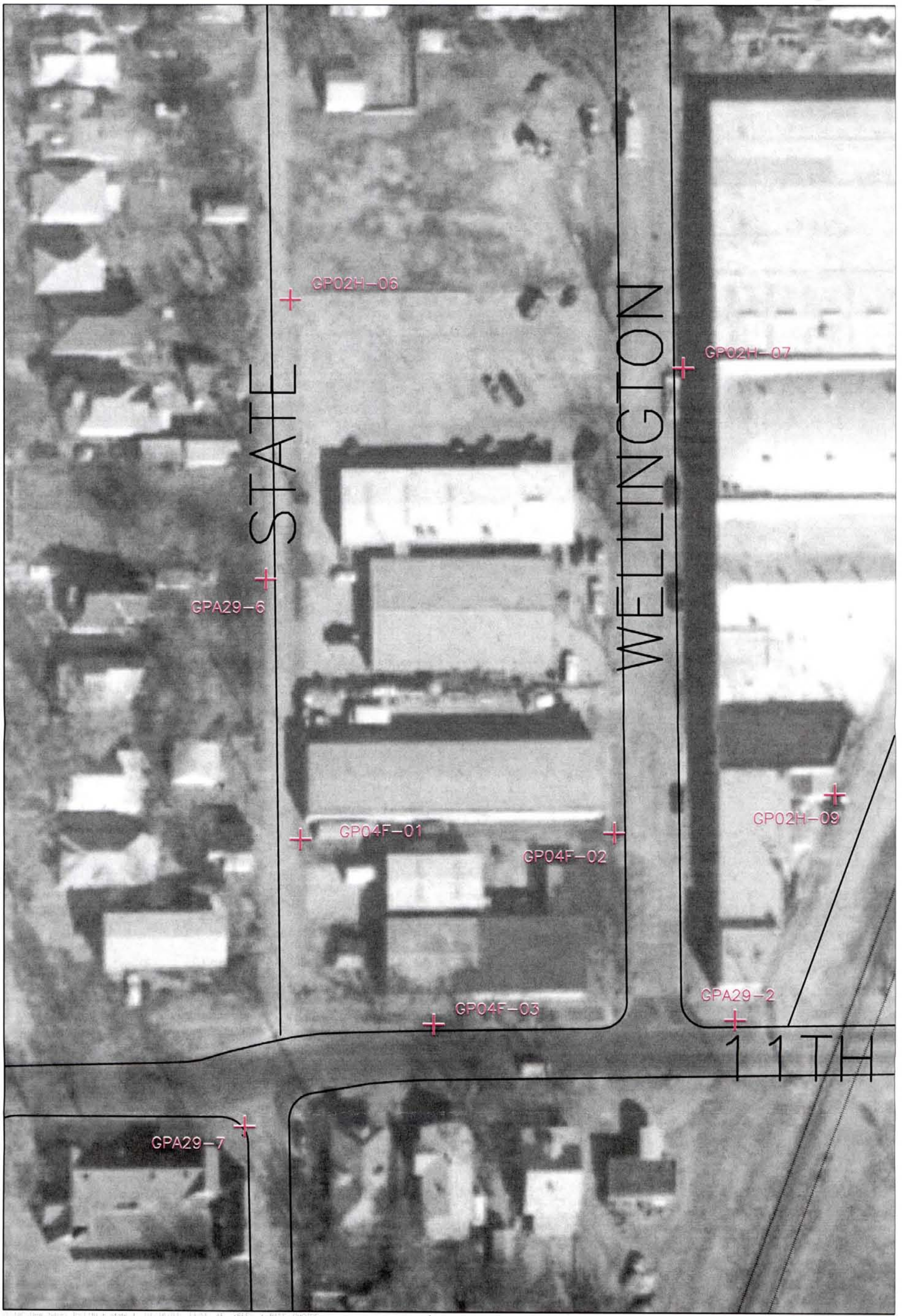
CDM

1" = 100'

50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 11th & State



CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 11th & State

Table(s)
Analytical Data Table(s)

11th and State
North Industrial Corridor (NIC) Site
Geoprobe Groundwater Sample Analytical Results, Site VOCs by EPA Method 8260

Station	Groundwater Depth Zone / Depth (feet)	Sample Date	QC Sample Flag	Units	PCE	TCE	C12DCE	VC	TCA	11DCA	11DCE	CT	CFM	BEN	BTEX
GP02H-06	S/17	11/11/99		µg/L	<1	**5.8**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-06	D/27	11/11/99		µg/L	<1	<1	**1.4**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-07	S/17	11/11/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-07	D/28	11/11/99		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-09	S/17	11/11/99		µg/L	**3.9**	**370**	**43**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP02H-09	D/35	11/11/99		µg/L	<1	**14**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-01	S/17	11/29/99		µg/L	<1	**340**	**52**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-01	D/34	11/29/99		µg/L	<1	**5.4**	**2.4**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-02	S/17	11/29/99		µg/L	<1	**7.1**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-02	D/38	11/29/99		µg/L	<1	<1	**1.2**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-03	S/17	12/02/99		µg/L	<1	**7.2**	**1.1**	<1	<1	<1	<1	<1	<1	<1	<5.4
GP04F-03	D/35	12/02/99		µg/L	<1	**1.2**	**2.1**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-2	S/20	12/04/97		µg/L	<1	**9.6**	**52**	<1	<1	<1	<1	<1	<1	<1	**230**
GPA29-2	D/35	12/04/97		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**8.7**
GPA29-5	S/20	05/29/98		µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-5	D/36	05/29/98		µg/L	<1	<1	**1.3**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-6	S/20	05/29/98		µg/L	<1	**30**	<1	<1	**1.6**	<1	<1	<1	<1	<1	<5.4
GPA29-6	S/20	10/20/99		µg/L	<1	**43**	<1	<1	**1.8**	<1	<1	<1	<1	<1	<5.4
GPA29-6	D/33	05/29/98		µg/L	<1	**1.1**	**1.9**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-7	S/20	05/29/98		µg/L	<1	**1.3**	<1	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-7	D/37	05/29/98		µg/L	<1	<1	**2.4**	<1	<1	<1	<1	<1	<1	<1	<5.4
GPA29-7	D/37	05/29/98	DUP	µg/L	<1	<1	**2.4**	<1	<1	<1	<1	<1	<1	<1	<5.4

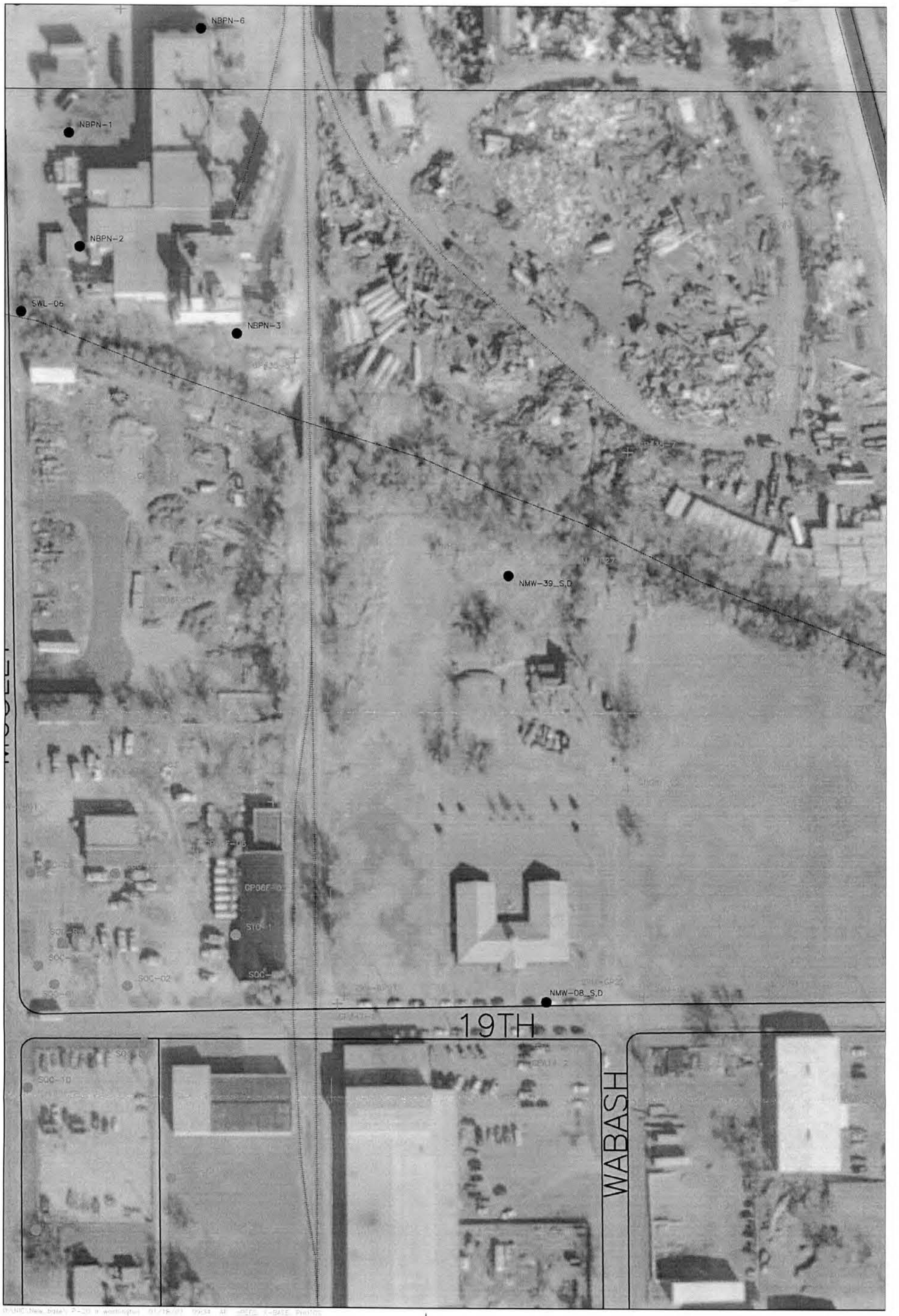
PCE = Tetrachloroethene
TCE = Trichloroethene
C12DCE = cis-1,2-dichloroethene
VC = Vinyl chloride
TCA = 1,1,1-Trichloroethane

11DCA = 1,1-Dichloroethane
11DCE = 1,1-Dichloroethene
CT = Carbon tetrachloride
CFM = Chloroform
BEN = Benzene

Bold text indicates results above analytical detection limits.
DUP = Field duplicate sample.
J = Estimated, value measured between the reporting limit and the detection limit
JS = Estimated due to surrogate recoveries outside of control limits.
JH = Estimated due to holding time violations.
JP = Estimated due to poor performance standard results.
JIS = Estimated due to low internal standard area.

CDM

Appendix L-31
Sample Location Maps for Suspect Source Areas (as identified in Section 9.5)

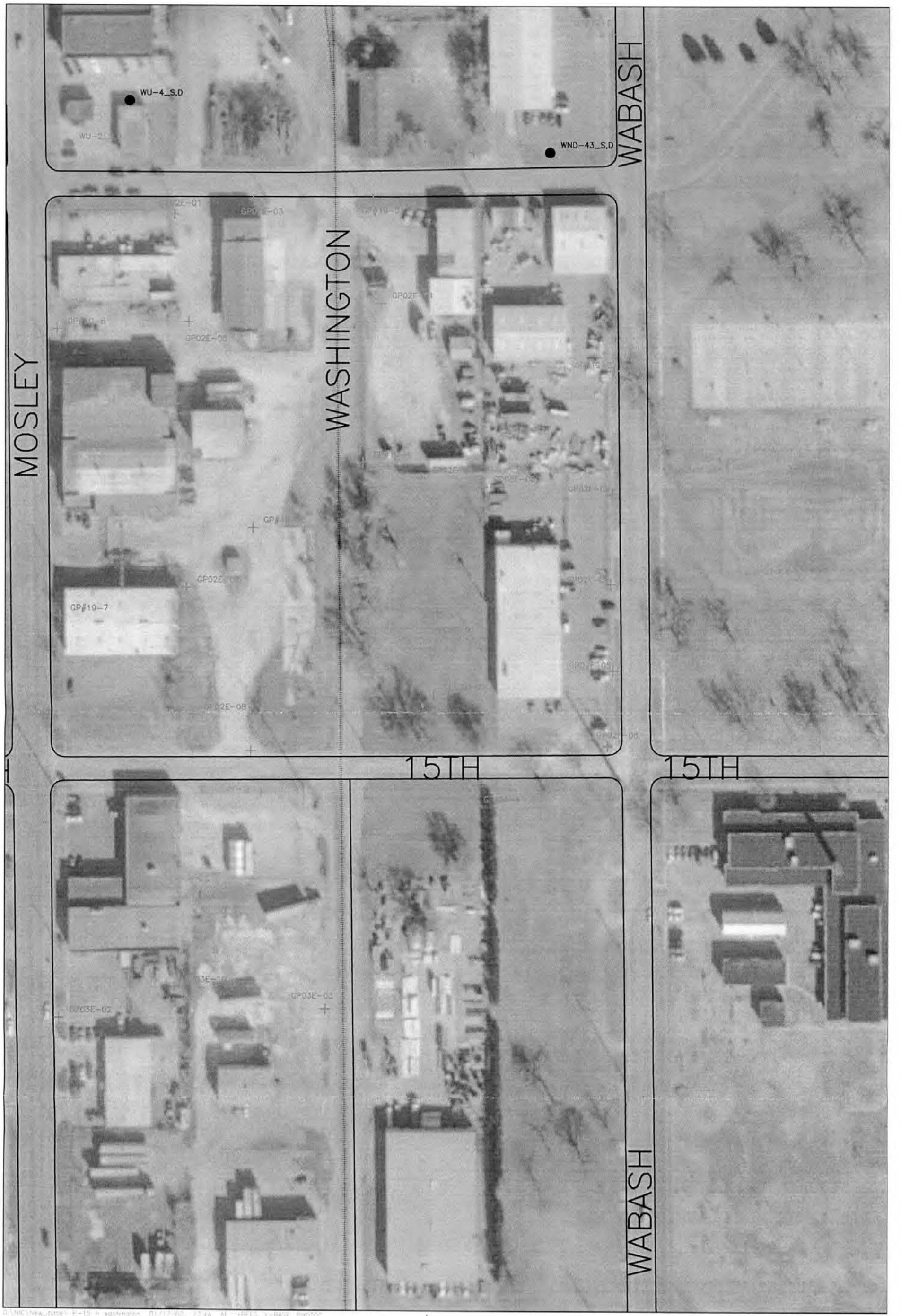


CDM

1" = 100'
50 0 100

N

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 20th & Washington



CDM

1" = 100'

50 0 100

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 15th & Washington

CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 15th & Ohio

CDM

1" = 100'

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Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 14th & Washington

CDM

1" = 100'

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Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 13th & Emporia

CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, 3rd & St Francis

CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former WR Grace

CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Former WR Grace

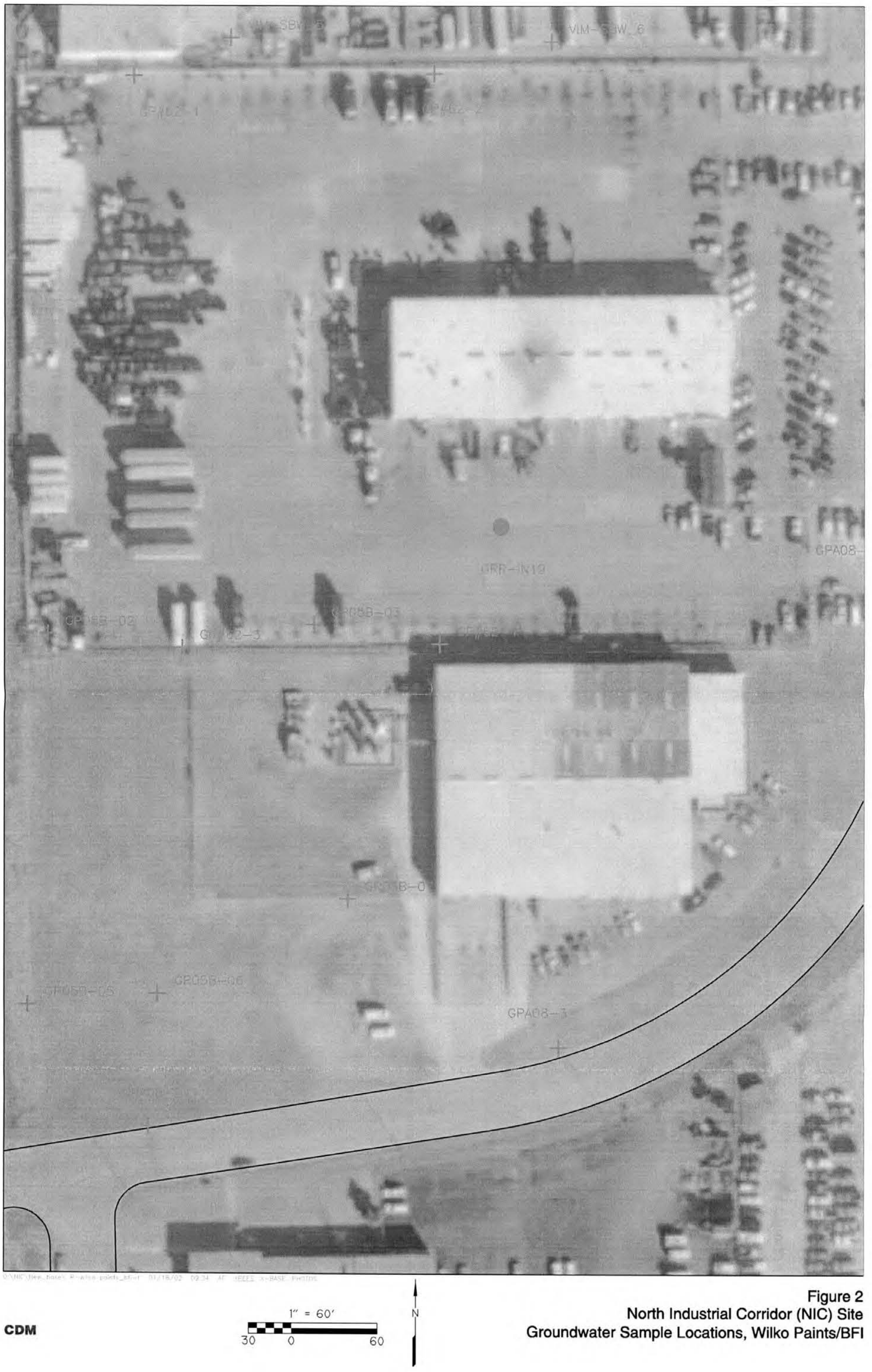

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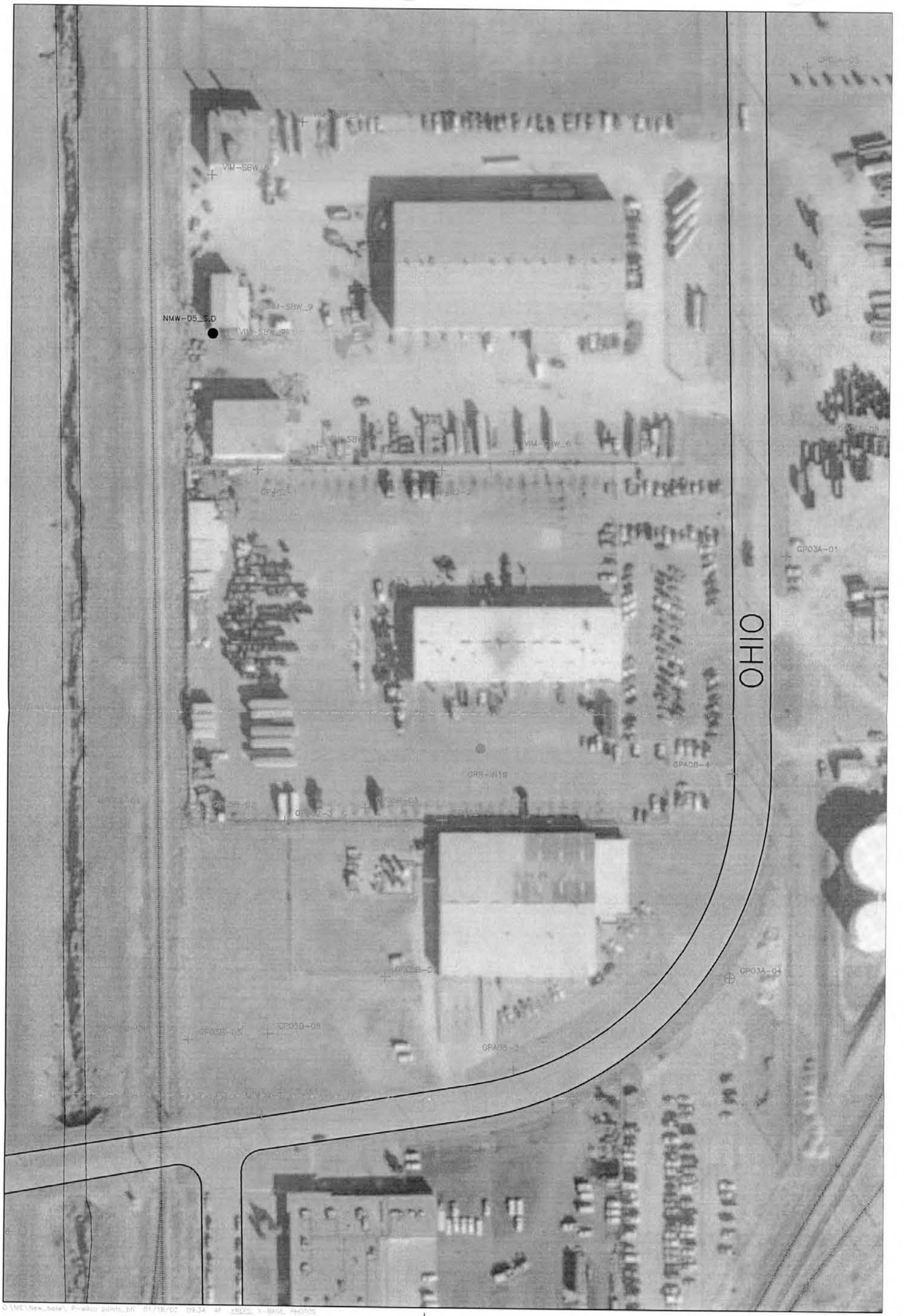
Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Wilko Paints/BFI



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1" = 100'

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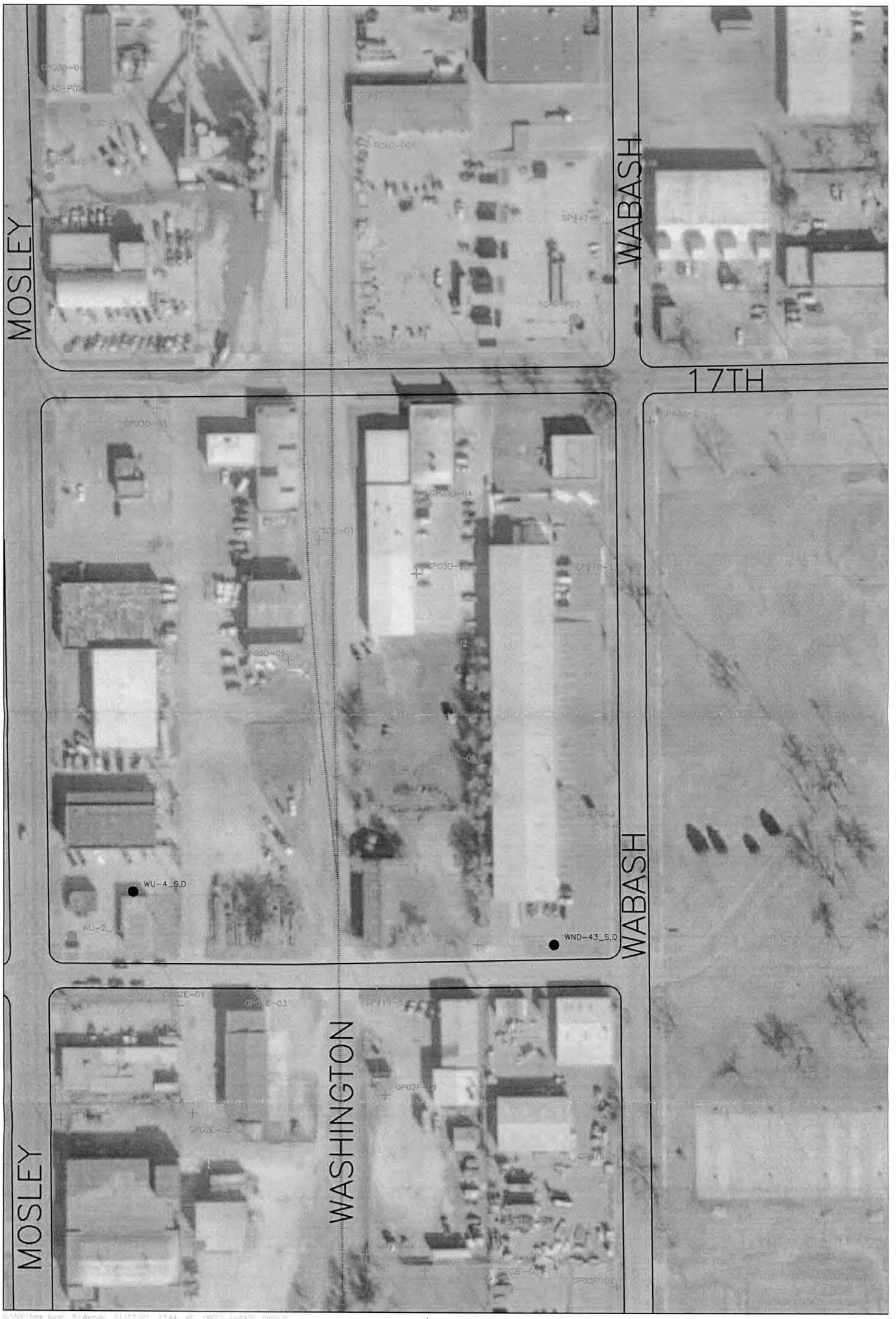
Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Wilko Paints/BFI



CDM

1" = 100'

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Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Weaver

CDM

1" = 50'

25 0 50

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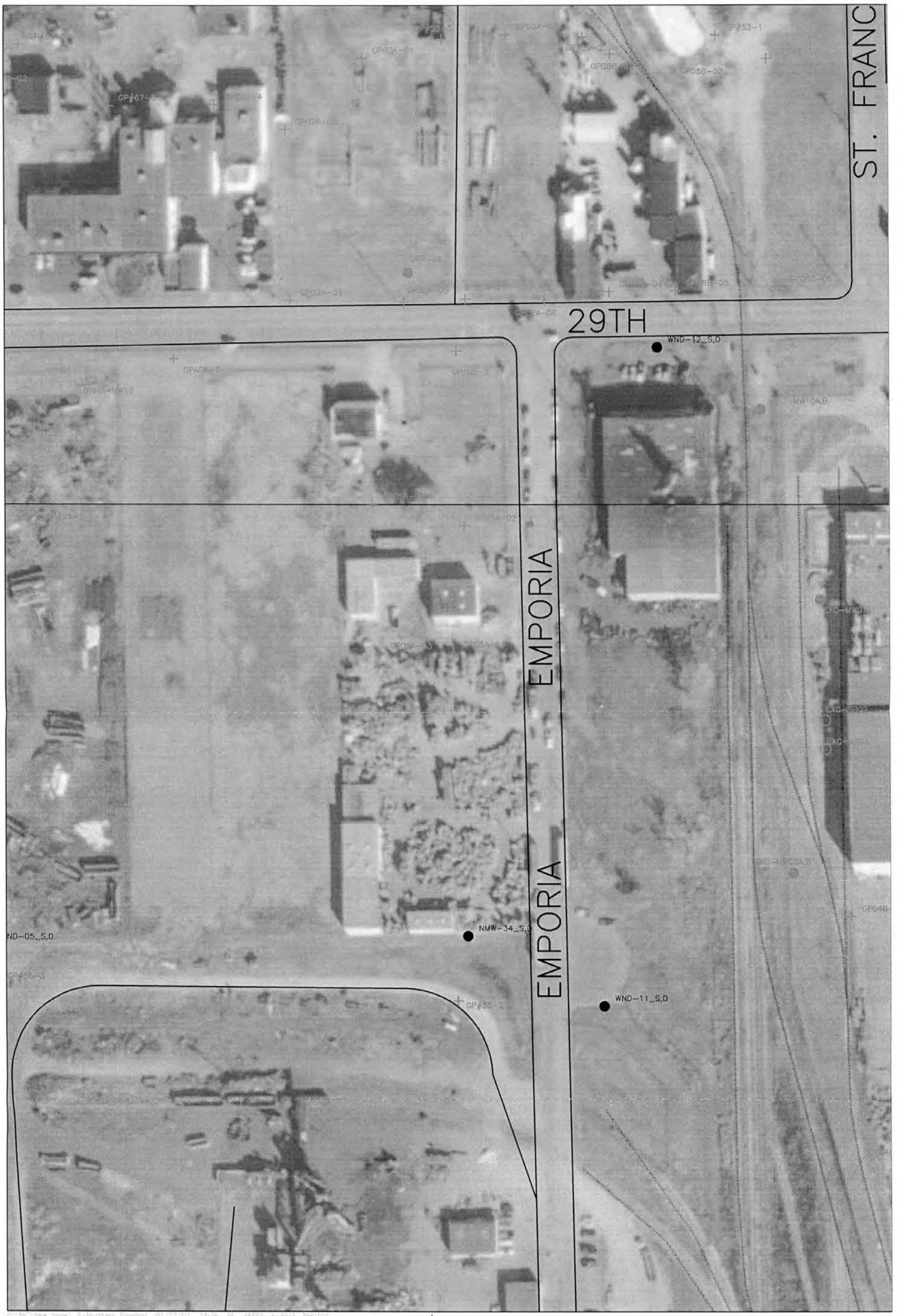
Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Northern Pipeline



CDM

1" = 100'

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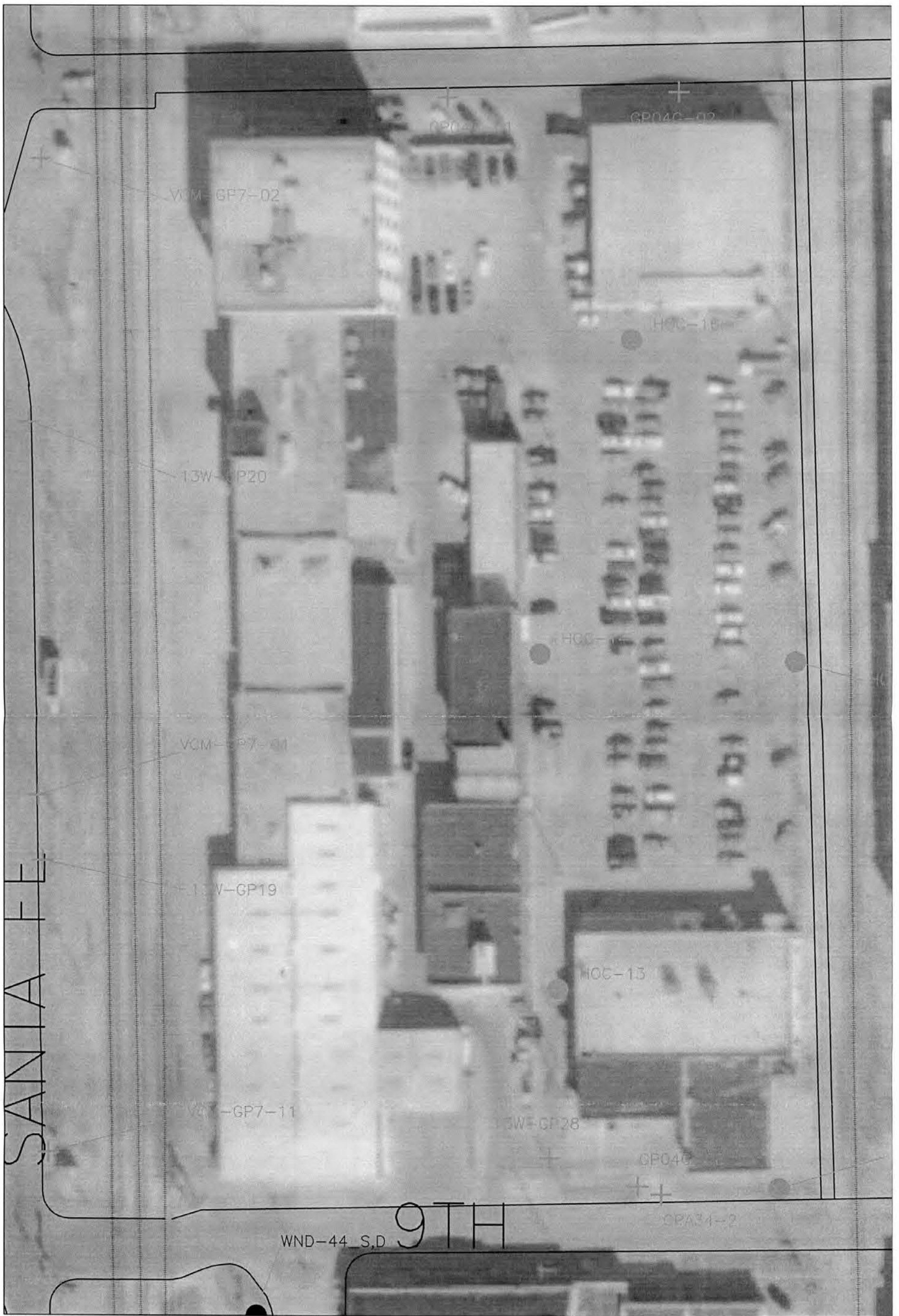
Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Northern Pipeline



CDM

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Kreonite West

CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Kreonite West

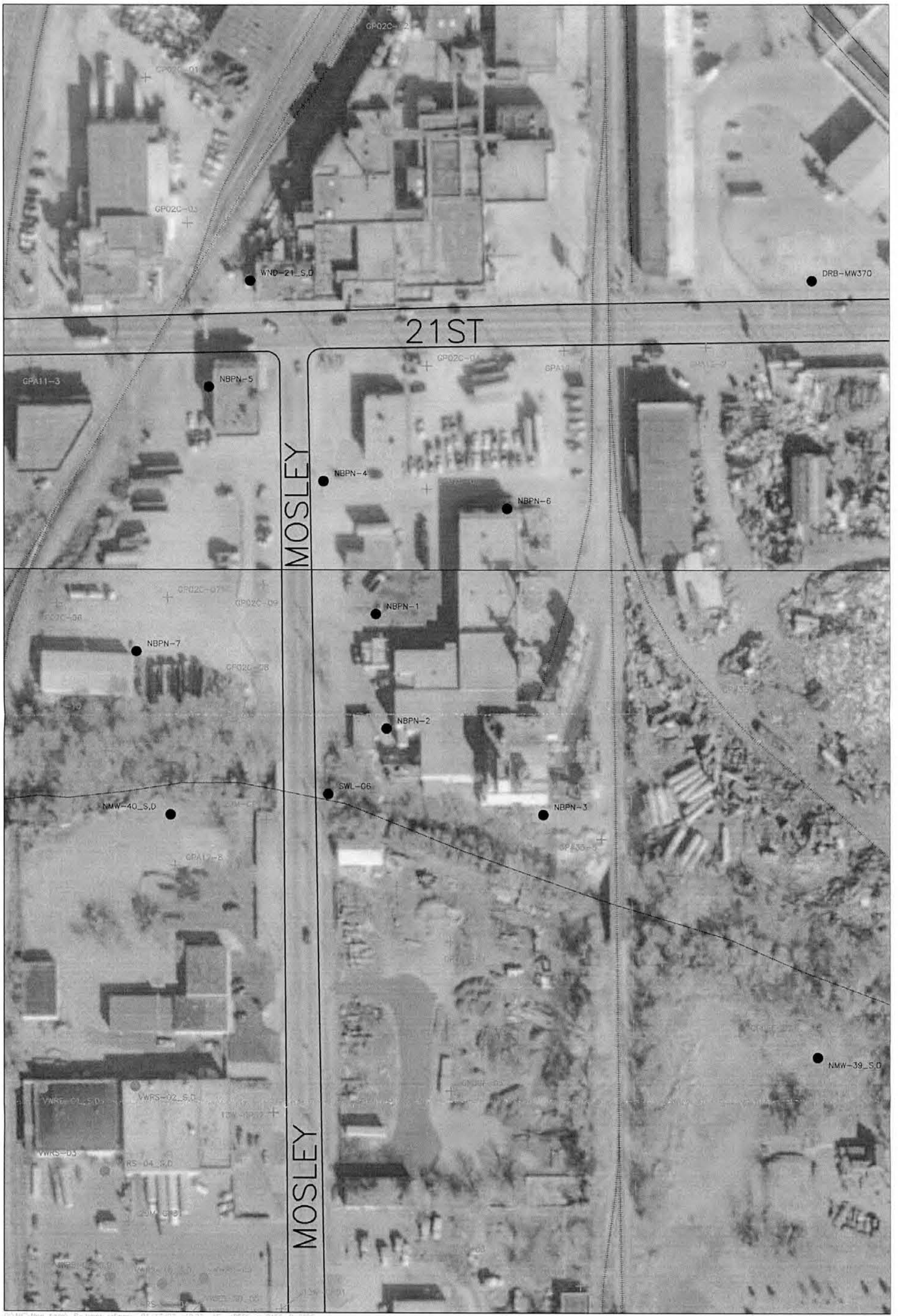
CDM

1" = 50'

25 0 50

N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Johns' Refinery Facility



CDM

1" = 100'

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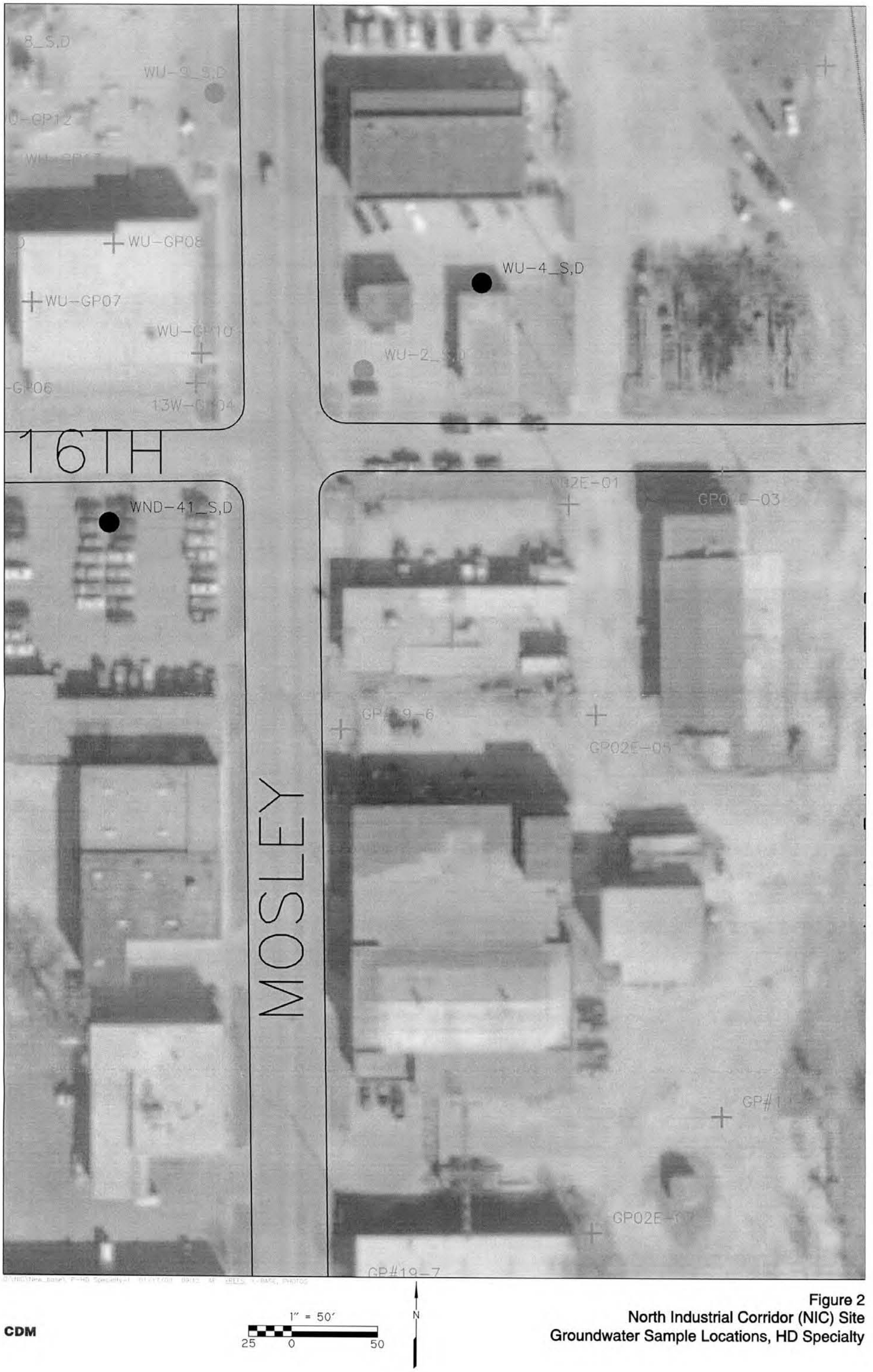
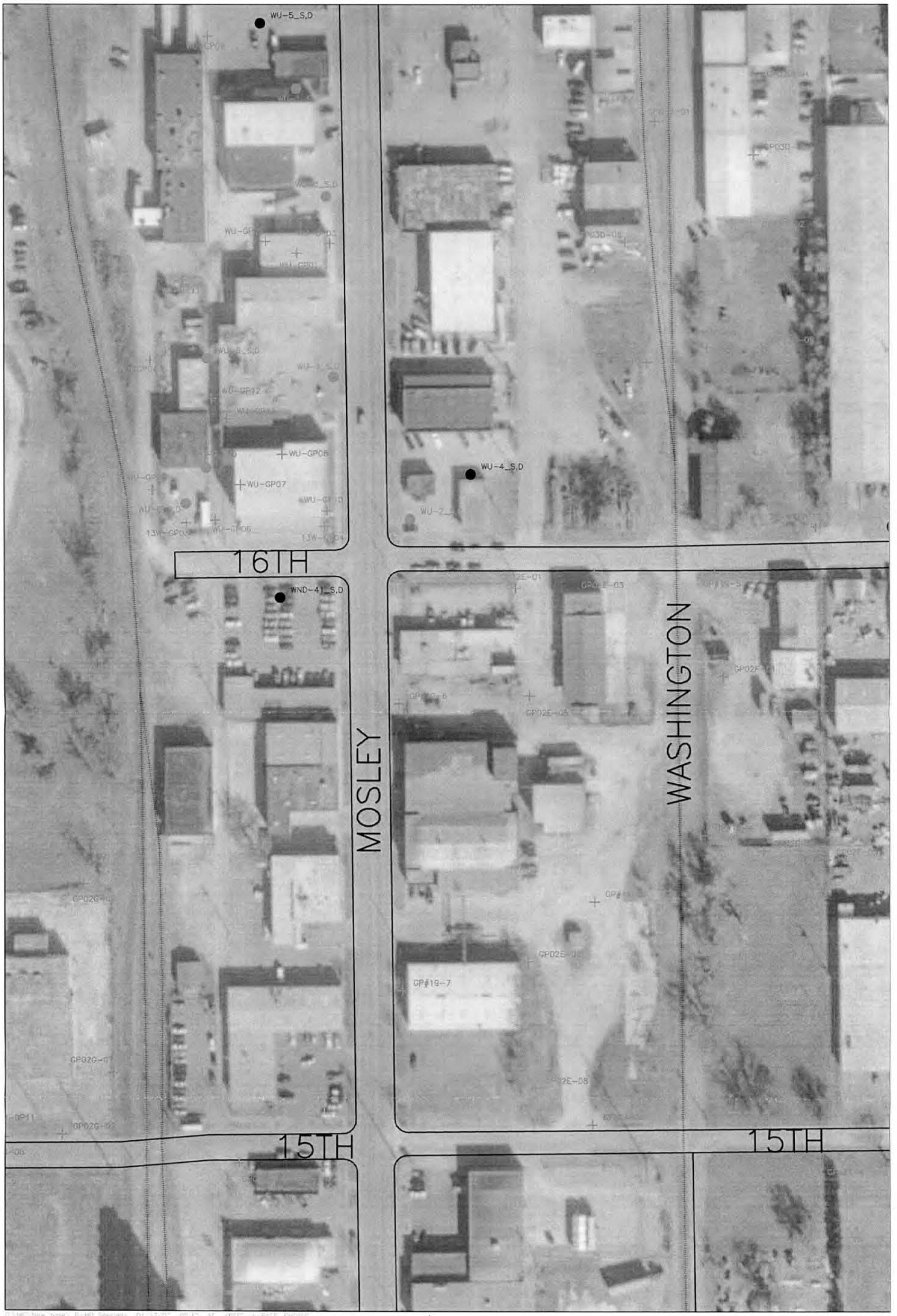
Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Johns' Refinery Facility



CDM

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, HD Specialty



CDM

1" = 100'

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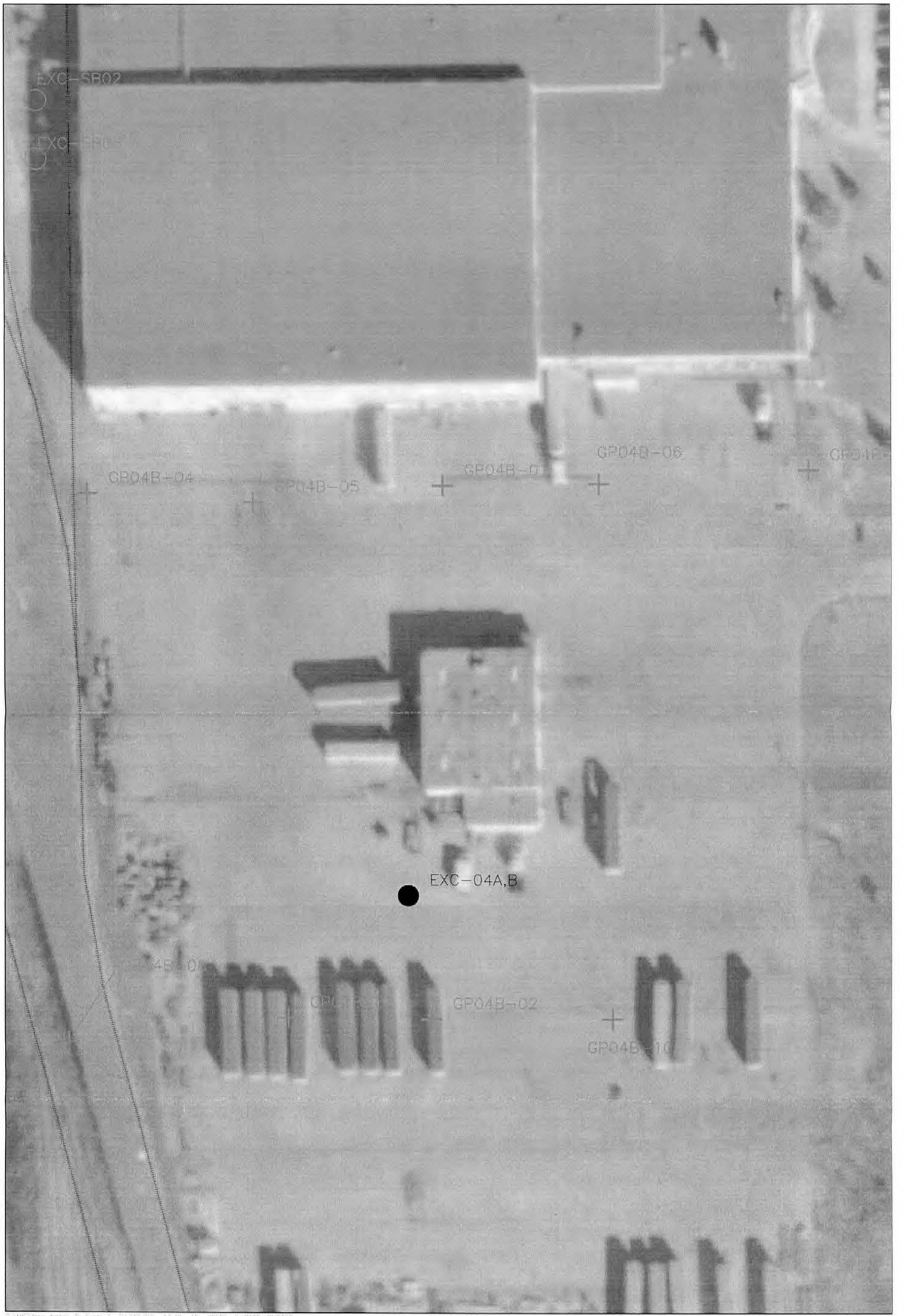
Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, HD Specialty



CDM

1" = 50'

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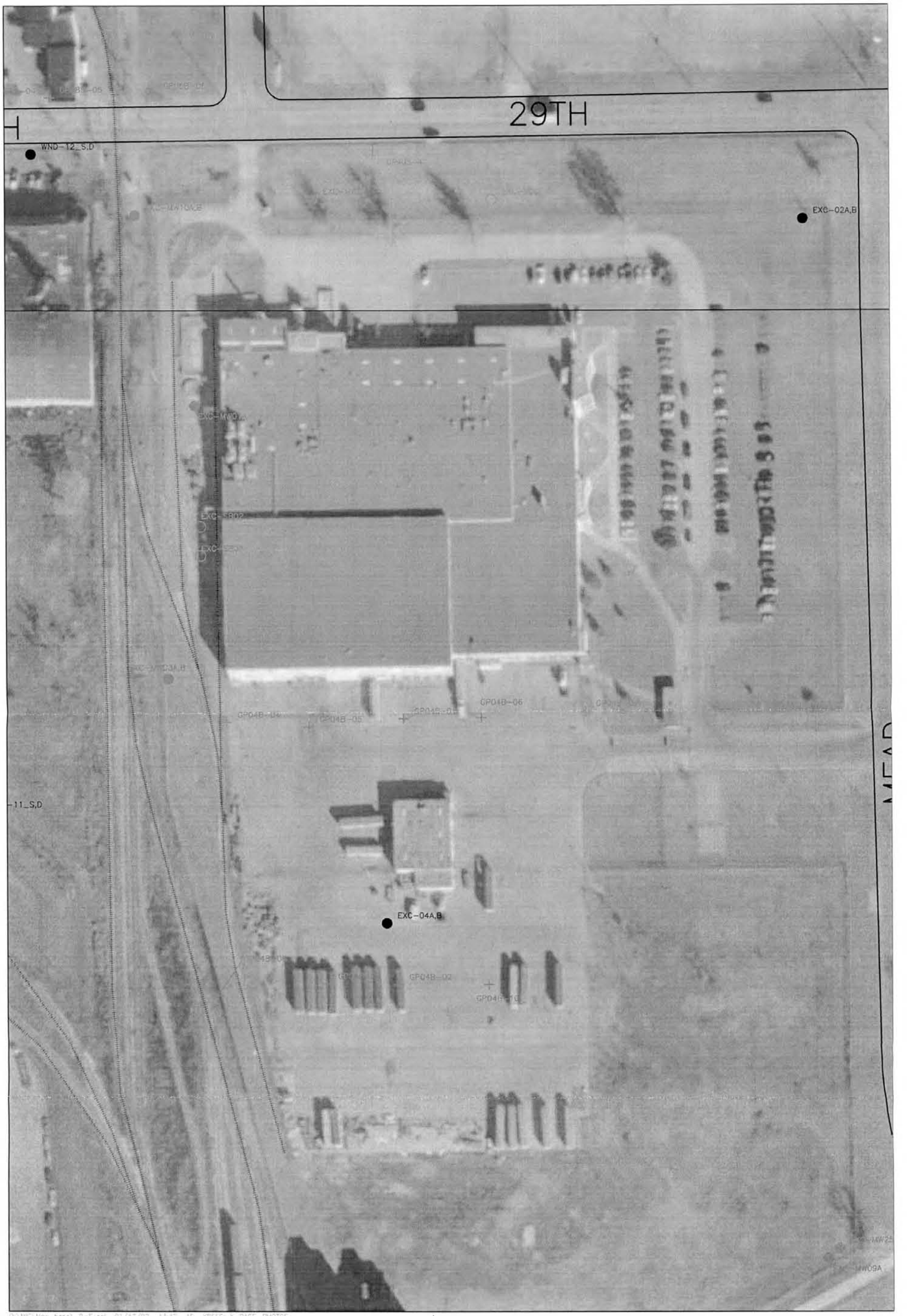
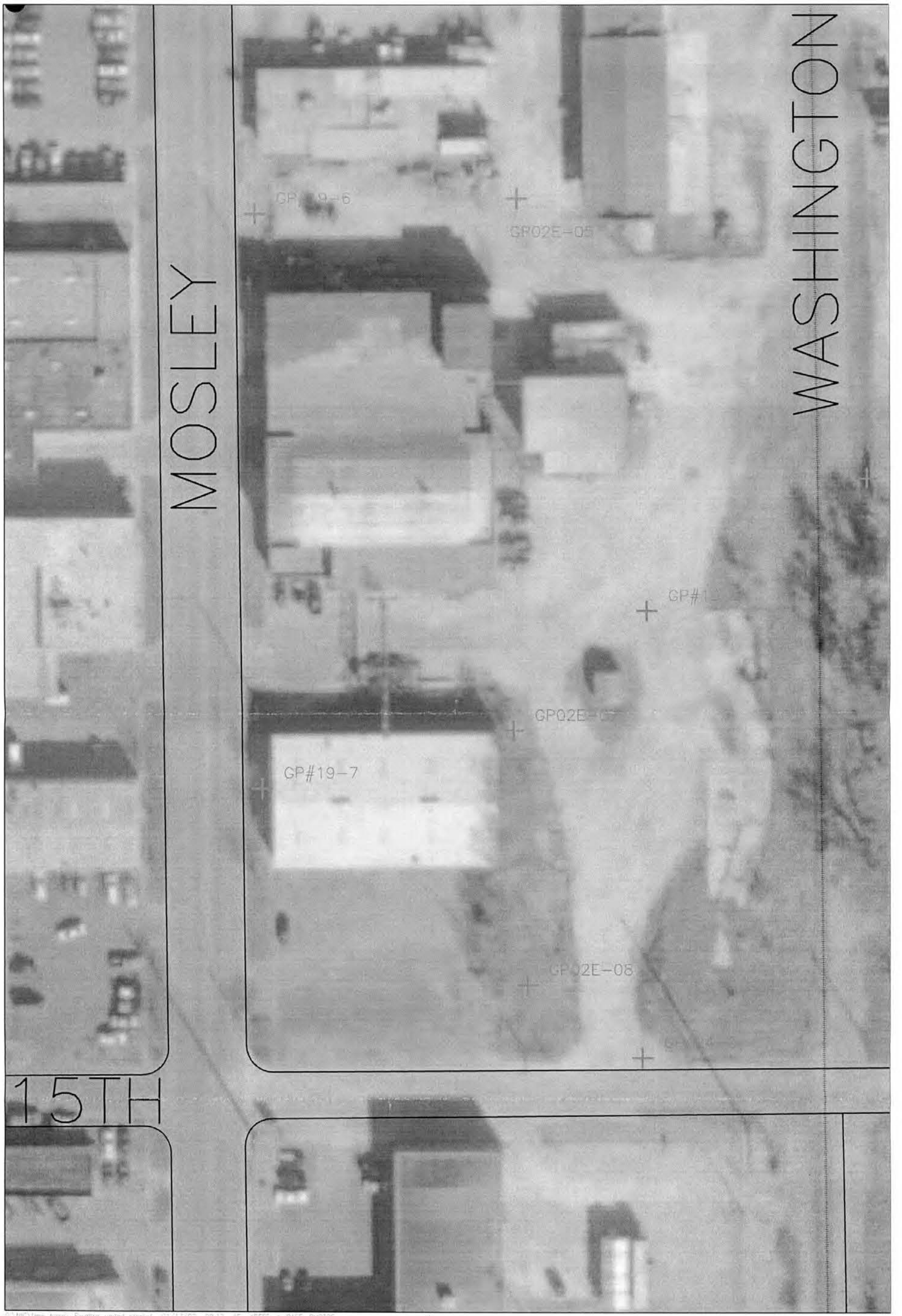
N

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Excel



CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Excel



CDM

Figure 2
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Altra/United Steel

CDM

Figure 1
North Industrial Corridor (NIC) Site
Groundwater Sample Locations, Altra/United Steel