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INTERIM MEASURES SITE CLEANUP & COMPREHENSIVE INVESTIGATION REPORT FORMER NOVICK IRON & METAL SITE 1007 E. 21ST STREET WICHITA, KANSAS

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January 25, 2014
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INTERIM MEASURES SITE CLEANUP
& COMPREHENSIVE INVESTIGATION REPORT
FORMER NOVICK IRON & METAL SITE
1007 E. 21ST STREET
WICHITA, KANSAS

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PCB Cleanup Certification

PCB Regulations require a certification statement signed by the responsible party.

"I certify that the cleanup requirements have been met and that the information contained in the record is true to the best of my knowledge."

By Betty Novick, Officer NIM, Inc.

Signed Betty Novick

Date 5-30-2014

INTERIM MEASURES SITE CLEANUP
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RESPONSE TO COMMENTS – March 31, 2014 Letter

The following are detailed responses to the March 31, 2014 letter from the Kansas Department of Health and Environment (KDHE). We have also reviewed the U. S. Environmental Protection Agency's (EPA) letter of February 19, 2014 and addressed those comments within the responses to KDHE's comments. Additional supporting information for the responses is included in the following revised Interim Measures Site Cleanup & Comprehensive Investigation Report (IMCR).

COMMENTS SPECIFIC TO PCBS

1. ***General Comment #1 EPA/KDHE:*** *General Comment: As indicated in EPA letter dated, February 1 elected to expand the interim measure action to encompass excavation of all known areas of polychlorinated biphenyl compound (PCB) contamination at the Site. While EPA had provided authorization to dispose the bulk remediation waste according to the provisions at 761.61(a), the EPA has not provided an overall 761.61(c) approval for the Site, as the characterization required prior to implementation of a Toxic Substances Control Act (TSCA) cleanup had not been completed. Procedurally, once NIM has addressed the outstanding issues identified herein, MM can submit a report documenting and certifying its achievement of the cleanup goals and the placement of the required deed restrictions and request the EPA's approval.*

Response: We agree with these comments and appreciate both KDHE and the EPA's efforts guiding NIM, Inc. through the 40 CFR Part 761 (a) and (c) cleanup requirements. For clarification purposes, our understanding of the comments *"NIM unilaterally elected to expand the interim measure action to encompass excavation of all known areas of polychlorinated biphenyl company (PCB) contamination at the Site"* is that procedural elements required for a final cleanup under 761.61 were not completed in advance.

NIM determined that the proper course was to cleanup all PCB contamination as it was discovered at the extents of the cleanup areas, including other areas, understanding that KDHE and EPA would not permit the PCB contamination to remain. KDHE and EPA were consulted and aware of the fact that the contaminated areas exceeded the initial extents. The *Shear And Southeast Area PCB Cleanup Plan* (W. Z. Baumgartner & Associates, Inc., October 1, 2012), provided for expansion of the cleanup area because PCB contamination had not been fully delineated prior the cleanup activity. The site cleanup was completed according to the procedures approved in the interim measures cleanup work plan, including those areas beyond the footprint of PCB contamination confirmed by site investigations by W. Z. Baumgartner & Associates, Inc. (WZB) prior to and during the cleanup. In addition, KDHE and EPA were updated of the progress of cleanup throughout field activities with regular reports including progress maps and

data reporting, including the expansion. KDHE was present during the cleanup activities on several occasions observing the cleanup process including expanded areas.

NIM is providing this response with the revised Interim Measures Cleanup Report to satisfy the comments and requirements made by both EPA and KDHE. In addition to the revised site cleanup report, we have provided with this submittal a draft application for Environmental Use Control including provision for a deed restriction, as requested. As such, NIM would like to obtain EPA's conditional approval of the PCB site cleanup subject to implementation of an approved Deed Restriction and Environmental Use Control application.

2. ***General Comment #2 KDHE/EPA:*** *General Comment: Despite contentions by NIM in the draft report that all cleanup work at the Site has been completed, the EPA believes additional characterization is still necessary to document the effectiveness of cleanup efforts at the Site. KDHE and the EPA previously commented on June 29, 2012 that samples would need to be collected in portions of the Site that have not been characterized to rule out additional impacts; however, to date, that work has yet to be completed since NIM requested tabling the response to the KDHE/EPA June 2012 comments, and subsequent submittal of a Revised Comprehensive Investigation (CI) /Corrective Action Study (CAS) Work Plan until after the IRM PCB removal for the Shear and Southeast Area was completed. In order to streamline site activities moving forward, please incorporate the recent IRM data collected (e.g., PCB and other parameters) with historical data, and incorporate additional sampling locations requested by KDHE and EPA into the additional work proposal required to complete site characterization activities for the Site under EPA TSCA and KDHE's State Cooperative Program. In addition, this work proposal submittal should appropriately address all of KDHE and EPA's previously stated concerns indicated in the June 2012 letter. Please provide the requested items in a revised CI Work Plan.*

Response: NIM is generally in agreement with these comments and agrees that combining IMCR data with historical data for PCB and other parameters, as requested, is the appropriate step in the CI/CAS process. As such, the location of all historic sampling is provided in the IMCR, **Exhibit No. 4**. NIM has been investigating the Site since 1989, and NIM believes that the presentation of all of the data as requested by EPA and KDHE is sufficient to deem investigation of the site completed. The data that has been generated through the cleanup verification and the repeated investigations have identified the areas where PCB was and was not present at the site from the former Novick Iron & Metal operations. At least seven comprehensive biased sampling events have been conducted at the site since it discovery and as many as 14 separate sampling events. Those historic sampling events were based on an understanding of the historical operations at the property as shown through aerial photographs provided in the revised IMCR. There is no basis to continue to sample in areas that have been eliminated as potentially impacted areas.

A response to the June 29, 2012 letter from EPA and KDHE is provided herein, following these responses. As we work to resolve the remaining issues presented in that letter, the path forward must be in light of new information from the interim measures site cleanup and the current condition of the Site. Previous Work Plans, comments, and reports, etc., were written and evaluated without this information. The original approach taken by the CI Work Plan has

been modified in light of exiting site conditions as determined empirically during the Interim Measures.

Regarding the comment above, the following EPA/KDHE comments from the June 29, 2012 letter relate specifically to PCB investigation and delineation, and appear to be the basis of General Comment #2 above and EPA's Comment #2 from the February 19, 2014 letter: Comment #1, #2, #12, and #13. We are providing a full response to those comments below:

- **Comment 1-June 29, 2012** is in regards to the regulatory procedures of 761.61, which we understand this response is a part of satisfying. The cleanup report has been revised to include a certification statement.
- **Comment 2-June 29, 2012** is in regards to the corridor-based investigation plan developed years ago, and which was abandoned during the meeting in Kansas City with KDHE/EPA as was agreed in principle at that meeting. Cleanup has been completed in all the previously identified "corridors" of the site. Since these areas were cleaned up with verification sampling completed, this comment is satisfied. Over 17,000 tons of PCB-contaminated material (and other parameters) was removed, and both the verification data and the extensive historic PCB sampling data demonstrate that PCB contamination has been removed to below 25 ppm. Previous investigations at the Site for PCB sampled the areas where PCB contamination was either known or suspected. The IMCR includes all PCB investigation and cleanup verification data for the site. The total number of samples collected and analyzed by NIM that are being used for PCB delineation at the site, is at least 333.
- **Comment 12-June 29, 2012** as above, is in regards to a proposal to investigate areas of potential contamination prior to the cleanup and verification. Since these areas were cleaned up with verification sampling completed, this comment is satisfied. We greatly appreciate EPA and KDHE's efforts to permit cleanup under 761.61(a) and 761(c) as discussed in the previous comment.
- **Comment 13-June 29, 2012** goes back to comment #6 from the September 16, 2011 letter from KDHE to W. Z. Baumgartner and the resulting series of responses and modifications to plans and reports. The original comment was to ensure NIM accounts for "structural impediments" during site investigation and cleanup. NIM removed or excavated any and all impediments during the site cleanup as to not impede the cleanup, investigation sampling, or verification sampling, specifically the concrete and scrap metal including the former crane and shear were removed.

3. ***General Comment #3, KDHE/EPA:*** *General Comment: The previous investigation completed by Terracon on behalf of NIM documented PCB impacts in sediments in the West Fork of Chisholm Creek. As part of required TSCA characterization efforts, please provide information on surface water flow at the Site, including all discharge points to the adjacent waterways. In addition, please summarize all historical surface water and sediment sampling PCB data collected during site investigation activities, and propose sampling locations to evaluate overland flow transport and potential impacts to the adjacent surface water bodies. The EPA recognizes there may be upstream sources not attributable to MM's past activities; however, the responsibility lies with NIM to demonstrate whether or not there are impacts or*

increases in impacts along the reaches adjacent to the NIM Site. Please provide the requested items in a revised CI Work Plan.

RESPONSE: As requested, a section has been added to the cleanup report summarizing the surface water discharge patterns of the site, and summarizing historic data for surface water and sediment monitoring around the site. The Terracon data demonstrates there has been no impact to the adjacent waterways from the site. As the site has been cleaned up with potential source of PCB >25 ppm removed, there is no reason to perform additional testing. Following the Interim Measures cleanup, the site was graded level to prevent significant discharge of surface water from the site.

A request for information from KDHE was made regarding surface water and sediment monitoring in streams near the site. No data was provided in time for producing this report. Additionally, we note that KDHE is an EPA delegated state for implementation of an NPDES Permit Program. We requested information from KDHE regarding coverage of this site's storm water discharges under the General Industrial Stormwater Permit KSR000000 or other NPDES Permit. No response was received. Issuance of the General Permit does not permit discharge of hazardous substances or discharges, which cause or contribute to a violation of Kansas Surface Water Quality Standards. The regulation provides for issuance of an individual permit if there is information available that indicates water quality standards have been, or may be violated. No information was provided to indicate if the existing facility is or is not in compliance with the State of Kansas for its KPDES permit.

4. ***General Comment #4, KDHE/EPA:*** *Exhibit 2/Exhibit 4: Please note, reporting inconsistencies were identified on Exhibit 2 (i.e., cells SH-G2, SH-G3, SE-Cl), and Exhibit 4 (i.e., cells SH-G2, SH-G3, SE-B5, laboratory report sampling dates for report ID 1310846). Please revise accordingly to be consistent with laboratory reports.*

Response: The reporting inconsistencies have been corrected as summarized below.

Sample ID	Sample Date	Lab Report ID	Lab Report Result	Exhibit 2 Result	Exhibit 4 Result	Report Revision
SH-G2-FLOOR-3	9/16/13	1309671-REV	0.338	0.291*	0.291*	Exhibits have been corrected to match the dry-weight corrected revised lab report
SH-G3-FLOOR-3	9/16/13	1309671-REV	0.144	0.118*	0.118*	
SH-G3-WALL-N	9/17/13	1309726	0.0162	0.016	0.016	None-Results are reported to 3 decimal places on Exhibits for consistency and readability
SE-C1-FLOOR-2	8/26/13	13081035	20.000	ND*	20.000	Exhibit changed to 20.000 ppm
SE-B5-FLOOR-1.5	9/19/13	1309876	0.072	0.072	0.72*	Exhibit changed to 0.072 ppm
All samples for Lab ID 1310846	10/17/13	1310846	Multiple	Multiple	Sample date 11/17/13*	Exhibit sample dates changed to 10/17/13

Note:

* Indicates incorrect value that is corrected.

5. ***General Comment #5, KDHE/EPA:*** *Exhibit 2/Exhibit 4: Exhibit 4 shows three soil samples were collected on September 25, 2013 from the Site identified as Pll Area-1, Pll Area-2, and Pll Area-3; which results each exceeded the PCB cleanup goal; however, the exact location of these samples are not presented on Exhibit 2. Please revise the report to include the exact location of these samples. In addition, Exhibit 4 indicates sample SE-A5-Wall-W collected on September 25, 2013 exceeded the PCB cleanup goal, and it does not appear in Exhibit 4 or in Exhibit 2 that any further excavation to the west of this cell was conducted in order to reach the cleanup goal. Please clarify the action taken at this particular cell.*

Response: Exhibit No. 2 (now **Exhibit No. 7**) in the original IMCR shows the results of the verification sample PCB results at the final extents, and placing results greater than the cleanup goal would be confusing. The location of the samples identified as P11 Area-1, P11 Area-2, and P11 Area-3 were taken from the surface soil prior to excavation in what was renamed the "WE" Area on the southwest side of the railroad spur. Verification samples in the "WE" areas correspond to these investigation sample locations, specifically WE-A1, WE-C1, and WE-F1 as the closest points. The report has been modified to add the "P11" area samples and other investigative samples to what is now **Exhibit No. 5** in the IMCR with other historic PCB sample results.

The wall from which sample SE-A5-Wall-W was collected on September 25, 2013 was excavated and removed on or before October 8, 2013. The north and west walls for A5 were excavated into SE-AA4 and SE-AA5. There was no wall to sample after over excavation and the results for those floor samples, including the floor sample for A5, were used for verification. As indicated in the field notes on October 8, the excavation in this area was completed such that there was no wall to sample.

COMMENTS SPECIFIC TO OTHER PARAMETERS

6. ***Section 3.1 Excavation Floor Confirmation Samples:*** *Section 3.1 Excavation Floor Confirmation Samples: The second paragraph in this section indicates biased grab samples were collected for testing where staining, odors, petroleum, miscellaneous buried material, or any other obvious indicators of possible pollution were observed. On September 12, 2013, KDHE was onsite and petroleum odors were observed at the cell SH-A5W at four feet (ft) below ground surface (bgs) (excavation bottom), and a petroleum sheen was observed near cell SH-A2 at two ft bgs; however, it does not appear that biased grab samples were collected from these areas at the time of observation. Please revise the report to include a discussion of these visual observations and actions taken in response to the observations while in the field.*

Response: The areas around SH-A5W and SH-A2 were excavated to remove the observed sheen/odor contamination. The source was free water leaking through a pile of contaminated soil staged on top of unexcavated soil (west of the cells in question). The surface and subsurface where the pile was staged was also excavated and verified later. Cleanup was verified in this area by sampling for other parameters, including TPH, at SH-A2-4', SH-B5-Floor4', and SH-A4W-4'. All verification sampling was completed to include locations within grids where staining, odors, and other indications of pollution were observed.

7. ***Section 3.5 Additional Parameters:*** *Section 3.5 Additional Parameters: Following review of the data presented in the draft report it does not appear that additional parameter sampling at the excavation floor across the Site was conducted at the frequency stated in the work plan (rate of 1 sample per 50' x 50' area), and data gaps for other parameters remain to exist at the Site. As indicated above, additional characterization work is required at the Site. In accord with comment 2 above, please incorporate the recent IRM data collected (e.g., PCB and other parameters) with historical data, and incorporate additional sampling locations requested by KDHE and EPA into the additional work proposal required to complete site characterization activities for the Site. In addition, this work proposal submittal should appropriately address all of KDHE and EPA's previously stated concerns indicated in the June 2012 letter.*

Response: Sampling for other parameters was completed from each of the cleanup areas to verify the cleanup of parameters other than PCB. This included 22 total locations from the Shear Area, the Southeast Area, and from each of the expanded areas (WE, P-10, and WSW Areas). The locations were collected from grid areas nominally 50 feet apart (more or less in some cases) as judged by the field scientist within each of the areas. The locations were spaced as best as possible to account for the variability of the shape and depth of the excavated areas, and to be representative of the final excavation conditions. These results combined with existing historic data adequately characterize typical conditions of the site for these other parameters. Please see **Exhibit No. 11** in the IMCR for the sample locations.

8. ***Section 3.5 Additional Parameters:*** *Section 3.5 Additional Parameters: This section indicates no VOCs, SVOCs, or petroleum hydrocarbons were detected above any KDHE Tier 2 Risk-Based Standards for Kansas (RSK) Manual value, and that chromium and lead were the only parameters detected to exceed the industrial (non-residential) soil pathway RSKs, with those exceedances occurring in two sample locations, WE-D1 and WSW-B, and that both of these sample locations were covered with at least 1 foot of clean fill material. Please note, these statements are not consistent with data presented in the laboratory reports, which indicate dibenz(a,h)anthracene was detected in the sample from cell SH-L1 exceeding the non-residential soil pathway and residential soil to groundwater pathway, and lead detections in four cells SH-H4 at 0.5ft, NE4 at 4ft (December 23, 2013 laboratory reporting of 1,040 mg/kg), WE-D1 atl.5ft, and WSW-B at 1 ft each exceeding the non-residential soil pathway, and chromium in cell WSW-B sample at 1ft exceeding the non-residential soil pathway. Please revise the report accordingly for consistency with results presented in laboratory reports and to account for these soil exceedances.*

Response: The report and exhibits have been modified to make the corrections noted for WE-D1, SH-L1 and SH-H4. An error was made on the initial lab report for sample NE4-Floor-4, which was incorrectly reported on a "dry weight" basis. The report has been corrected to the correct total lead concentration of 743 ppm for NE4-Floor-4.

9. ***Section 3.5 - Table 4:*** *Table 4 indicates that additional excavation of cell SH-H4 was conducted beyond 0.5 feet bgs due to additional PCB contamination removal; however, Exhibits 2 and 4 do not indicate that additional excavation was conducted to deeper depths. In addition, please revise the table to be consistent with laboratory reports (i.e., SH-F12 chromium and lead*

concentrations exceeded the non-residential soil pathway; WE-D1 chromium result exceeds the residential soil pathway; December 23, 2013 laboratory report indicates lead was detected in the cell sample NE-4 at a concentration of 1,040 mg/kg exceeding the non-residential soil pathway). Please review and verify the information presented and revise the report documents as necessary for consistency.

Response: SH-H4 was not excavated further. This location was confused with SH-H14 while writing the report, and corrections have been made. The chromium concentration for WE-D1 has been included, and the Exhibits and Report have been corrected. We note the lab report error for NE4-4' in the comment above. Additional information regarding Benzo(a)pyrene concentrations have also been added.

10. ***Exhibit 5/General Comment:*** *Exhibit 5/General Comment: Please revise the exhibit to include results of all other parameters analyzed with comparison to KDHE's Tier 2 RSK values. Please note, that RSK values for a number of constituents have recently been updated and can be found at the following weblink at http://www.kdheks.gov/remediai/rsk_manualpage.html. In addition, please provide a figure in the report presenting additional parameter data collected during the IRM, showing where all residential and non-residential RSK values are exceeded in soil at the Site. For Environmental Use Control Purposes, it will need to be clearly documented and presented in the report where RSK (both residential and non-residential) exceedances remain at the Site.*

Response: We have updated the **Exhibit**-now **Exhibit No. 10** to include all of the other parameters analyzed with comparison to KDHE's Tier 2 RSK values, using the updated values provided in the web link. Additionally, we have added a new **Exhibit No. 11**, which is a map showing the location of the other parameter samples collected including the locations where results exceeded the applicable RSK Tier 2 values.

11. ***Section 4.0 Conclusions:*** *Section 4.0 Conclusions: The fifth paragraph indicates that mercury exceeded the non-residential soil pathway in two sample locations. Please note, these reported non-residential exceedances for mercury could not be verified. Table 4 and laboratory reports do indicate that two soil samples (SH-F12 and WE-D1) collected and analyzed for mercury did exceed the residential soil pathway value. Please revise the conclusion section of the report to account for and be consistent with the RSK exceedances discussed in this comment and other comments presented above.*

Response: This discussion has been corrected and modified. The sample where SH-F12 exceeded for mercury was not the final depth. This location was excavated further and resampled for lead and chromium, which were below RSK Values. Due to confusion over RSK value applicability, mercury was not reanalyzed in for the retest (in addition to benzo(a)pyrene). Retesting after additional excavation at this and at the other locations resulted in metals values lower than the RSK values. It is a forgone conclusion this is the case at SH-F12 for mercury and B(a)P at a depth of 4 feet.

12. ***General Comment:*** *General Comment: Please provide a figure showing the final excavation depth completed at all cells during the IRM since additional parameter laboratory data indicate*

additional excavation was conducted in some cells after reaching the PCB cleanup goal (i.e., cells SH-A2, SH-H14, WE-D1). In addition, please provide a surveyed topographic map of the excavation area as discussed in the work plan.

Response: We have provided the topographical map (**Exhibit No. 8**) requested, and as promised in the work plan, showing the final extents and elevation of excavation. We could not provide this in the draft report because the contractor did not have a completed map available when we submitted.

13. ***General Comment:*** *General Comment: Please include in the IRM report a Data Validation Summary for the IRM activities in accord with the Site-Specific Quality Assurance Project Plan.*

Response: The data validation summary has been prepared and incorporated into the cleanup report. The report indicates that the data is usable for purposes of the IMCR.

14. ***General Comment:*** *General Comment: Please provide printed copies of all material provided on the compact disc in the report.*

Response: A copy of all files on the disc is being provided as requested.

RESPONSE TO COMMENTS – June 29, 2012 Letter

The following are detailed responses to the June 29, 2012 letter from KDHE and EPA. This response is provided in cooperation with the response to comments on the Interim Measures Cleanup Report as discussed by teleconference on April 18, 2014 due to overlap.

1. ***Comment 1.*** *The work plan does not include a certification as required by 40 CFR 761.61(a)(3). Please provide proper certification for the work plan.*

Response: The updated IMRC has been updated to include certification.

2. ***Comment 2.*** *It is the EPA's understanding that this work plan is being done under 40 CFR 761.61(a). After reviewing all maps in the work plan which identify the samples taken to date, the EPA needs NIM to justify not testing larger areas for polychlorinated biphenyls (PCBs) in each corridor and to submit a sampling plan for sampling these areas. For reference, EPA has prepared and attached a map showing samples taken to date for PCBs based on data presented in the work plan. Please revise the work plan accordingly to address this matter.*

Response: The corridor-based investigation plan discussed in the comment was developed years ago, and was abandoned during the meeting in Kansas City with KDHE/EPA. The change of approach was discussed and agreed by KDHE and EPA and the Interim Measures Work Plan has been approved and implemented. This approach was abandoned for many reasons, but most importantly cleanup has been completed in all the previously identified "corridors" of the site. Since these areas were cleaned up with verification sampling completed, this comment is satisfied. Over 17,000 tons of PCB-contaminated material was removed, and both the verification data and the extensive historic PCB sampling data demonstrate that PCB

contamination has been removed. Previous investigations at the Site for PCB sampled the areas where PCB contamination was either known or suspected. The IMCR has been revised to include all PCB investigation and cleanup verification data for the site. The total number of samples collected and analyzed by NIM that are being used for PCB delineation is more than 333 (not including samples where cleanup occurred).

3. ***Comment 3.*** *Section 2.2 third paragraph states "the site is bounded to the west by the Wichita Flood Control Canal", when it is actually to the east and not west. Please revise.*

Response: We will correct all future reports, etc. to note the Wichita Flood Control Canal is east of the site.

4. ***Comment 4.*** *Section 2.5.1 discusses the site-wide data screening process and identifies site-wide potential parameters of concern (PPOCs) for soil based on parameters that exceeded both KDHE's Tier 2 Levels for the Non-Residential soil pathway and the site-wide upper confidence interval (UCI) calculated. Please be advised, KDHE previously requested NIM reevaluate existing data based on actual concentrations and not the UCI, and KDHE considers all contaminants detected above KDHE's Residential Tier 2 Levels (groundwater pathway, soil pathway, or soil to groundwater pathway) to be contaminants of concern (COCs) for the NIM site (recognizing that some groundwater impacts may be attributable to upgradient sources). Please revise the work plan accordingly to account for KDHE's requests and remove analysis based on the UCI from the table referenced in the section.*

Response: See response to Comment 2. Modifications were made to the Work Plan based on our understanding of previous comments and verbal conversations with KDHE. We are no longer using this approach.

5. ***Comment 5.*** *Section 2.5.1 discusses the historical investigative activity at the site. KDHE requests that NIM provide a single map in the work plan that shows the investigation corridors and historical/proposed sample locations for this work plan (i.e. overlay all historical/proposed sampling locations over Exhibit 3).*

Response: We have provided this information as requested in the revised IMCR, but updated with no corridors and showing the cleanup areas.

6. ***Comment 6.*** *KDHE notes that the North, Southwest, East, and West Corridors only include volatile organic compound (VOC) analysis for select samples containing and adjacent to groundwater MCL exceedances only. KDHE believes that a more thorough sampling strategy for VOCs is necessary to fill in remaining data gaps, and to fully evaluate site conditions based on the nature of NIM's past operations. Please revise the work plan for each Corridor to include adequate sample coverage for VOC analysis.*

Response: VOCs were sampled and analyzed during the cleanup verification. No VOCs were detected at significant concentrations in the cleanup verification samples in all areas of the site. This new information provided as part of the IMCR is adequate to demonstrate that VOCs, are not a resident source of groundwater contamination. KDHE has sufficient information about adjacent sites to know that the groundwater source of these parameters is offsite (Please see Addendum No. 1 to the IMCR, prepared by NIM, Inc. for more discussion).

7. ***Comment 7.*** *KDHE notes that the North and East Corridors do not include polycyclic aromatic hydrocarbons (PAH) analysis for proposed sampling, and that the Southwest and West Corridors only include PAH analysis for select sample grid locations that include and are*

adjacent to the historic surface sample residential exceedances only. KDHE believes that a more thorough sampling strategy for PAH compounds is necessary to fill in remaining data gaps, and to fully evaluate site conditions based on the nature of NIM's past operations. Please revise the work plan for each Corridor to include adequate sample coverage for PAH analysis.

Response: SVOCs/PAHs were sampled and analyzed during the cleanup verification. No SVOCs were detected at significant concentrations in the cleanup verification samples with the exception of benzo(a)pyrene and dibenzo(a,h)anthracene. B(a)P slightly exceeded the residential soil RSK value in 3 samples. D(a,h)A exceeded the non-residential soil and residential soil-to-groundwater RSK value at 1 location. This new information provided as part of the IMCR is adequate to demonstrate that SVOCs, are not a significant source of contamination. KDHE has sufficient information about adjacent sites to know that the groundwater source of these parameters is offsite (Please see Addendum No. 1 to the IMCR, prepared by NIM, Inc. for more discussion).

8. Comment 8. *The work plan for the North, Southwest, East, and West Corridors do not include total petroleum hydrocarbons-gasoline range organics (TPH-GRO) analysis for any of the proposed sampling areas, in addition, work plan for the North and West Corridors do not include TPH-diesel range organics (TPH-DRO) analysis for proposed sampling, and that the Southwest and East Corridors only include TPH-DRO analysis for select sample grid locations that include and are adjacent to the historic surface sample residential exceedances only. KDHE believes that analysis of TPH-GRO and a more thorough analysis of TPH-DRO are necessary to fill in remaining data gaps, and to fully evaluate site conditions based on the nature of NIM's past operations. Please revise the work plan for each Corridor to include adequate sample coverage for TPH-GRO and TPH-DRO analysis.*

Response: Please see the discussion for Comment 7, but with respect to TPH.

9. Comment 9. *The work plan proposes that for metal analysis in the North, Southwest, East, and West Corridors chromium and lead will be sampled site-wide, and that other select metal compounds will be analyzed from the 0-1 ft interval in select sample grid locations that include and are adjacent to historic surface sample residential exceedances. To ensure metal contaminants are fully characterized in these proposed soil sample locations during this investigation, KDHE request that NIM revise the work plan for each Corridor to include analysis for eight Resource Conservation and Recovery Act (RCRA) metals rather than select targeted metals.*

Response: Historic metals analysis and new data provided by the interim measure cleanup report is sufficient to characterize the site for metals. The site's use in the Environmental Use Control application is to remain a scrap yard with deed restriction. Metals contamination is a forgone conclusion for the current use and further cleanup would not provide any benefit.

10. Comment 10. *Section 2.5.2 for the Surface Water Corridor does not include a discussion of previous sample locations and historic results within the Corridor, nor does it reference exhibits providing historical sampling locations or data. Please revise the work plan accordingly.*

Response: A section has been added to the IMCR to include surface water and sediment data as requested. Investigative data show there is no demonstrated impact from the site to off-site surface water or sediment.

11. Comment 11. *Section 2.5.3 references Exhibit 8. The shear area boundaries as provided in Exhibit 8 of the revised Comprehensive Investigation/Corrective Action Study (CI/CAS) work*

plan differ from the boundaries as shown in the Shear and Southeast PCB Cleanup Work Plan. Furthermore, the northern half of the shear area as shown in Exhibit 8 has not been sampled. Since the extent of contamination has not been fully delineated, please indicate how NIM plans to address this matter.

Response: The entire shear area was excavated and cleaned up pursuant to the Interim Measures Work Plan. The boundaries of the cleanup areas were expanded according to the Work Plan and fully delineated and verified.

12. Comment 12. *Sections 2.5.3 and 2.5.4 discusses the proposed 50 foot by 50 foot sampling grid for PCBs for the investigation, which is not consistent with 40 CFR 761 Subpart N. Please be advised if NIM wishes to use an alternate sampling plan to that used in 40 CFR 761.61(a), that NIM must apply in writing to the EPA for a 40 CFR 761.61(c) approval. Please inform the EPA of your intentions.*

Response: This comment is based on a proposal to investigate areas of potential contamination prior to the cleanup. Since the site has been cleaned up to <25 ppm with verification sampling completed at 25 feet sample grid for PCB, this comment is satisfied. We greatly appreciate EPA and KDHE's efforts to permit cleanup under 761.61(a) and 761(c) as discussed in the previous comment.

13. Comment 13. *Section 2.5.3 indicates "no sampling is proposed inside or under the building foundations at this time...". Please be advised, the inside and under the building foundations need to be sampled during the investigation. Please revise the work plan accordingly.*

Response: This comment goes back to comment #6 from the September 16, 2011 letter from KDHE to W. Z. Baumgartner and the resulting series of responses and modifications to plans and reports. The original comment was to ensure NIM accounts for "structural impediments" during the site investigation and cleanup. NIM removed, penetrated, or excavated any and all impediments during the site cleanup as to not impede the cleanup, investigation sampling, or verification sampling. Because the contaminated areas have now been fully delineated and cleaned up there is no factual basis to conclude that there is any impacted area in or around any remaining site buildings or structures.

14. Comment 14. *Section 2.5.3 indicates that soil samples will be collected from intervals 0-1, 1-2, 2-4, 4-6, and 6-8 feet below ground surface (ft bgs); however, only select samples will be tested depending on the results of the initial analytical results (e.g., targeted sampling for select COCs based on results), and that a decision will be made to analyze adjacent samples either horizontally or vertically, if residential screening criteria are exceeded. The work plan also indicates every effort will be made to ensure that holding time limits are met. Please be advised, holding limits need to be met for each analysis. If this is not implemented, KDHE may require additional soil sampling during a separate mobilization.*

Response: Samples were collected across the site to verify cleanup in the horizontal and vertical extents. The results are presented in the IMCR and are sufficient to meet KDHE/EPA's objectives. Holding times were complied with during the interim measures phase, as directed. In most cases verification analyses were completed on an expedited basis (1- or 2-day turnaround) at a premium cost to support the cleanup process.

15. Comment 15. *Section 2.5.3 references Exhibit 13-Surface Water Corridor Site Area Investigation. Please revise the Exhibit to show the planned corridor site sample nomenclature*

system and include a tabulation of initial analysis for each proposed sampling point. In addition to the proposed analysis, KDHE requests that the surface water and sediment samples be characterized for TPH-DRO and eight RCRA Metals rather than a targeted list of metals. Please revise the work plan accordingly.

Response: Please see response to comment 10.

16. Comment 16. *Section 2.5.3 no.6 discusses waste management practices. Please note, KDHE requests that the TCLP analysis be run for 8 RCRA Metals rather than just lead, cadmium, and chromium. Please revise the work plan accordingly.*

Response: TCLP analysis was completed in 2012 prior to the cleanup for RCRA metals; these results were submitted by WZB Inc. with the Supplemental Investigation Report for the Shear and SE Areas.

17. Comment 17. *Section 2.5.5 discusses site preparation activities; however, no mention is made that the Kansas One Call System will be contacted prior to performing investigation activities during this scope of work. Please ensure this is done prior to initiating field activities*

Response: Kansas One Call was contacted by the contractor prior to beginning cleanup activities, as required by the Scope of Work.

18. Comment 18. *Section 2.8 indicates that NFM may propose to conduct pilot treatability studies and other treatability data gathering activities for disposing of PCB waste. Please be advised, if NIM is planning on conducting these activities at this time that NIM must apply in writing to the EPA for a 40 CFR 761.60(e) approval, or NIM must identify a facility that has national approval for performing this type of work at the site. Please inform the EPA of your intentions.*

Response: NIM disposed of >17,000 tons of PCB waste as documented in the IMCR and did not pursue treating PCBs. No treatability studies were proposed or completed.

19. Comment 19. *Sections 3.1 and 3.3 indicate the CAS evaluation will be included in the Interim Investigation Reports; however, Section 2.9 refers to a CI Report. For clarity, the CI results should be reported in a CI Report and not an Interim Investigation Report, and the CAS evaluation and final site remedy should be fully evaluated and addressed in the CAS Report for the site in total following KDHE and EPA final approval of the CI Report, and any subsequent addenda to the CI Report (e.g., if additional investigations are required based on the results of the CI Report). Please revise the work plan text accordingly.*

Response: Based on comments and conversations with KDHE and EPA, and in consideration of the unique development of this project, the IMCR has been expanded to include/reference all of the historic investigation data. As such was have retitled the report to include Comprehensive Investigation in the title in order to complete this procedural step in the administrative process. NIM respectfully appeals that KDHE and EPA recognize the magnitude of work completed and reported as having satisfied the administrative requirements to implement an Environmental Use Control / Deed Restriction on the property as the final measure.

20. Comment 20. *Section 4.0 does not include a revised cleanup schedule for the site as required by both the EPA and KDHE. Please provide.*

Response: We propose to submit a final EUC application for the property within 45 days of approval of the IMCR.

21. Comment 21. *The second paragraph of Section 4.0 indicates that some material storage piles in the west corridor site may be temporary relocated to prepare the site for access. Although not specifically mentioned in the work plan, please be advised that if NIM intends to dispose of any material (i.e., scrap metal) that is moved and in contact with PCB-contaminated materials, those materials must be tested for PCB contamination to determine proper disposal.*

Response: NIM disposed of all materials removed from the cleanup areas in accordance with the Shear and Southeast Area PCB Cleanup Report.

22. Comment 22. *Exhibits 4-7 provide a summary of investigative activity with tables of data used in analysis for the proposed sampling plan, and goes on to list the depth (i.e., 0-0.5 ft bgs). From the tables presented in the Exhibits it appears that only the data from 0-0.5 ft bgs was used in NIMs analysis, when historical data exists at deeper depths that need to be included in NIMs analysis. To ensure that each corridor is fully characterized for all COCs during this investigation, KDHE requests that NIM reevaluate all existing data and revise tables within Exhibits 4-7 to include analysis of the historical data collected at deeper intervals as well. Please revise the work plan accordingly.*

Response: We have prepared the attached IMCR to satisfy these comments.

23. Comment 23. *Please note Exhibits 11 and 12 are missing the legend. Please revise.*

Response: This was an artifact of the scanner used to copy documents due to sensitivity or low toner.

INTERIM MEASURES SITE CLEANUP
& COMPREHENSIVE INVESTIGATION REPORT
FORMER NOVICK IRON & METAL SITE
1007 E. 21ST STREET
WICHITA, KANSAS

EXECUTIVE SUMMARY

This document fulfills the requirements of an *Interim Measures Site Cleanup Report* and a *Comprehensive Investigation Report* for the site of the former Novick Iron & Metal operation. This document has been prepared on behalf of NIM, Inc. Cleanup activities began in August 2013 to complete site remediation described in the *Shear and Southeast Area PCB Cleanup Plan*. Backfill of the remediated areas was completed January 17, 2014.

The site cleanup was expanded outside the original cleanup area footprint. The expansion was executed to include the site locations where PCB contamination was either known from historical records or discovered through soil sampling completed during the cleanup. Additional areas outside the original cleanup footprint were remediated and verified by procedures in the *Shear and Southeast Area PCB Cleanup Plan*.

This report provides documentation of EPA-specific criteria in accordance with the 40 CRF § 761.61(c) risk-based PCB cleanup rules as follows:

- Complete site characterization information
- Cleanup and disposal activities
- Cleanup verification sampling for PCB contaminated soil and debris
- Cleanup and sampling for additional parameters of interest, including metals, semi-volatile organics (SVOCs), volatile organics (VOCs), and petroleum hydrocarbons as diesel, oil and gasoline range organics.
- Documentation of site restoration

The former Novick Iron & Metal, Inc. facility is located at 1007 E. 21st Street North in Wichita, Kansas with the legal description described as NE1/4 of Section 9, Township 27 South, Range 1 East, Sedgwick County, Kansas.

The NIM site is located in the North Industrial Corridor (NIC), which is an area of documented groundwater contamination. Numerous contaminant sources have been identified within the NIC, and it has been demonstrated to have impacted the environmental conditions at Novick.

The site has been the location of a scrap metal processing and recycling company since approximately 1965. Site operators have included Novick Iron & Metal until 2003-04 and the Yaffe Company (operating as Quickservice Steel Company, LLC. and 21st Street Metals) since that time.

Historic aerial photography of the site documenting its use as a scrap metal facility are provided in **Exhibit No. 3**.

It is well documented that metal recycling facilities receive items from the public and industry that are rich in metal content. These items are processed in order to recover valuable metals which can be recycled. Metal concentrations in the soil of a recycling facility are higher than in residential neighborhoods and most industrial sites. Iron, aluminum, copper, and lead concentrations can be found in the soil. Historically lead is present due to its ubiquitous use in so many applications, including paint, batteries, solder, plastics, rubber, wheel weights, shower and plumbing applications. Shearing, shredding, sawing, torching, and material handling are necessary parts of operating a metal recycling facility and each of those activities releases minute particles of metals that accumulate.

The subject property is located in an industrialized area. According to the Wichita City Zoning Department the NIM and adjoining properties are classified as General Industrial (GI). Surrounding property use is as follows:

- *West:* The property to the west separated by the Wichita Terminal railroad tracks and fence is the former John's Refinery and is currently industrial in use as a veterinary supply.

- *North:* The property to the north across 21st Street includes the former Coastal Refinery. There is ongoing groundwater remediation at this property, including a free product recovery. Other adjacent uses north of the subject site are industrial including a scrap recycling facility.

- *East:* The property to the east across the Wichita Flood Control Channel is part of the Coastal Refinery remediation site and is vacant. There are numerous groundwater monitoring and recovery wells scattered across the property.

- *South:* The property across the West Fork of Chisholm Creek south is vacant land and an industrial facility, Tramco.

A review of the *Remedial Investigation Report, North Industrial Corridor, Camp, Dresser & McKee, Inc., February 2004* (NIC RI Report) shows that the NIM site is within the boundaries of the former National Priorities List (NPL) 29th and Mead site, where there is documented contamination of the groundwater with volatile organics. The Former Coastal Derby Refinery facility is located across the street and upgradient from NIM at 1100 East 21st Street North. The NIC RI Report documents significant petroleum hydrocarbon contamination related to past refining activities conducted at the facility with free product present on the groundwater.

The Johns' Refinery facility was investigated by the EPA and found to be contaminated with PCBs up to 742 mg/kg PCBs and 3,180 mg/kg lead. Additionally, the EPA discovered TCE concentrations in groundwater at John's Refinery as high as 1,000 μg/L.

Beginning in 1988, a number of environmental investigations have been performed at the NIM, Inc. site. These are listed in **Table 2.1**. Most of these investigations detected PCB and metals contamination. There were some historic "hot spots" for PCB, and KDHE desired that and Interim Measures Cleanup be formulated to address these areas. The data is presented in Tables 2.2, 2.3 and 2.4.

The initial investigations leading to the remediation documented in this report also included surface water sampling, sediment sampling, and groundwater sampling. PCB's were not detected in the surface water samples nor the groundwater samples. Sediment sample in the adjacent creek did detect PCB. The most recent sample is from 2003 and was below the consensus-based threshold where an adverse affect is frequently observed.

After approval of the remediation plan by KDHE, removal of contaminated soil began in August 2013. Oversight and verification sampling for the *Cleanup Plan* was performed by W. Z. Baumgartner & Associates, Inc. into December 2013. A transfer of project oversight and verification sampling was completed in December 2013 to Industrial Environmental Consultants, LLC. Remediation Services Inc. completed excavation, backfilling, rail car coordination, and special waste disposal activities. Republic Services, Inc. completed Rail Car management and waste disposal.

PCB-impacted soil, debris, waste, metal, and concrete were excavated from the site according to the *Cleanup Plan* and disposed off-site. The cleanup level selected was PCB < 25 ppm. Bulk PCB remediation waste ≥ 50 ppm was disposed of at the Republic Services TSCA Landfill in Avalon, Texas. Bulk PCB remediation waste ≥25 ppm and < 50 ppm was disposed of at the Waste Connections Plum Thicket landfill in Harper, Kansas as Special Waste.

Soil above the cleanup goal was excavated, transported, and disposed according to the *Cleanup Plan*. Verification samples were collected from within cleanup areas along the floors and vertical walls of the excavation to verify the cleanup goal for PCB was achieved. Once verification sampling confirmed PCB concentrations for the remaining and surrounding soil were delineated to <25 ppm, the areas were backfilled to natural grade using clean fill materials.

Control measures were implemented as described in the *Cleanup Plan* to prevent the spread of PCB-contaminated materials from outside the cleanup area. These measures included:

- Installation of perimeter stormwater controls and implementation of the stormwater pollution prevention plan to prevent stormwater discharges from the active cleanup area
- Removal by the site's owner of recyclable materials not designated for cleanup (e.g., the shear and crane)
- Installation of a barrier fence from the west to the east boundary of the site to create an exclusion zone for non-authorized personnel
- Daily site health and safety meetings for site workers
- Installation of a decontamination pad for cleaning equipment that needed to exit the cleanup zone such as the water truck
- Use of a water truck with spray hose for dust suppression

- Prohibition of pile storage, except for active loading, not to exceed 24 hours
- Air monitoring for PCB was completed to confirm workers, site scrap recycling operators, visitors, and neighbors would not be exposed to airborne PCB by the cleanup activity.

A total of 16,613.04 tons of PCB-impacted waste material excavated during the cleanup was disposed at the Republic Services CSC Landfill, 101 Republic Way, PO Box 236, Avalon, TX. The CSC Landfill is permitted to receive PCB waste >50 ppm. The material was loaded into rail cars and transported to a transfer location in Midlothian, Texas. From the transfer location, the waste material was loaded into 20-yard end dumps and trucked to the landfill for disposal.

A total of 969.39 tons of special waste determined to be <50 ppm PCB and ≥25 ppm as found by sample data was disposed at the Waste Connections Plum Thicket Landfill, 440 NE 150th Road, Harper, Kansas. EPA Region VII permitted this activity for this interim measures cleanup in accordance with 40 CFR 761.61(c).

The excavated areas were backfilled using clean fill and machine compacted to restore the natural surface level, drainage, and topography, and to preserve future use of the property for Yaffe. The thickness of clean fill was placed to restore the site to the pre-cleanup site grade. The backfill was a clean soil offsite source.

The site cleanup successfully removed PCB contamination previously identified ≥25 ppm from the Shear and Southeast Areas according to the approved *Cleanup Plan*. The cleanup area was expanded to include all other areas of PCB contamination based on all the previous investigations of the site going back to 1989. These historic sample results were located, cleaned up to <25 ppm, and delineated during remediation activity according to the *Cleanup Plan* procedures. Verification sampling inside and around the cleanup areas confirm PCB concentrations remaining at the site are <25 ppm. The extent of PCB contamination at the site was fully delineated and verified as required by 40 CFR 761. No other areas of PCB contamination ≥25 ppm are known to exist. All other areas suspected to have PCB contamination were sampled and remediated.

Excavated areas were backfilled with clean soil and machine compacted to restore the pre-cleanup surface conditions.

Verification sampling for parameters other than PCB were collected across the site in each area of excavation at the site. The sample results confirm no exceedance of Kansas RSK industrial use and soil-to-groundwater standards remained for volatiles, petroleum hydrocarbons as diesel, oil and gasoline range organics, arsenic, barium, cadmium, selenium, and silver. Verification sampling showed that chromium, lead, and dibenzo(a,h)anthracene were the only parameters to exceed the non-residential soil use pathway at the final depth. Additionally, chromium, lead, mercury, and/or benzo(a)pyrene exceeded the residential Kansas RSK values at the final depth in limited sample locations. All of these sample areas were covered with at least 1 foot of clean soil, limiting any future exposure. Further, these metals and PAHs are commonly found in the surface soil of industrial scrap metal recycling yards due to torching, cutting,

shearing, crushing, leaking, breaking, or storing scrap materials. These activities will continue at the site.

NIM Inc. has successfully cleaned up contamination left by Novick Iron & Metal's use of the site. NIM is not responsible for continued cleanup of contamination resulting from scrap metal recycling after its sale of the property in 2003. The site has been operated as a scrap yard for the past 10 years, and NIM Inc. has not owned the site or been present during this time (except for the site cleanup and investigation) and has submitted an application for an Environmental Use Control for the site which will ensure exposure risks from the site are limited or limited.

INTERIM MEASURES SITE CLEANUP
& COMPREHENSIVE INVESTIGATION REPORT
FORMER NOVICK IRON & METAL SITE
1007 E. 21ST STREET
WICHITA, KANSAS

1.0 INTRODUCTION

This updated and revised *Interim Measures Site Cleanup Report* has been prepared following completion of cleanup activities at the former Novick Iron & Metal site on behalf of NIM, Inc. Cleanup activities began in August 2013 to complete site remediation described in the *Shear and Southeast Area PCB Cleanup Plan* (W. Z. Baumgartner & Associates, Inc. – WZB, October 1, 2012 - *Cleanup Plan*). Backfill of the cleanup areas was completed January 17, 2014.

As expected, the cleanup was expanded outside the original cleanup area footprint. The expansion was executed to include the site locations where PCB (or other parameters) contamination was either known due to the site's historical record and/or discovered through sampling completed during the cleanup. This completed delineation of PCB at the site during the cleanup, as outlined in the *Cleanup Plan*. Additional areas outside the original cleanup footprint were remediated and verified by procedures in the *Shear and Southeast Area PCB Cleanup Plan*.

This Report provides documentation of EPA-specific criteria in accordance with the 40 CRF § 761.61(c) risk-based PCB cleanup rules as follows:

- Complete site characterization information
- Cleanup and disposal activities
- Cleanup verification sampling for PCB contaminated soil and debris
- Cleanup and sampling for additional parameters of interest, including metals, semi-volatile organics (SVOCs), volatile organics (VOCs), and petroleum hydrocarbons as diesel, oil and gasoline range organics.
- Documentation of site restoration

1.1 Site Location

The former Novick Iron & Metal, Inc. Facility is located at 1007 E. 21st Street North in Wichita, Kansas with the legal description described as NE1/4 of Section 9, Township 27 South, Range 1 East, Sedgwick County, Kansas. **Exhibit No. 1** includes the USGS Quadrangle Wichita East Site Location Map.

The NIM site is located in the North Industrial Corridor (NIC), which is an area of documented groundwater contamination. Numerous contaminant sources have been identified within the NIC, and it has been demonstrated to have impacted the environmental conditions at Novick.

1.2 Site Use

The site has been the location of a scrap metal processing and recycling company since approximately 1965. Site operators have included Novick Iron & Metal until 2003-04 when it was sold. Since the sale, the Yaffe Company has operated the site since purchasing the property as the Quickservice Steel Company, LLC., and currently as 21st Street Metals. **Exhibit No. 2** shows aerial photographs (©*Google*) of typical recent site use before (2010 image) and then the site conditions after the cleanup (2014 image).

Aerial Photograph Review

Aerial photography of the site was reviewed from before use by Novick Iron & Metal to just prior to sale. A copy of these photographs, obtained from the City of Wichita, depict typical site usage over time (**Exhibit No. 3**). The purpose of this exhibit is to show where industrial activity occurred so that there are no data gaps.

1.3 Site Use Considerations

Our experience having been to more than 1,000 metal recycling facilities or scrap yards (formerly known as junk yards), has shown there are many similarities that an environmental examination of a facility would find. Metal recycling facilities receive items from the public and industry that are metal rich, and process those items isolating valuables and sorting metal containing post-consumer goods into marketable products that can be recycled.

Metals

Metal concentrations across the entire facility are higher than in residential neighborhoods and also most industrial yards. Iron is the predominant metal. The Aluminum concentration in the soil is elevated. The components of brass and bronze are present. Copper fragments are invariably present. Historically lead is present due to its ubiquitous use in so many applications, including paint, batteries, solder, plastics, rubber, wheel weights, shower and plumbing applications.

Shearing, shredding, sawing, torching, and material handling are necessary parts of operating a metal recycling facility and each of those activities releases minute particles of metals that accumulate.

Fluids

Fluid control and recovery is an important part of receiving post-consumer goods and operating high-powered engines and hydraulic processing equipment. Large require immediate attention. A facility should have a fluid spill control program to address releases of diesel, gasoline, antifreeze, oil, waste oil, battery acid, and other fluids.

Operation

Further the facility needs a plan to remove accumulating soils in processing areas. The presence of metals and fluids must be to be addressed in the disposition of those soils. Virtually all community zoning plans classify metal recycling facilities as some type of industrial use. Training and personal protective equipment is required for workers to be safe and healthy while on the job. Access to the property is typically very limited by fencing or barriers to prevent theft and to keep out intruders, protecting property and possibly lives.

At metal recycling facilities an environmental examination will find metals and fluids on the soil surface. Practices at the site may result in the accumulation of more than incidental amounts. In any case metal recycling facilities will have industrial level accumulations of metals and fluids and be subject to the potential release of an undesirable metal or fluid through negligence, sabotage, maintenance failure of some equipment, or accident.

1.4 Surrounding Property

The subject property is located in an industrialized area. According to the Wichita City Zoning Department the NIM and adjoining properties are classified as General Industrial (GI). Surrounding property use is as follows:

- *West:* The property to the west separated by the Wichita Terminal railroad tracks and fence is the former John's Refinery and is currently industrial in use as a veterinary supply.

- *North:* The property to the north across 21st Street includes the former Coastal Refinery. There is ongoing groundwater remediation at this property, including a free product recovery. Other adjacent uses north of the subject site are industrial including a scrap recycling facility.

- *East:* The property to the east across the Wichita Flood Control Channel is part of the Coastal Refinery remediation site and is vacant. There are numerous groundwater monitoring and recovery wells scattered across the property.

- *South:* The property across the West Fork of Chisholm Creek south is vacant land and an industrial facility, Tramco.

As mention previously, the facility is located in the NIC. A review of the *Remedial Investigation Report, North Industrial Corridor, Camp, Dresser & McKee, Inc., February 2004* (NIC RI Report) shows that the NIM site is within the boundaries of the former National Priorities List (NPL) 29th and Mead site, where:

> *"Contaminants including TCE, carbon tetrachloride (CT), BTEX compounds (benzene, toluene, ethylbenzene, and xylene), methylene chloride (MC), VC, and 1,1,1 trichloroethane (1,1,1 TCA) were detected."*

The Former Coastal Derby Refinery facility is located across the street and upgradient from NIM at 1100 East 21st Street North. The NIC RI Report documents significant petroleum hydrocarbon contamination related to past refining activities conducted at the facility:

> *"Significant (estimated to be several million gallons) free petroleum hydrocarbon product is present on top of the water table. Soil, groundwater, and surface water impacts have been documented for this facility. In addition to the petroleum hydrocarbon contamination, chlorinated solvent contamination in the form of 1,2 dichloroethane {1,2-DCE} is also attributed to the facility."*

The Johns' Refinery facility was investigated by the EPA by sampling tank contents and soils, showing significant PCB concentrations in tank contents and site soil. Product materials were reported to contain up to 742 mg/kg PCBs and 3,180 mg/kg lead. The NIC RI Report says:

> *"A Response Action (RA) was subsequently performed 1984 1985 that consisted of emptying and removing 32 above ground tanks, 11 underground tanks, disposal of the tank contents, and removal of PCB contaminated soil. The site was subsequently capped with soil and gravel as a parking lot."*

Additionally, the EPA discovered TCE concentrations in groundwater at John's Refinery as high as 1,000 µg/L. However, TCE could not be linked with certainty to the John's Refinery, and it was not investigated further at that time. Groundwater assessments for volatile organics were conducted by the City of Wichita in 1999 and 2004 as part of the NIC RI. For more information regarding surround properties, please see **Addendum No. 1**, which was prepared by NIM, Inc.

2.0 BACKGROUND INFORMATION/SITE INVESTIGATION

Site Investigation has been ongoing at the former NIM Site since at least 1989. These investigations found contamination of several parameters, including PCB. **Exhibit No. 4** is a map locating investigative sample coverage at the facility, not including cleanup sampling. A summary of the Site Investigation as it relates to the Interim Measures Cleanup follows in **Table 2.1**. A comprehensive view of these investigations with historic aerial photography in **Exhibit No. 3** shows that the areas investigated correspond to the areas where PCB and other contaminants would be expected.

Table 2.1
Summary of Historic Site Investigation

Investigation Date	Report/Document	Investigation Activity	Summary of Findings
June 8, 1988	Final Report November 11, 1988 Ecology & Environment	Site inspection for suspected disposal of transformer oil and improper battery recycling. Six soil samples collected from Site with 1 background.	Soil samples showed elevated lead, PCB, SVOC, and other metals concentrations (Cr, Cu, Zn, Hg).
October 15, 1988	Memorandum Inspection Summary November 3, 1988 KDHE	Previous inspection follow-up. Discovered large quantity of broken batteries and UST. Five soil samples collected.	Soil samples confirmed previous results for metals, including high lead concentrations.
June 17-18, 1989	Soil Sampling Report August 4, 1989 Terracon	Grid sampling conducted on a 70 ft grid interval with lead analysis from the center of each accessible square. 107 samples collected. Ten surface soil samples tested at two "PCB hot spots."	Surface soil sample results showed 24 samples with lead concentrations >400 mg/kg. Ten soil samples at the E&E-identified PCB hot spots (001, 003) showed PCB >10 mg/kg in 7 samples.
December 13, 1989	UST Removal Report and Leak Assessment 1989-1993 KDHE	Two USTs removed from Site. 1,000 gal and 2,000 gal diesel and possibly gasoline.	Fuel was released during removal. Soil removal activities were completed. No verification samples for residual contamination.
October 1990	Phase 2 Results January 16, 1991 Terracon	Monitoring well installed near removed USTs.	TPH detected at 1 mg/L in monitoring well.

Table 2.1 Summary of Historic Site Investigation			
Investigation Date	**Report/Document**	**Investigation Activity**	**Summary of Findings**
October 17-18, 1990	Soil Sampling Results Phase 2 January 16, 1991 Terracon	Additional grid sampling and lead analysis was conducted to further define the June 1989 results. Samples were collected from three consecutive 6"-depth intervals. Seven PCB samples (2 concrete) were collected to 12" depth.	~55 samples revealed >1000 mg/kg lead contamination, extending to 18" below grade in some cases. PCB samples from 001 and 003 areas resulted in two samples greater than 10 mg/kg (both at 001). The PCB concrete samples were <0.5 mg/kg.
March 20, 1992	Groudwater Sampling Event May 6, 1992 Terracon	Groundwater sampling of the onsite well for TPH and BTEX.	TPH was not detected. BTEX was detected, with Benzene elevated.
Circa 2003 (dates unknown)	Draft Focused Phase II August 15, 2003 Integrated Solutions, Inc. (ISI)	Focused soil and groundwater sampling at site areas of concern.	Site groundwater samples revealed TPH DRO/GRO and TCE and VC, including one upgradient well. Soil samples showed elevated Pb, Cd, Hg, TPH, and PCB. Samples of Al and Zn dross, since removed, exceeded TCLP for lead.
September 2003	Limited Site Investigation Report December 16, 2003 Terracon	Confirmation of ISI PCB results and petroleum staining. 21 borings advanced.	PCB >1000 mg/kg found in southeast corner. PCB concentrations limited to top 2 feet. Approximately 235' by 30' petroleum stained surface soil area was identified.
October 21 - November 12, 2003	Soil Removal Report March 10, 2004 Terracon	Remove visually stained soils at north and south crane areas. No verification samples collected.	North crane excavation was 30' x 27' x 2' deep. South crane was 24' x 13' x 2' deep. Excavated material tested >50 mg/kg and disposed as TSCA waste.
January 7-15, 2008	Investigation Report September 18, 2008 Terracon	Further assessment of the vertical and horizontal extent of soil and groundwater contamination. Fourteen probes were advanced for comprehensive soil and groundwater samples. Sediment and surface water samples were collected from adjacent streams.	All samples were analyzed for VOCs, TPH DRO/GRO, PAH, PCB, and RCRA 8 metals. Soil sample results revealed elevated metals, PCB, PAH, VOC, and TPH. VOCs, TPH, and PCBs were detected at elevated concentrations in groundwater. Groundwater isocontours indicate the groundwater contamination is not due to Novick. Sediment and surface water samples do not show significant impact from the site.

Table 2.1 Summary of Historic Site Investigation			
Investigation Date	**Report/Document**	**Investigation Activity**	**Summary of Findings**
April – June 2010	Interim Measures Site Investigation Report - Task 1 June 22, 2010 WZB Inc.	Groundwater investigation with installation of shallow and deep wells at 7 locations.	Groundwater was tested for VOCs, SVOCs, metals, PCB, and TPH and found elevated concentrations of metals as well as chlorinated solvents and petroleum-based VOCs and SVOCs consistent with offsite sources documented in the NIC investigation.
January – March 2011	Interim Measures – Task 2 PCB Hot Spot Investigation Report May 9, 2011 WZB Inc.	Grid-based investigative soil sampling in the southeast area of the site to delineate known high PCB contamination.	Near-complete delineation of PCB in the southeast area
September 26-28, 2011	Shear Area PCB Investigation Report November 13, 2012 WZB Inc.	Grid-based investigative soil sampling in the shear area of the site to delineate known high PCB contamination. Groundwater sampling at shear-area wells for PCB analysis.	Location of PCB contamination in the shear area, confirmation of no PCB contamination of groundwater.
October 15-16, 2012	Shear and Southeast Area Supplemental PCB Investigation Report March 2013 WZB Inc.	PCB sampling around previous investigation areas to delineate horizontal and vertical PCB contamination at the site.	Location of additional PCB contaminated areas prior to interim measures cleanup
August – December 2013	IMCR	PCB and other parameters – verification sampling and investigation for PCBs	PCB is cleaned up to <25 ppm, CI is completed

2.1 PCB Investigation

Before the Interim Measures Cleanup began, several phases of investigation were completed as described in Table 1. The *PCB Hot Spot Investigation Report* (WZB, May 9, 2011) located PCB concentrations in excess of 1,000 parts per million (ppm) in the Southeast Area, and the *Shear Area PCB Investigation Report* (WZB, November 13, 2012) located PCB concentrations in excess of 500 ppm in the Shear Area. Additional characterization of the Shear and Southeast Areas was reported in the *Shear And Southeast Area Supplemental PCB Investigation Report* (WZB, March 2013). The elevated PCB concentrations these areas confirmed historic high-PCB sample results from previous investigations.

The historic surface sample locations shown in **Table 2.2** were included within the Shear Area investigation by WZB, and were cleaned up and verified. A map showing the location of the historic PCB soil samples in relationship to the cleanup area is presented as **Exhibit No. 5**.

These results and concentrations are based on previous investigations not completed by W. Z. Baumgartner & Associates or Industrial Environmental Consultants, LLC.

Table 2.2 Shear Area Historic Surface Sample Results PCB ≥25 ppm Initial Cleanup Area		
Sample Identification	**PCB Concentration (ppm)**	**Investigation**
PCB-10	87.7	Integrated Solutions - 2003
PCB10-1	76	Terracon – September 2003
PCB10-2	165	Terracon - September 2003
PCB10-3	154	Terracon - September 2003
SOIL-02	85	A&M Engineering – 2004
P-8	470.9	Terracon – January 2008
P-9	118.4	Terracon – January 2008

Also, the Southeast Area Investigations by WZB included historic surface sample locations as follows in **Table 2.3**. These were cleaned up and verified.

Table 2.3 Southeast Area Historic Surface Sample Results PCB ≥25 ppm Initial Cleanup Area		
Sample Identification	**PCB Concentration (ppm)**	**Investigation**
PCB-8	4,900	Integrated Solutions - 2003
PCB8-1	Up to 4,100	Terracon – September 2003
PCB8-2	1,200	Terracon – September 2003
PCB8-3	Up to 42,000	Terracon - September 2003
PCB8-4	2,800	Terracon -September – 2003

The only historic subsurface sample where PCB ≥25 ppm, P-9 (89 ppm - Terracon, January 2008) at 4' below ground surface (bgs), was located within the *Cleanup Plan's* Shear Area footprint, and was cleaned up and verified.

Additional historic samples where PCBs were known to exceed 25 ppm had not yet been fully investigated prior to beginning the cleanup in August 2013. The historic sample points are summarized in **Table 2.4**. All of these historic sample locations at the site with PCB ≥25 ppm were located by sampling, excavated, delineated by verification sampling, and disposed during the cleanup.

Table 2.4 Historic Surface Sample Results PCB ≥25 ppm		
Sample Identification	**PCB Concentration (ppm)**	**Investigation**
001	93	EPA/(E&E) June 1988
002	44	EPA/(E&E) June 1988
003	13000	EPA/(E&E) June 1988
004	32	EPA/(E&E) June 1988
004D	26	EPA/(E&E) June 1988
005	41	EPA/(E&E) June 1988
001-1	35	Terracon June 1989
001-2	56	Terracon June 1989
001-3	54	Terracon June 1989
001-4	52	Terracon June 1989
001-5	92	Terracon June 1989
003-2	27	Terracon June 1989
003-5	100	Terracon June 1989
001-3	86	Terracon October 1990
PCB-4	72.6	Integrated Solutions 2003
PCB-6	40.3	Integrated Solutions 2003
PCB-7	27.3	Integrated Solutions 2003
PCB4-1	60	Terracon September 2003
PCB4-3	69	Terracon September 2003
PCB6-1	71	Terracon September 2003
PCB6-3	30	Terracon September 2003
PCB 7-1	33	Terracon September 2003
P-10	35.6	Terracon January 2008
P-11	42.8	Terracon January 2008

2.2 Other Parameter Site Investigations

Sampling for parameters other than PCBs, including RCRA metals, semi-volatile organics (SVOCs), volatile organics (VOCs), and petroleum hydrocarbons (TPH) diesel and gasoline range has been completed at the site as documented in the Reports listed in **Table 2.1**. A representation of the historic sample locations from the site, including investigative sampling for the shear and southeast areas, are depicted on **Exhibit No. 4**, as best as is feasible. The site interim measures cleanup removed the areas where the highest concentrations of other parameters were found during the site investigation(s). Verification of the cleanup of the other parameters was completed during the cleanup in each area of

concern at the site and is discussed later in this report. Other parameters above Kansas RSK values for industrial and residential use remain on site as further use of the property as a scrap yard will perpetuate at these levels.

2.3 Surface Water and Sediment PCB Investigation

Site Surface Water Drainage

The surface water drainage patterns and topography for the site prior to cleanup are provided in **Exhibit No. 6**. There are three (3) outfalls for surface water at the site, which was confirmed with the Site's owner Yaffe Iron & Metal from their Storm Water Pollution Prevention Plan. Additionally, the drainage map shows two areas where stormwater collects on site with no discharge.

Outfall 001 is at the north center of the site. Runoff from Outfall 001 drains most of the site north of the railroad spur. Concentrated runoff flows past building #2, a mostly vacant storage shed, and under the site's metal fence. A wet spot showing the drainage path is visible on the aerial photograph presented earlier. Runoff from this outfall follows 21st Street to the east and eventually enters the Wichita Flood Control Chanel. The Wichita Flood Control Channel (Channel) is a concrete-paved surface water channel that bounds the site to the east and flows from north to south

Outfall 002 drains the southwest area of the site and discharges into the West Fork of Chisholm Creek (Creek). The Creek bounds the Site to the south and flows from northwest to southeast converging with the Channel near the southeast corner of the Site. This drainage area is currently mostly high grass and is seldom used. Historically, according to aerial photographs, the area was used for material storage in trailers and large heavy steel material storage. There is an unused historic drainage pipe underpassing the railroad track from the shear area. This is not a current processing area as it is typically covered with trees and vegetation.

Runoff from Outfall 003 drains a small area in the southeast corner of the site into the Creek. This drainage area was used for storage of materials inside trailers and for processing as an extension of the shear area.

There is a dry collection area east of the shear area, which collects surface water from much of the central and eastern parts of the site, including the shear and southeast areas. This area was sampled, cleaned up, and backfilled in the interim measures cleanup, and was identified as the "P10 Area." Additionally, a low spot beneath the east end of the since-removed old shear collected surface water from the west, south, and central shear areas between the shear mound and railroad spur. This area was fully excavated, verified, and backfilled to a more natural grade during the interim measures cleanup. Both of these surface water collection areas contained runoff from the heaviest processing areas of the site based on historic use, preventing runoff into the adjacent Creek or Channel.

Off-Site Sediment and Surface Water Sampling

Historic Surface Water and Sediment data has been reviewed to determine if there has been any impact to the adjacent water bodies to the site, namely the Wichita Flood Control Channel to the east and the West Fork Chisholm Creek to the south. A primary rationale for the Cleanup in the Southeast Area as discussed in the *Interim Measures Work Plan* (WZB, June 12, 2009), was due to its proximity to these waterways and the potential for off-site transport of known PCB contamination. This discussion is limited to PCB. A discussion regarding other parameters in surface water and sediment is provided in **Addendum No. 1**.

Terracon completed off-site sediment sampling in the Creek adjacent to the site for PCB, TPH, VOCs, SVOCs, and metals (*Investigation Report*, Terracon Consultants, Inc., April 14, 2008). Creek #1 is upgradient near the railroad bridge over the Creek. Creek #2 is downgradient above the confluence of the Creek and Channel. Prior sediment sampling was completed as Part of the NIC RI by CDM in 2001 for PCB. Sample SD-03 was collected in the Creek before the confluence with the Chanel. SD-08 was collected in the Creek below the confluence with the Channel. **Table 2.5** summarizes those results for PCB as all of the other parameters of concern were lower than Tier 2 RSK values.

Table 2.5
Off-Site Sediment PCB Results (ppm)

Creek #1 Sediment Terracon 2008	Creek #2 Sediment Terracon 2008	SD-03 Sediment NIC - CDM 2001	SD-08 Sediment NIC - CDM 2001
ND (0.0411)	0.108	0.65	ND (0.033)

Notes:
ppm = Parts per million or mg/kg
EEC = 1.6 mg/kg
MEC = 0.34 mg/kg
TEC = 0.035 mg/kg

Sediment sampling in the Creek near the confluence of the channel shows that the SD-03 result from 2001 was above all of the consensus-based sediment effect screening values,[1] the extreme effect concentration (EEC), midrange effect concentration (MEC), and the threshold effect concentration. The downstream sample SD-08 below the creek and channel confluence shows PCB was not detected. Regarding the detection of PCB in the Creek in 2001, the CDM RI report made the following comment, indicating there was no cause for action <u>*at that time*</u>:

> "PCB-1260 was detected in the sediment sample from location SW-03 at a concentration of 650 µg/kg. For reference purposes, the KDHE Tier 2 Risk-Based Concentrations for PCBs are 9,500 µg/kg (non-residential soil pathway) and 53,000 µg/kg (non-residential soil to groundwater pathway)."

Follow-up sampling by Terracon in 2008 nearby the same location as SD-03 demonstrated the concentration was below the MEC threshold where adverse effects frequently occur. The Creek #1 and Creek #2 samples showed the PCB concentration in the creek adjacent to the site was within the range where adverse affects are unlikely to be observed. NIM Inc. attempted to find additional sediment data from KDHE for the Site Area with an open records request, but none were available.

Terracon completed off-site surface water sampling near the site in the Creek and Channel (*Investigation Report*, Terracon Consultants, Inc., April 14, 2008). Creek #1 sample is upgradient near the railroad track bridge over the Creek. Creek #2 sample is downgradient near the confluence of the Creek and Channel near the southeast corner of the site. Canal #1 sample is in the Canal near the 21st Street Bridge. Canal #2 sample is in the Canal up from the confluence of the Creek and Channel. Additionally in November of 2009 Terracon with KDHE collected samples Creek 3 and Canal 3, which

[1] MacDonald, D. L. Dipinto, J. Field, C. Ingersoll, E. Long, and R. Swartz. 2000. Development and evaluation of consensus-based sediment effect concentrations of polychlorinated biphenyls. Environmental and Chemistry Volume 19; pp 1403-1413.

correspond to 2008 sample locations Creek #2 and Canal #2. In 2001, CDM collected 2001 surface water samples SW-06 (in the Creek) and SW-13 (Channel). **Table 2.6** summarizes those results.

Table 2.6
Off-Site Surface Water PCB Results (ppm)

Sample Identification	PCB Concentration (ppm)	Investigation
SW-06	ND (0.0011)	CDM 2001
SW-13	ND (0.0011)	CDM 2001
Creek #1 Surface Water	ND (0.0011)	Terracon – January 2008
Creek #2 Surface Water	ND (0.001)	Terracon – January 2008
Canal #1 Surface Water	ND (0.0011)	Terracon – January 2008
Canal #2 Surface Water	ND (0.0011)	Terracon – January 2008
Creek 3	ND (0.001)	Terracon/KDHE – November 2009
Duplicate	ND (0.001)	Terracon/KDHE – November 2009
Canal 3	ND (0.001)	Terracon/KDHE – November 2009

Off-site PCB Sources to Sediment/Surface Water

The NIC Remedial Investigation report, 2004 documented off-site sources of PCB within the drainage area above the former NIM site include the Kansas Gas and Electric PCB Spill Report at 328 E. 29th Avenue and McDowell-Houge Electric, Inc. at 1220 E 37th Street. The Kansas Gas and Electric site is in the Creek drainage area, and the McDowell site is in the Canal drainage area. Not shown on the Figure is John's Refinery, a PCB cleanup site previously discussed in Section 1.4, which is directly adjacent to the Site to the west. Additionally, the RI identified PCB 1248 and 1260 in sludge pit samples at the Golden Rule Refinery and Barnsdall Refinery, which are upgradient of the NIM Site (maximum 7.8 ppm) in the Creek drainage area.

2.4 Groundwater Investigation

Results of the groundwater investigation of the site were reported in the *Interim Measures Site Investigation Report – Task 1*, WZB, June 22, 2010. The report demonstrated that there were off-site sources of the pollutants found in groundwater, and that there was no evidence of off-site migration of pollutants from the site. The cleanup activity described in this report removed potential sources of groundwater contamination at the site, as planned. The Interim Measures Cleanup has addressed the data gaps identified in the KDHE letter of September 16, 2010 and addressed in the WZB letter of October 11, 2010. KDHE requested reinstallation of monitoring wells removed during the cleanup. NIM has removed its potential threat to groundwater at the site, and further testing is not necessary. This approach is consistent with the EPA conclusion of no further action for groundwater at the adjacent John's Refinery. Groundwater monitoring for the NIC was completed by the City of Wichita at the Site in 1999 and 2004 as part of the RI.

3.0 CLEANUP PLAN IMPLEMENTATION

Oversight and verification sampling for the *Cleanup Plan* was performed by W. Z. Baumgartner & Associates, Inc. into December 2013. A transfer of project oversight and verification sampling was completed in December 2013 to Industrial Environmental Consultants, LLC. Remediation Services Inc. completed excavation, backfilling, rail car coordination, and special waste disposal activities. Republic Services, Inc. completed Rail Car management and waste disposal.

3.1 Site Cleanup of PCB Waste

PCB-impacted soil, debris, waste, metal, and concrete were excavated from the site according to the *Cleanup Plan* and disposed off-site. The cleanup level selected was PCB < 25 ppm. Bulk PCB remediation waste ≥ 50 ppm was disposed of at the Republic Services TSCA Landfill in Avalon, Texas. Bulk PCB remediation waste ≥25 ppm and < 50 ppm was disposed of at the Waste Connections Plum Thicket landfill in Harper, Kansas as Special Waste. Copies of the waste profiles, PCB notifications, and disposal authorization are included with **Appendix A**.

Soil above the cleanup goal was excavated, transported, and disposed according to the *Cleanup Plan*. Verification samples were collected from within cleanup areas along the floors and vertical walls of the excavation to verify the cleanup goal for PCB was achieved. Surface samples were collected around the outside of the cleanup areas not previously delineated to <25 ppm by previous W. Z. Baumgartner & Associates, Inc. investigation. Once verification sampling confirmed PCB concentrations for the remaining and surrounding soil were delineated to <25 ppm, the areas were backfilled to natural grade using clean fill materials (See Section 3.5).

Exhibit No. 7 is a map showing the Site Cleanup excavation extent and verification sample PCB results. **Exhibit No. 8** is a topographical map depicting the extents of excavation prepared by Garber Surveying on behalf of the contractor, Remediation Services, Inc. **Exhibit No. 7** also shows investigation sample results used for PCB delineation outside the extent of excavation. This includes samples collected by W. Z. Baumgartner & Associates, Inc. prior to the cleanup and the surficial sample results collected during the cleanup. The sampling activity details are discussed below. Sampling and cleanup of other parameters was also completed in conjunction with the PCB cleanup. Other parameter testing and cleanup details are presented later in Section 3.

3.2 Cleanup Control Measures

Control measures were implemented as described in the *Cleanup Plan* to prevent the spread of PCB-contaminated materials from outside the cleanup area. These measures included:

- Installation of perimeter stormwater controls and implementation of the stormwater pollution prevention plan to prevent stormwater discharges from the active cleanup area
- Removal by the site's owner of recyclable materials not designated for cleanup (e.g., the shear and crane)
- Installation of a barrier fence from the west to the east boundary of the site to create an exclusion zone for non-authorized personnel
- Daily site health and safety meetings for site workers
- Installation of a decontamination pad for cleaning equipment that needed to exit the cleanup zone such as the water truck
- Use of a water truck with spray hose for dust suppression
- The use of tarps to cover temporary waste storage piles
- Prohibition of pile storage, except for active loading, not to exceed 24 hours
- Air monitoring for PCB was completed to confirm workers, site scrap recycling operators, visitors, and neighbors would not be exposed to airborne PCB by the cleanup activity (See Section 4.6).

3.3 PCB Waste Disposal

A total of 16,613.04 tons of PCB-impacted waste material excavated during the cleanup was disposed at the Republic Services CSC Landfill, 101 Republic Way, PO Box 236, Avalon, TX 76623 in Avalon, Texas. The CSC Landfill is permitted to receive PCB waste >50 ppm. Material was excavated from the site. The material was loaded into rail cars and transported to a transfer location in Midlothian, Texas. From the transfer location, the waste material was loaded into 20 yard end dumps and trucked to the landfill for disposal. Copies of the manifests and Republic scale tickets, in addition to a summary spreadsheet for rail cars, are in **Appendix B**.

3.4 Special Waste Disposal

A total of 969.39 tons of special waste determined to be <50 ppm PCB and ≥25 ppm as found by sample data was disposed at the Waste Connections Plum Thicket Landfill, 440 NE 150th Road, Harper, Kansas. EPA Region VII permitted this activity for this interim measures cleanup in accordance with 40 CFR 761.61(c). Approval letters are included in **Appendix A**. Copies of these manifest and transportation records are in **Appendix C**.

3.5 Backfill and Site Restoration

The excavated areas were backfilled using clean fill and machine compacted to restore the natural surface level, drainage, and topography, and to preserve future use of the property for Yaffe. The thickness of clean fill was placed to restore the site to the pre-cleanup site grade. The backfill was a clean soil offsite source. Complete scale weights are not available as of the date of this report, but the total weight of backfill placed was approximately 95% of the material removed. Photographs of the borrow site and the analytical data are in **Appendix D**.

4.0 SAMPLING METHODOLOGY

The Shear and Southeast Areas and additional historical sampling locations where PCB ≥25 ppm were cleaned up to below the *Cleanup Plan's* goal of <25 ppm. This was confirmed through PCB verification sample results from within the excavated areas and from investigative sampling completed before or during the cleanup. **Exhibit No. 9** is a tabulation of the PCB data collected during the cleanup activities. In addition, the presence of other potential pollutants were tested within the excavated areas and compared to the residential soil, industrial soil, and soil-to-groundwater use Kansas RSK values.

Confirmation samples for PCB were taken from the outside perimeter walls and the bottoms of the excavated areas. Thus, the outer limits of the excavation's horizontal and vertical extents were sampled and compared to the cleanup goal. Where pre-cleanup investigation data was not available, surficial samples were collected to confirm the horizontal extent was reached.

Please see the Appendix for copies of the analytical laboratory reports (**Appendix G**), the field notes (**Appendix F**), and project photographs (**Appendix E**).

4.1 Excavation floor PCB Confirmation Samples

A single composite sample grab sample was collected for PCB analysis from the floor of the excavation in each area nominally 25 by 25 feet. In accordance with the *Cleanup Plan*, composite floor samples were constructed from 5 grab samples collected from the center of each grid square and with 1 from each quadrant of the grid. Samples were analyzed for PCBs on a dry weight basis.

Grab sample portions were generally selected randomly when the material was natural or homogeneous. Biased grab samples were collected for testing where staining, odors, petroleum, miscellaneous buried material, or any other obvious indicators of possible pollution were observed.

Grab floor excavation samples were also analyzed for other parameters of concern during the cleanup for comparison with Kansas RSK values. These samples were collected in the same manner as PCB samples with the exception of the petroleum hydrocarbon and volatile analysis samples, which were discreet grab samples.

4.2 Perimeter Wall PCB Confirmation Samples

Composite wall samples were collected for vertical excavation walls extending greater than or equal to 2-foot in depth. The composite sample was comprised of grab samples collected

at various intervals along the nominal 25-foot horizontal wall length from the entire vertical wall face (top to bottom). The grab samples were homogenized for analysis to obtain a representative concentration of the wall. Wall samples were analyzed for PCBs on a dry weight basis.

In some cases the excavation did not present a vertical wall face for sampling. This occurred when the excavation was tapered to match the gradient of the natural or "clean" soil horizon beneath visibly contaminated fill material. These areas were sampled as floor samples with the deepest depth of the nominal 25 by 25 foot area recorded as the depth. For example, a test area with a sloped floor depth horizon from 0.5' to 3' bgs would be labeled as a 3' floor sample with no wall sample.

4.3 Historic PCB Contaminated Samples

All of the historic PCB-contaminated areas previously identified by others were delineated and cleaned up to PCB <25 ppm. This includes all the sample locations identified in **Table 2.4** of this report. These locations were remediated based on previous site investigation data confirmed by additional surficial sampling completed during the cleanup. Verification sampling was completed for all of these locations in accordance with the procedures in the *Cleanup Plan*. The historic samples where PCBs were found ≥25 ppm are shown on the map in **Exhibit No. 4** with the cleanup extent shown.

Other historic surface sample locations listed in **Table 2.2** within the *Cleanup Plan's* Shear Area footprint were remediated according to the *Cleanup Plan*. The same is true for historic surface sample locations in **Table 2.3** that were in the Southeast Area. The only historic subsurface sample ≥25 ppm, P-9 (89 ppm) at 4' bgs, was within the original *Cleanup Plan* Shear Area footprint was remediated as planned.

4.4 Site PCB Investigative Sampling

Surface soil PCB sampling was completed during the cleanup for one of two reasons:

1. To confirm the horizontal extent of the cleanup where pre-cleanup W. Z. Baumgartner & Associates investigation data did not delineate PCB contamination.

2. To locate, delineate, and clean up all known historic PCB-contaminated sample locations previously identified by other historical investigations (See Section 1.2).

Surface soil samples were collected at the site between 0 and 6 inches below ground surface and composited for PCB dry weight analysis during the cleanup. Samples with results below the cleanup goal used for delineation are shown on **Exhibit No. 7** along with the cleanup verification samples. Results ≥25 ppm were excavated with verification samples collected from floors and walls according to the work plan to confirm cleanup, and these are shown on **Exhibit No. 4** along with elevated PCB concentrations identified in pre-cleanup investigations. **Table 4.1** summarizes surface investigation samples ≥25 ppm collected during the cleanup for reasons outlined above in this section.

Table 4.1 Surface Investigation Sample Results PCB ≥25 ppm Collected During Cleanup Process		
Sample Identification	**Total PCB (ppm)**	**Location Identification/Sample Use**
SUR-NW Corner Wire Bands	47.400	Delineation of known PCB contamination in the north shear area; "NO" grid area
SUR-NW Corner iron pipe	30.700	Delineation of known PCB contamination in the north shear area; "NO" grid area
SUR-S of I beam E of AA15	40.300	Southeast of "NO" area; delineate PCB contamination
SUR-I Beams on Concrete	38.182	Delineation of known PCB contamination in the north shear area; "NO" grid area
NO5-S	42.500	Delineation of known PCB contamination in the north shear area; "NO" grid area
NO4S-S	39.500	Delineation of known PCB contamination in the north shear area; "NO" grid area
NO-2 (SURFACE)	53.000	Delineation of known PCB contamination in the north shear area; "NO" grid area
NO-1 (SURFACE)	57.000	Delineation of known PCB contamination in the north shear area; "NO" grid area
NA1-SURFACE	55.000	North shear area; delineate PCB contamination
SUR-N. Side of Well	52.667	North shear area; delineate PCB contamination
NA3-SURFACE	25.400	North shear area; delineate PCB contamination and locate elevated historical result from 2003, Terracon PCB 9-1
SH-L1-S	28.000	Grid-based sampling in the east shear area; delineate PCB contamination and confirm elevated historical results 2003. Terracon PCB 6-1 and 6-3
P10CW-S	58.800	Grid-based sampling east of SH area; located elevated historical PCB results near P-10
P10BS-S	83.000	Grid-based sampling east of SH area; located elevated historical PCB results near P-10Excavation East of SH area; delineate PCB contamination and confirm elevated historical results
P10BW-S	33.600	Grid-based sampling east of SH area; located elevated historical PCB results near P-10
ESH-WOOD-MID	190.000	Grid-based sampling east of SH area; located elevated historical PCB results near P-10
P10ES-S	26.000	Grid-based sampling east of SH area; located elevated historical PCB results near P-10
WSW-C-SURFACE	32.900	Grid-based sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008

Table 4.1 Surface Investigation Sample Results PCB ≥25 ppm Collected During Cleanup Process		
Sample Identification	**Total PCB (ppm)**	**Location Identification/Sample Use**
SUR-S. of RR track near conc. Box	34.767	Sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008
WSW-B-SURFACE	31.700	Grid-based sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008
SUR-P11 Area 3	29.140	Sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008
WE-F11-S	37.000	Grid-based sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008
WE-E11-S	35.700	Grid-based sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008
P11 Area-1 (surface)	1684.200	Sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008
SUR-P11 Area-2	27.619	Sampling southwest of SH area; site wide PCB investigation and delineation based on historic PCB result P-11, Terracon 2008

Note: *Results are reported in this Table to 3 decimal places for consistency of comparison. Please refer to the Lab Reports for the complete and/or final values.*

4.5 Additional Parameters

A total of 22 locations were sampled and analyzed for additional potential parameters of concern from within the cleanup area. Samples were collected from the bottom of the excavation, with at least one sample taken from each of the general excavation areas. The samples were collected from grid areas nominally 50 feet apart (more or less in some cases) as judged by the field scientist. The locations were spaced as best as possible to account for the variability of the shape and depth of the excavated areas, and to be representative of the final excavation conditions. Samples were collected and analyzed according to the *Cleanup Plan* for the following parameters:

- Volatile organics (VOCs)
- Semi-volatile organics (SVOCs)
- RCRA Metals
- Petroleum hydrocarbons as diesel, oil, and gasoline range organics

Three locations (SE-C2, SH-AA16, and SH-F12) were resampled for lead and chromium after additional excavation. In all 3 retests, the results were less than RSK values for lead and cadmium confirming cleanup to below the screening values. Although retesting for mercury and

benzo(a)pyrene was not completed at SH-F12, and there is no reason to suspect there is any exceedances at the final depth of 4 feet. Two locations, SE-AA5-Floor-2 and NE4-Floor-4, were tested for a limited set of parameters and not the entire suite.

Exhibit No. 10 is a tabulation of all of the results for the locations sampled for the additional parameters. These results have been compared to the Kansas Tier 2 RSK values for the residential pathway, industrial pathway, and the soil to groundwater pathway (screening values). No VOCs or petroleum hydrocarbons were detected above the Kansas Tier 2 RSK screening values in the verification samples. All SVOCs were below the Kansas Tier 2 RSK screening values in verification samples with the exception of two Polynuclear Aromatic Hydrocarbons (PAHs), dibenzo(a,h)anthracene at SH-L1-Floor-1 and benzo(a)pyrene at SH-H4, SH-L1, and WE-D1. Chromium, lead, and mercury were the only metals detected above any of the Kansas Tier 2 RSK values.

All Southeast Area results were below Kansas Tier 2 RSK values at the final depth:

- SE-C2-Floor-3'
- SE-C21-Floor-2.5'
- SE-C4-Floor-2'
- SE-AA5-Floor-2'

The following 11 sample locations in the Shear Area and P-10 Area were below Kansas Tier 2 RSK values at the final depth:

- SH-A2-Floor-4'
- SH-B5-Floor-4'
- SH-F6-Floor-2'
- SH-H1-Floor-4'
- SH-AA16-Floor-1.5'
- SH-F12-Floor-4'
- SH-H14-Floor-3'
- SH-A1W-Floor4'
- SH-A4-Floor-4'
- SH-E1-Floor-4'
- P10-A-Floor-1'

Table 4.2 summarizes RSK Value exceedances at the final depth in the additional parameters verification samples. The sample locations and RSK exceedances are located on **Exhibit No. 11**. Chromium (1 sample), lead (3 samples), and dibenzo(a,h)anthracene (1 sample) were the only parameters to exceed the non-residential soil use pathway at the final depth.

Table 4.2
Summary of Elevated Concentrations for Additional Parameters at Final Depth
Kansas Tier 2 RSK Value and Sample Results in mg/kg

Sample Identification	Chromium RSK-R 33.6 RSK-NR 111	Lead RSK-R 400 RSK-NR 1000	Mercury RSK-R 2 RSK-NR 20	DA RSK-R 1.09 RSK-NR 3.38	BP RSK-R 1.09 RSK-NR 3.38
SH-E3-Floor-4	< RSK (12.2)	438	< RSK (0.329)	< RSK (0.021)	< RSK (0.120)
SH-H4-Floor-0.5	65.2	4430	< RSK (0.578)	< RSK	1.1
SH-J14-Floor-3	< RSK (14.6)	698	< RSK (0.052)	< RSK	<RSK (0.11)
SH-L1-Floor-1	97.4	620	< RSK (0.52)	3.8*	1.5
WE-D1-Floor-1.5	51	1840	4.13	<RSK	1.3
WSW-B-Floor-1	192	1390	< RSK (0.68)	< RSK	<RSK (0.230)
NE4-Floor-4	< RSK 12.4	743	N/A	N/A	N/A

Notes:

1. *RSK-R indicates Residential and RSK-NR indicates Non-residential Soil screening values.*
2. *DA = Dibenzo(a,h)anthracene; BP = Benzo(a)pyrene*
3. *<RSK - Indicates the result was less than Kansas Tier 2 RSK values for the residential pathway, non-residential pathway, and the soil to groundwater value. Sample result in parenthesis.*
4. *Shaded results indicate the Non-Residential RSK soil pathway was exceeded.*
5. *N/A – Not analyzed*
6. **Dibenzo(a,h)anthracene also exceeded the Residential soil-to-groundwater RSK value.*

4.6 Air Monitoring

Air monitoring was completed as described in the *Cleanup Plan* during the cleanup activity. Air samples were collected using a personal monitoring device for the excavator or loader operator during a representative 8-hour workday for excavation and rail car loading. No PCB was detected in any of the samples. The results are summarized below in **Table 4.3** and the reports are included in **Appendix H**.

Table 4.3
Air Sample Results

Sample Identification & Date	PCB Concentration (µg/sample)	Report ID
Air Test 1 – 8/22/13	ND<0.01	ALS1323531
91213 – 9/13/13	ND <0.01	ALS1309330
AIR TEST – 10/9/13	ND <0.01	ALS1310290

5.0 DATA VALIDATION SUMMARY

The Data Validation Summary (DVS) has been prepared to summarize validation and quality assurance / quality control (QA/QC) work completed in association with the former NIM site. The data validation process for the project is outlined in the *Novick Iron and Metal Quality Assurance Project Plan* (QAPP) dated December 3, 2009 (Revised). The process includes an in-depth review of the data, the reports to include completeness, holding times and sample preservation, sample integrity and temperature upon receipt, surrogate spike recoveries, matrix spike / matrix spike duplicate (MS/MSD) recovery relative percent differences (RPD) and lab control samples (LCS). These criteria are evaluated to ensure that all the data meets the project objectives for precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS).

ALS Environmental-Houston Laboratory (ALS), located in Houston, Texas was the primary laboratory used for the chemical analysis, however; TestAmerica Laboratories, Inc. (TA), located in Nashville, Tennessee, also completed analyses. Details of analyses by ALS and TA are documented fully in **Appendix G** along with final data packages, including level II QA/QC data. Both laboratories were provided a copy of the QAPP. The lab was notified of the need to comply with the quality assurance protocols and ensure that all data was properly reviewed and approved prior to release. Both laboratories are certified by the state of Kansas.

Data Review

Duplicate analyses were performed for each work order of samples processed at ALS and TA. The laboratory calculated the RPD between applicable values. RPD values within the acceptable limits indicate both laboratory precision and minimal matrix heterogeneity of compounds detected in the samples. The results of laboratory blanks were all within the acceptable criteria. The data is qualified in the laboratory results included in **Appendix G**.

During cleanup verification sampling, a total of 7 replicate samples were completed:

- DUP-1 (SE-C1-WALL-S)
- DUP-2 (SH-F3-FLOOR-2)
- SH-I1-FLOOR-1 (SPLIT)
- SE-D1-WALL-S (SPLIT)
- SH-H1-FLOOR-4 (SPLIT)
- SH-G1-FLOOR-4 (SPLIT)
- DUP (SE-A5-WALL-N)

Additionally RPD values based on 7 samples split with KDHE and analyzed at Pace Analytical in Lenexa, Kansas were calculated. Field duplicates of soil samples were analyzed for total PCB. The precision goal for the duplicate sample is ± 50%. The results of the RPD

analysis are in **Appendix G**. Those parameters that were outside the RPD goal are qualified by the criteria: %RPD ≥ 50. **Table 5.1** provides a summary of the RPD calculations.

Table 5.1
QA/QC Sample RPD Summary

Sample ID	Total PCB (mg/kg)	RPD	RPD Goal Met?
SE-C1-WALL-S	440.000	2.33	Yes
DUP-1 (SE-C1-WALL-S)	420.000		
SH-F3-FLOOR-2	64.000	48.84	Yes
DUP-2 (SH-F3-FLOOR-2)	22.000		
SH-I1-FLOOR-1	53.400	25.52	Yes
SH-I1-FLOOR-1 (SPLIT)	31.685		
SH-H1-FLOOR-4	3.560	56.76	No
SH-H1-FLOOR-4 (SPLIT)	0.982		
SE-D1-WALL-S	1.600	20.60	Yes
SE-D1-WALL-S (SPLIT)	2.430		
SH-G1-FLOOR-4	2.240	47.90	Yes
SH-G1-FLOOR-4 (SPLIT)	0.789		
SE-A5-WALL-N	15.213	92.71	No
DUP (SE-A5-WALL-N)	402.150		
SH-A5W-FLOOR-4	0.025	34.55	Yes
SH-A5W FLOOR 4'	0.0514		
SH-A8-FLOOR-4	0.069	26.98	Yes
SH-A8 FLOOR 4'	0.120		
SE-AA4-FLOOR-1	26.000	0.57	Yes
SE-AA4 FLOOR 4'	26.300		
SH-A2-FLOOR-2	1.230	25.13	Yes
SH-A2 FLOOR 2'	0.736		
SH-A1-FLOOR-2	2.470	53.04	No
SH-A1 FLOOR 2'	0.758		
SE-E2-WALL-S	14.000	37.05	Yes
SE-E2-WALL SOUTH	6.430		
SE-D1-FLOOR-2.5	6.600	34.65	Yes
SE-D1-FLOOR 2.5	13.600		
SH-U5-FLOOR-1	20.000	76.38	No
SH-U5-FLOOR-1	2.678		
SE-E2-FLOOR-2	9200.000	87.30	No
SE-E2-FLOOR-2	624.000		

The total PCB concentration is calculated from the sum of the individual Aroclors for the duplicate samples. DUP (SE-A5-WALL-N), SH-H1-FLOOR-4 (SPLIT), SH-A1 FLOOR 2', SH-U5-FLOOR-1, and SE-E2-FLOOR-2 are qualified as %RPD $\geq$ 50. This may be due to the different dilutions used in samples versus the corresponding samples. SE-A5-WALL-N and SE-E2-FLOOR-2 were not used as final verification samples, and additional cleanup was completed based on results above the cleanup goal. Because the magnitude of PCB in results from samples collected at SH-H1-FLOOR-4, SH-A1-FLOOR-2, and SH-SU-FLOOR-1 are well below the cleanup goal of 25 ppm, the data obtained is usable for the purposes of this site cleanup.

ALS and TA report that the data was tested within acceptable holding times and most were tested within the recommended temperatures for the parameters of concern. The usability for the total PCB data in samples received out of the required temperature range is not affected due to PCB persistence. The results associated with surrogate spike recoveries are reported in **Appendix G**. In some cases, the sample required a dilution prior to analysis. In these cases the surrogate spike concentration in the sample may have been reduced to a level where the recovery calculation does not provide useful information. These instances were qualified in the reports. Analytes were not detected in any of the laboratory blanks associated with verification sampling. In some cases MS/MSD recoveries and surrogate recoveries were outside of the control limits due to matrix interference. In general MS/MSD and LCS results indicate that analysis results meet acceptable limits.

Sample results were evaluated for representativeness by examining items related to sample collection, including chain of custody documentation, field logbook entries, sample labeling, collection dates, and condition of the samples upon receipt at the laboratory. Copies of the field logbooks and COCs have been included in **Appendices F** and **G,** respectively.

Laboratory procedures also were examined, including anomalies reported by the laboratory, either upon receipt of the samples at the laboratory or during the analytical process. Other than sample SE-A5-WALL-N no data are considered unusable for the purposes of this site cleanup. The matrix sampled for SE-A5-WALL-N was excavated and disposed based on the one high PCB test. Therefore the completeness assessment for field and laboratory data is nearly 100%. The comparability of the samples has been preserved by using the same field techniques for the collection of each sample. This was accomplished by conforming to the FSP and Work Plan.

The detection limits were within an acceptable range. Dilutions were required for a portion of the samples when concentrations exceeded the linear range of the instrumentation. Sample dilution factors are contained in the analytical report. No results were reported at concentrations between the MRL and the MDL.

Other than sample SE-A5-WALL-N, 100% of the data obtained during the site cleanup are valid (not rejected) and acceptable for their intended use. All analysis where performed as requested on the chain of custody documents and in accordance with the Work Plan. While some data are qualified, they are considered valid for the project's intended use. **Table 5.2** provides the analytical data report summary.

Table 5.2 Analytical Data Report Summary					
Laboratory Work Order	1309024	1309161	1309218	1309543	1309598
Sample Ids Analyzed	1309024-01 1309024-02	1309161-01 1309161-02 1309161-03 1309161-04 1309161-06 1309161-07 1309161-08 1309161-09 1309161-10 1309161-11 1309161-12 1309161-13 1309161-14 1309161-15 1309161-17 1309161-18 1309161-19 1309161-20 1309161-21 1309161-22 1309161-23 1309161-24 1309161-25 1309161-26 1309161-27 1309161-28 1309161-30	1309218-01 1309218-02 1309218-03 1309218-04 1309218-05 1309218-06 1309218-07 1309218-08 1309218-09 1309218-10 1309218-11 1309218-12 1309218-13	1309543-01 1309543-02 1309543-03 1309543-04 1309543-05 1309543-06 1309543-07 1309543-08 1309543-09 1309543-10 1309543-11 1309543-12 1309543-13 1309543-14 1309543-15 1309543-16 1309543-17 1309543-18 1309543-19 1309543-20 1309543-21	1309598-01 1309598-02 1309598-03 1309598-04 1309598-05
No. of Samples	2	27	13	21	5
Laboratory Work Order	1309671	1309726	1309796	1309876	1309934
Sample Ids Analyzed	1309671-01 1309671-02 1309671-03	1309726-01 1309726-02 1309726-03 1309726-04 1309726-05 1309726-06	1309796-01 1309796-02 1309796-03 1309796-04 1309796-05	1309876-01 1309876-02 1309876-03 1309876-04 1309876-05 1309876-06	1309934-01 1309934-02 1309934-03 1309934-04 1309934-05 1309934-06

Table 5.2 Analytical Data Report Summary					
		1309726-07 1309726-08 1309726-09 1309726-10 1309726-11 1309726-12 1309726-13 1309726-14 1309726-15 1309726-16 1309726-17 1309726-18 1309726-19 1309726-20 1309726-21		1309876-07 1309876-08 1309876-09	
No. of Samples	3	21	5	9	6
Laboratory Work Order	1310155	1310237	1310279	1310431	1310480
Sample Ids Analyzed	1310155-01 1310155-02 1310155-04 1310155-05 1310155-06 1310155-07 1310155-08 1310155-09 1310155-10 1310155-11 1310155-12 1310155-13 1310155-14 1310155-15	1310237-01 1310237-02 1310237-03 1310237-04 1310237-05 1310237-06 1310237-07 1310237-08	1310279-01 1310279-02 1310279-03 1310279-04 1310279-05 1310279-06 1310279-07 1310279-08 1310279-09 1310279-10 1310279-11 1310279-12 1310279-13 1310279-14 1310279-15 1310279-16 1310279-17 1310279-18 1310279-19	1310431-01 1310431-02 1310431-03 1310431-04 1310431-05 1310431-06 1310431-07	1310480-01 1310480-02 1310480-03 1310480-04 1310480-05 1310480-06 1310480-07 1310480-08 1310480-09 1310480-10 1310480-11 1310480-12
No. of Samples	14	8	19	7	12

Table 5.2 Analytical Data Report Summary					
Laboratory Work Order	1310564	1310667	1310735	1310797	1310846
Sample Ids Analyzed	1310564-01 1310564-02 1310564-03 1310564-04 1310564-05 1310564-06 1310564-07 1310564-08 1310564-09 1310564-10 1310564-11 1310564-12	1310667-01 1310667-02 1310667-03	1310735-01 1310735-02 1310735-03 1310735-04 1310735-05 1310735-06 1310735-07 1310735-08 1310735-09 1310735-10 1310735-11 1310735-12 1310735-13 1310735-14 1310735-15	1310797-01 1310797-02 1310797-03 1310797-04 1310797-05 1310797-06 1310797-07 1310797-08 1310797-09 1310797-10 1310797-11 1310797-12 1310797-13 1310797-14 1310797-15 1310797-16 1310797-17 1310797-18 1310797-19 1310797-20 1310797-21 1310797-22 1310797-23 1310797-24	1310846-01 1310846-02 1310846-03 1310846-04 1310846-05 1310846-06 1310846-07 1310846-08 1310846-09
No. of Samples	12	3	15	24	9
Laboratory Work Order	1311257	1311331	1311454	1311658	1311995
Sample Ids Analyzed	1311257-01 1311257-02 1311257-03 1311257-04 1311257-05 1311257-06 1311257-07 1311257-08 1311257-09 1311257-10	1311331-01 1311331-02 1311331-03 1311331-04 1311331-05 1311331-06 1311331-07 1311331-08 1311331-09	1311454-01 1311454-02 1311454-03 1311454-04 1311454-05 1311454-06 1311454-07 1311454-08 1311454-09 1311454-10	1311658-01 1311658-02 1311658-03 1311658-04 1311658-05 1311658-06 1311658-07 1311658-08 1311658-09 1311658-10	1311995-01 1311995-02 1311995-03 1311995-04 1311995-05 1311995-06 1311995-07 1311995-08 1311995-09 1311995-10

Table 5.2 Analytical Data Report Summary					
	1311257-11 1311257-12 1311257-13 1311257-14 1311257-15 1311257-16 1311257-17 1311257-18 1311257-19 1311257-20 1311257-21 1311257-22 1311257-23 1311257-24 1311257-25		1311454-11 1311454-12 1311454-13 1311454-14	1311658-11 1311658-12 1311658-13 1311658-14 1311658-15 1311658-16	1311995-11 1311995-12 1311995-13 1311995-14 1311995-15 1311995-16 1311995-17 1311995-18 1311995-19 1311995-20 1311995-21
No. of Samples	25	8	14	16	21
Laboratory Work Order	1312779	13081035	13081107	13081170	13081222
Sample Ids Analyzed	1312779-01 1312779-02 1312779-03 1312779-04 1312779-05 1312779-06 1312779-07 1312779-08 1312779-09 1312779-10 1312779-11 1312779-12	13081035-01 13081035-02 13081035-03 13081035-04	13081107-01 13081107-02 13081107-03 13081107-04 13081107-05 13081107-06 13081107-07 13081107-08 13081107-09 13081107-10 13081107-11 13081107-12 13081107-13 13081107-14 13081107-15 13081107-16 13081107-17 13081107-18	13081170-01 13081170-02 13081170-03 13081170-04 13081170-05 13081170-06 13081170-07 13081170-08 13081170-09 13081170-10 13081170-11 13081170-12 13081170-13 13081170-14 13081170-15 13081170-16 13081170-17 13081170-18	13081222-01 13081222-02 13081222-03 13081222-04 13081222-05 13081222-06 13081222-07 13081222-08 13081222-09 13081222-10 13081222-11 13081222-12 13081222-13 13081222-14
No. of Samples	12	4	18	18	14
Laboratory Work Order	13091177	13101015	13101087	13111045	490-35635

Table 5.2 Analytical Data Report Summary					
Sample Ids Analyzed	13091177-01 13091177-02 13091177-03 13091177-04 13091177-05 13091177-06 13091177-07 13091177-08 13091177-09 13091177-10 13091177-11 13091177-12 13091177-13 13091177-14 13091177-15 13091177-16 13091177-17 13091177-18 13091177-19 13091177-20 13091177-21 13091177-22 13091177-23 13091177-24 13091177-25 13091177-26 13091177-27 13091177-28	13101015-01 13101015-02 13101015-03 13101015-04 13101015-05 13101015-06 13101015-07 13101015-08	13101087-01 13101087-02 13101087-03 13101087-04 13101087-05 13101087-06 13101087-07 13101087-08 13101087-09 13101087-10 13101087-11 13101087-12	13111045-01 13111045-02 13111045-03 13111045-04 13111045-05 13111045-06 13111045-07 13111045-08 13111045-09 13111045-10 13111045-11 13111045-12 13111045-13 13111045-14	490-35635-1 490-35635-2 490-35635-3 490-35635-4 490-35635-5 490-35635-6 490-35635-7
No. of Samples	28	8	12	14	7
Laboratory Work Order	490-35637	490-35775	490-36242	490-34385	490-35338
Sample Ids Analyzed	490-35637-1 490-35637-2 490-35637-3 490-35637-4 490-35637-5 490-35637-6 490-35637-7	490-35775-1 490-35775-2 490-35775-3 490-35775-4 490-35775-5 490-35775-6 490-35775-7	490-36242-1 490-36242-2 490-36242-3 490-36242-4 490-36242-5 490-36242-6 490-36242-7	490-34385-1 490-34385-2	490-35338-1 490-35338-4 490-35338-5 490-35338-6

Table 5.2 Analytical Data Report Summary					
	490-35637-8	490-35775-8	490-36242-8 490-36242-9		
No. of Samples	8	8	9	2	4
Parameters Analyzed and Method:			All Work Orders: PCB-1016 by SW846 8082; PCB-1221 by SW846 8082; PCB-1232 by SW846 8082; PCB-1242 by SW846 8082; PCB-1248 by SW846 8082; PCB-1254 by SW846 8082; PCB-1260 by SW846 8082; % Dry Solids by SW-846;		
Laboratory Work Order	1309372	1309735	1310161	1310268	1311459
Sample Ids Analyzed	1309372-01 1309372-02 1309372-03	1309735-01 1309735-02 1309735-03 1309735-04 1309735-05	1310161-01	1310268-01 1310268-02 1310268-03 1310268-04 1310268-05	1311459-01 1311459-02 1311459-03 1311459-04 1311459-05 1311459-06 1311459-07 1311459-08 1311459-09
No. of Samples	3	5	1	5	9
Laboratory Work Order	1312779	1309543	1311459		
Sample Ids Analyzed	1312779-12*	1309543-17*	1311459-02* 1311459-09*		
No. of Samples	1	1	2		
Parameters Analyzed and Method:			EPH - IOWA OA-2, VPH - IOWA OA-1, MERCURY – SW846 7471B, RCRA METALS - SW846 6020, LOW-LEVEL SEMIVOLATILES - SW846 8270, TCL VOLATILES – SW846 8260C *DENOTES SAMPLE ANALYZED FOR Cr, Pb SW846 6020		
Laboratory Work Order	1309330	1310290	1323531		
Sample Ids Analyzed	1309330-01	1310290-01	1323531001		
No. of Samples	1	1	1		
Parameters Analyzed and Method:			PCBs - N5503		

Table 5.2 Analytical Data Report Summary	
Data Report Target Criteria Reviewed and Met	• Client and project information • Date / time of receipt • Analytical Report including methods, results for each sample, including flags / qualifiers, units, MDL, MRL, dilution factor, analysis date / time, method, batch • Sample extraction data including batch, lab number, wt/vol extracted, date, analyst ID, extraction method • Project Quality Control Data – Blank including value, qualification, lab number, date / time analyzed • Laboratory Duplicate – results, qualification, RPD, batch, sample ID, date / time analyzed • Laboratory Control Sample – known value, analyzed, qualification, units, % recovery, target range, batch, date / time analyzed • Matrix Spike – Original value, MS value, qualification, Spike conc., % Recovery, Target Range, batch, sample ID, date / time analyzed • Matrix Spike Duplicate – Original value, Duplicate value, qualification, Spike conc., % Recovery, Target Range, RPD, Limit, batch, sample ID, date / time analyzed • Laboratory Certification Summary • Data Qualifiers and Definitions / Method Modification Notes • Chain of Custody and Laboratory Check in Report

6.0 CONCLUSIONS

This *Interim Measures Site Cleanup Report* has documented cleanup of 17,582.43 tons of contaminated waste material from the former Novick Iron & Metal site. The *Site Investigation* portion of the report has demonstrated that the site has been fully investigated when all of the historical site investigation is considered with additional investigation completed during the cleanup phase.

The site cleanup successfully removed PCB contamination previously identified ≥25 ppm from the Shear and Southeast Areas according to the approved *Cleanup Plan*. The cleanup area was expanded to include all other areas of PCB contamination based on all the previous investigations of the site going back to 1989. These historic sample results were located, cleaned up to <25 ppm, and delineated during remediation activity according to the *Cleanup Plan* procedures. Verification sampling inside and around the cleanup areas confirm PCB concentrations remaining at the site are <25 ppm. The extent of PCB contamination at the site was fully delineated and verified as required by 40 CFR 761. No other areas of PCB contamination ≥25 ppm are known to exist. All other areas suspected to have PCB contamination were sampled and remediated.

Excavated areas were backfilled with clean soil and machine compacted to restore the pre-cleanup surface conditions. Approximately 95% by weight of the excavated material removed was replaced.

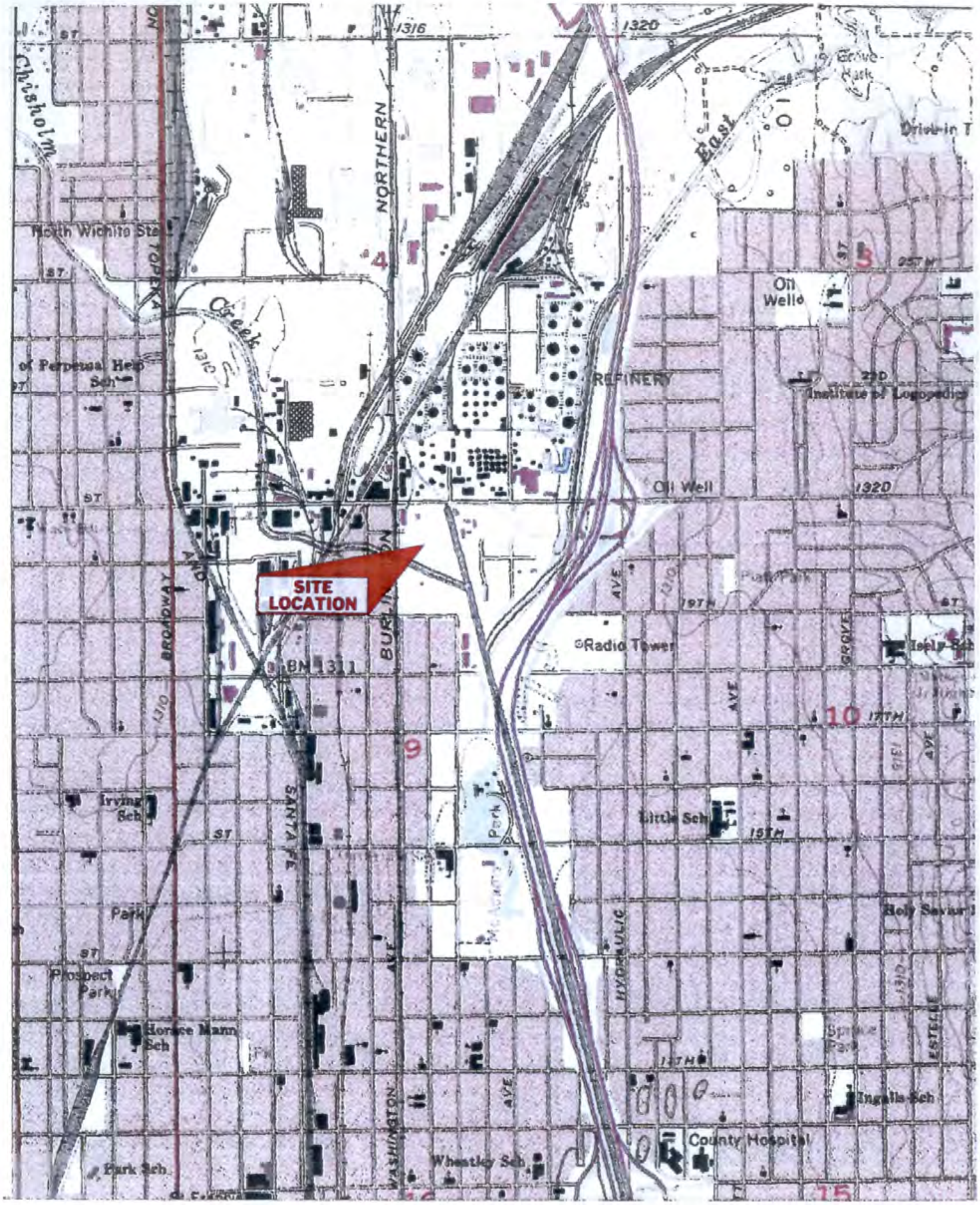
Verification sampling for parameters other than PCB were collected across the site in each area of excavation at the site. As a result of this and the data presented herein the entire site has effectively been gridded, sampled, and analyzed for all of the parameters of concern. The verification sample results confirm no exceedances of Kansas RSK industrial use and soil-to-groundwater RSK values remained for volatiles, petroleum hydrocarbons as diesel, oil and gasoline range organics, arsenic, barium, cadmium, selenium, and silver. Verification sampling showed that chromium, lead, and dibenzo(a,h)anthracene were the only parameters to exceed the non-residential soil use pathway at the final depth. Dibenzo(a,h)anthracene was the only parameter to exceed the RSK value for soil-to-groundwater. Mercury (1 sample) and benzo(a)pyrene (3 samples) also were detected above residential standards at final depth. All of the sample areas were covered with at least 1 foot of clean soil, limiting any future exposure or migration pathways. Further, these metals and PAHs are commonly found in the surface soil of industrial scrap metal recycling yards due to torching, cutting, shearing, crushing, equipment leaking, seal unit breaking, or storing scrap materials. These activities have been observed and will continue at the site at its current use.

Historic data and investigation activity has been added and referenced into this report to complete the requirement of a Comprehensive Investigation Report. This includes a review of historic PCB soil data, other parameter data, surface water and sediment, and groundwater.

NIM Inc. has successfully cleaned up contamination left by Novick Iron & Metal's use of the site. NIM is not responsible for continued cleanup of contamination resulting from scrap metal recycling after its sale of the property in 2003. The operation of the site has been as a Scrap Yard for metal recycling over the previous 10 years, and it is important to note that NIM Inc. has not owned the site or been present during this time (except for the site cleanup and investigation). Obviously scrap processing activities at the site after 2003 are not the responsibility of NIM Inc. NIM Inc. has submitted an application for an Environmental Use Control for the site which will ensure exposure risks from the site are limited.

Exhibit No. 1

USGS Quadrangle Wichita East Site Location Map



INDUSTRIAL ENVIRONMENTAL CONSULTANTS

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EXHIBIT 1

SITE LOCATION MAP

FORMER NOVICK IRON & METAL
WICHITA, KANSAS

N

USGS MAP(S)
WICHITA, EAST KANSAS

LAT 37° 43' 48" N
LONG. 97° 19' 31" W
Scale:1"=2000'

Exhibit No. 2

Before and After Cleanup Aerial Photographs

DATE: JULY 13, 2010
SOURCE: GOOGLE MAPS

DATE : MARCH 12, 2014
SOURCE: GOOGLE MAPS

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NO.	REVISIONS	DATE	ENGR

BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

iec INDUSTRIAL ENVIRONMENTAL CONSULTANTS
2603 FESSEY PARK ROAD
P.O. BOX 40066
NASHVILLE, TENNESSEE 37204
615-730-5059

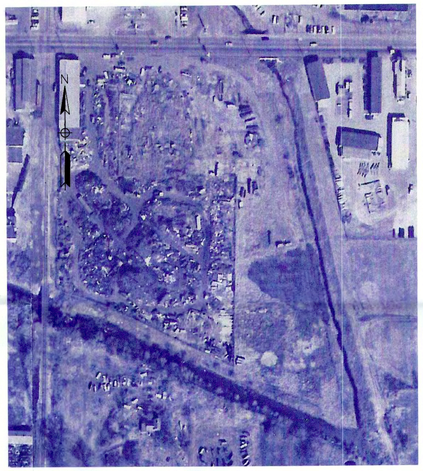
DRAWN BY: CLG	BEFORE & AFTER AERIAL PHOTOGRAPHS INTERIM MEASURES CLEANUP	SCALE: NTS	PROJECT NO: 14006
CHECKED BY: JKW			
ENGINEER: JCT	FORMER NOVICK IRON & METAL WICHITA, KANSAS	CONTOUR INTERVAL: NA	EXHIBIT NO: 2
DATE: 5/28/2014			

Exhibit No. 3

Historic Use By NIM / Aerial Photographs

DATE : 1960

PREPARED, IN PART, FOR THE HOUSING
& HOME FINANCE AGENCY

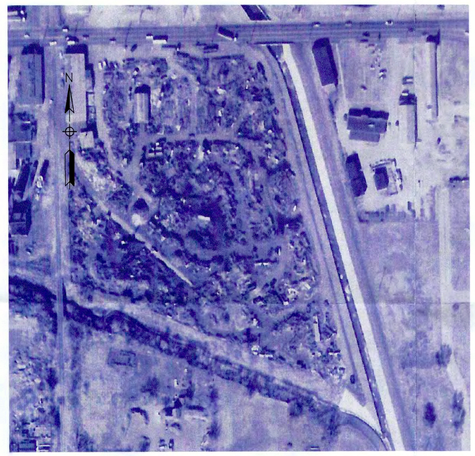


DATE : 1968

PREPARED BY:KUCERA & ASSOCIATES
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION &
KANSAS GAS & ELECTRIC COMPANY

DATE : 1974

PREPARED BY:WESTERN AIR MAPS
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION &
KANSAS GAS & ELECTRIC COMPANY

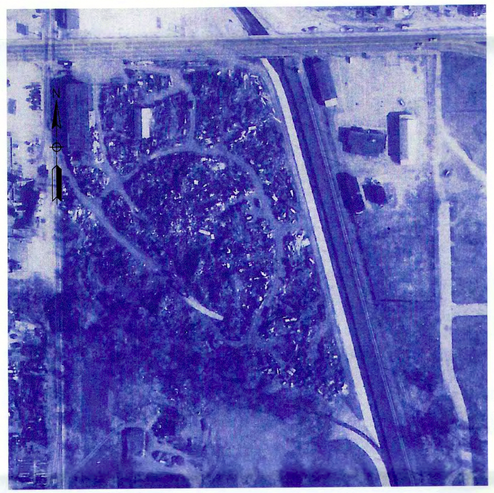


DATE : 1977

PREPARED BY:VERNON GRAPHICS
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION &
KANSAS GAS & ELECTRIC COMPANY

DATE: 1983

PREPARED BY:KUCERA & ASSOCIATES
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION &
KANSAS GAS & ELECTRIC COMPANY



DATE : 1986

PREPARED BY:SURDEX CORPORATION
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION

DATE : 1992

PREPARED BY:WESTERN AIR MAPS
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION

DATE : 1995

PREPARED BYM.J. HARDEN & ASSOCIATES
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION

DATE : 1997

PREPARED BY:WESTERN AIR MAPS
FOR : WICHITA-SHEDWICK METROPOLIAN
AREA PLANNING COMMISSION

NO.	REVISIONS	DATE	ENGR

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NASHVILLE,TENNESSEE 37204
615-730-5059

DRAWN BY: CLG
CHECKED BY: JKW
ENGINEER: JCT
DATE: 5/28/2014

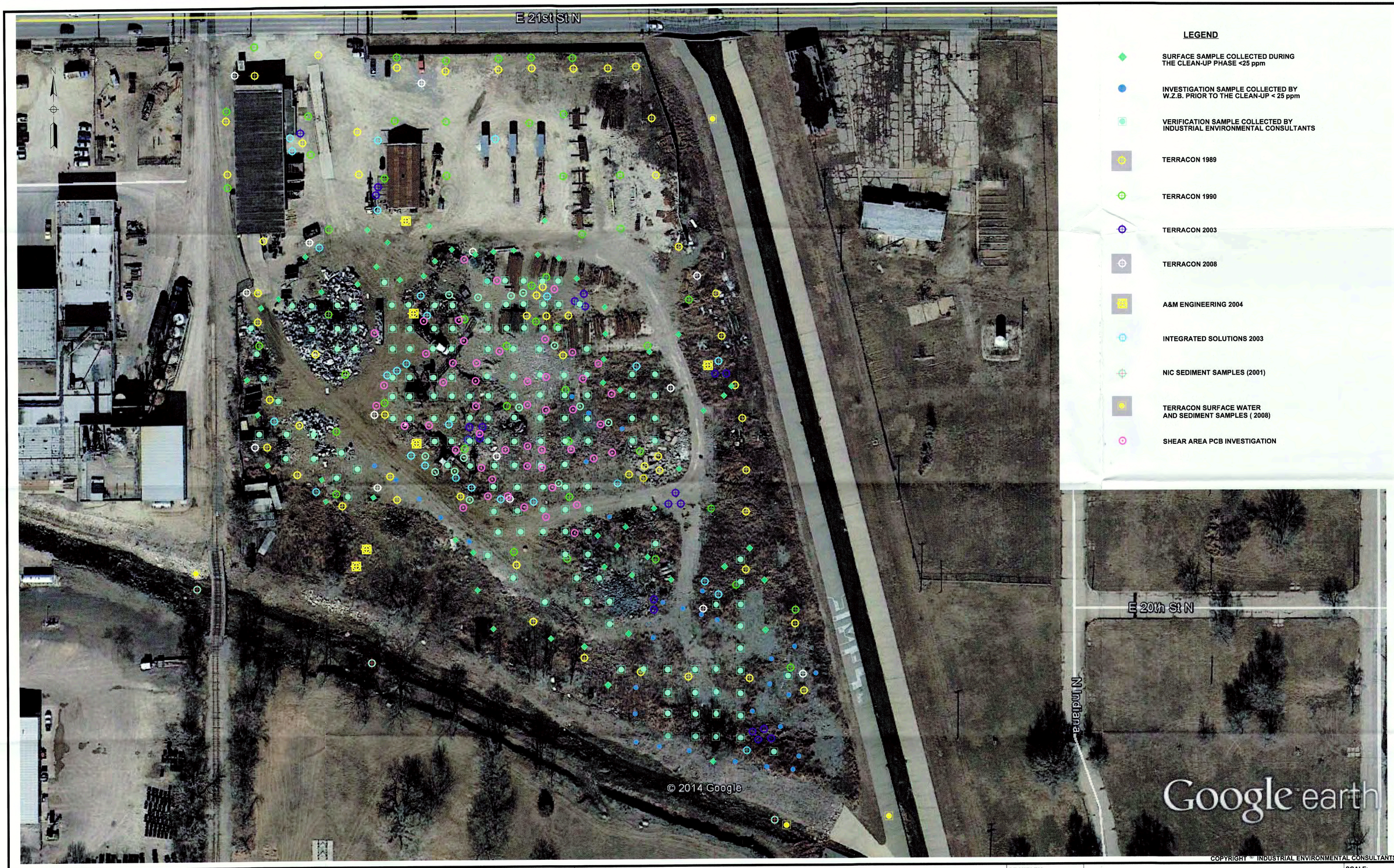
HISTORICAL SITE USE BY NIM
(AERIAL PHOTOGRAPHS)

FORMER NOVICK IRON AND METAL
WICHITA, KANSAS

SCALE: NONE
PROJECT NO.: 14006
EXHIBIT NO. 3

Exhibit No. 4

Historic Site Investigation Sample Locations



LEGEND

- SURFACE SAMPLE COLLECTED DURING THE CLEAN-UP PHASE <25 ppm
- INVESTIGATION SAMPLE COLLECTED BY W.Z.B. PRIOR TO THE CLEAN-UP < 25 ppm
- VERIFICATION SAMPLE COLLECTED BY INDUSTRIAL ENVIRONMENTAL CONSULTANTS
- TERRACON 1989
- TERRACON 1990
- TERRACON 2003
- TERRACON 2008
- A&M ENGINEERING 2004
- INTEGRATED SOLUTIONS 2003
- NIC SEDIMENT SAMPLES (2001)
- TERRACON SURFACE WATER AND SEDIMENT SAMPLES (2008)
- SHEAR AREA PCB INVESTIGATION

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615-730-5059

DRAWN BY: DMP
CHECKED BY: JKW
ENGINEER: JCT
DATE: 4/28/2014

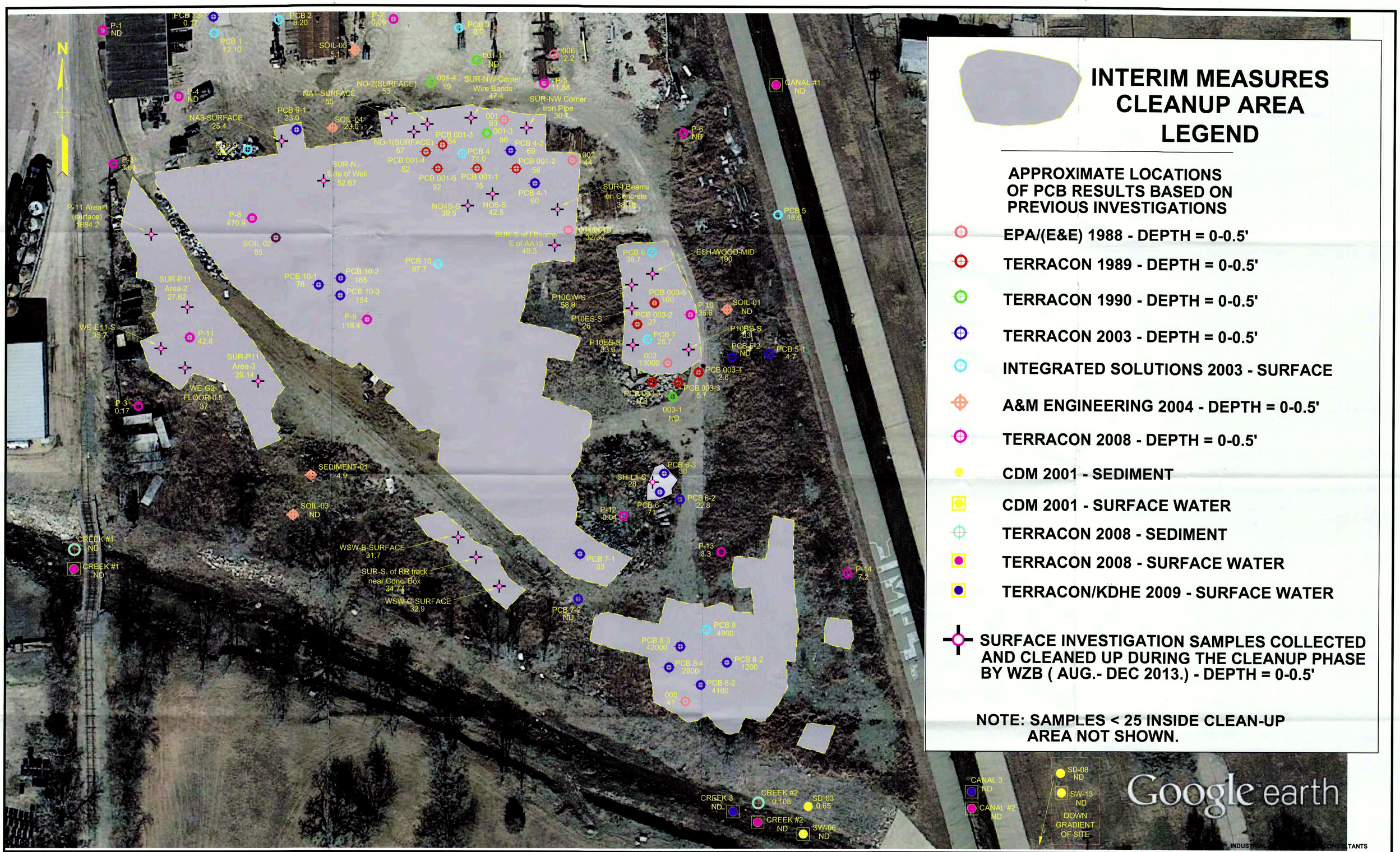
HISTORIC INVESTIGATIONS SAMPLE LOCATIONS

FORMER NOVICK IRON AND METAL
WICHITA, KANSAS

SCALE: 1" =50'
PROJECT NO.: 14006
EXHIBIT NO. 4

Exhibit No. 5

Historic PCB Investigation PCB Results Map



INTERIM MEASURES CLEANUP AREA LEGEND

APPROXIMATE LOCATIONS OF PCB RESULTS BASED ON PREVIOUS INVESTIGATIONS

- EPA/(E&E) 1988 - DEPTH = 0-0.5'
- TERRACON 1989 - DEPTH = 0-0.5'
- TERRACON 1990 - DEPTH = 0-0.5'
- TERRACON 2003 - DEPTH = 0-0.5'
- INTEGRATED SOLUTIONS 2003 - SURFACE
- A&M ENGINEERING 2004 - DEPTH = 0-0.5'
- TERRACON 2008 - DEPTH = 0-0.5'
- CDM 2001 - SEDIMENT
- CDM 2001 - SURFACE WATER
- TERRACON 2008 - SEDIMENT
- TERRACON 2008 - SURFACE WATER
- TERRACON/KDHE 2009 - SURFACE WATER
- SURFACE INVESTIGATION SAMPLES COLLECTED AND CLEANED UP DURING THE CLEANUP PHASE BY WZB (AUG.- DEC 2013.) - DEPTH = 0-0.5'

NOTE: SAMPLES < 25 INSIDE CLEAN-UP AREA NOT SHOWN.

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NO.	REVISIONS	DATE	ENGR
1	REVISED MAP PER KDHE LETTER 2/24/2015	4/10/2015	JKW

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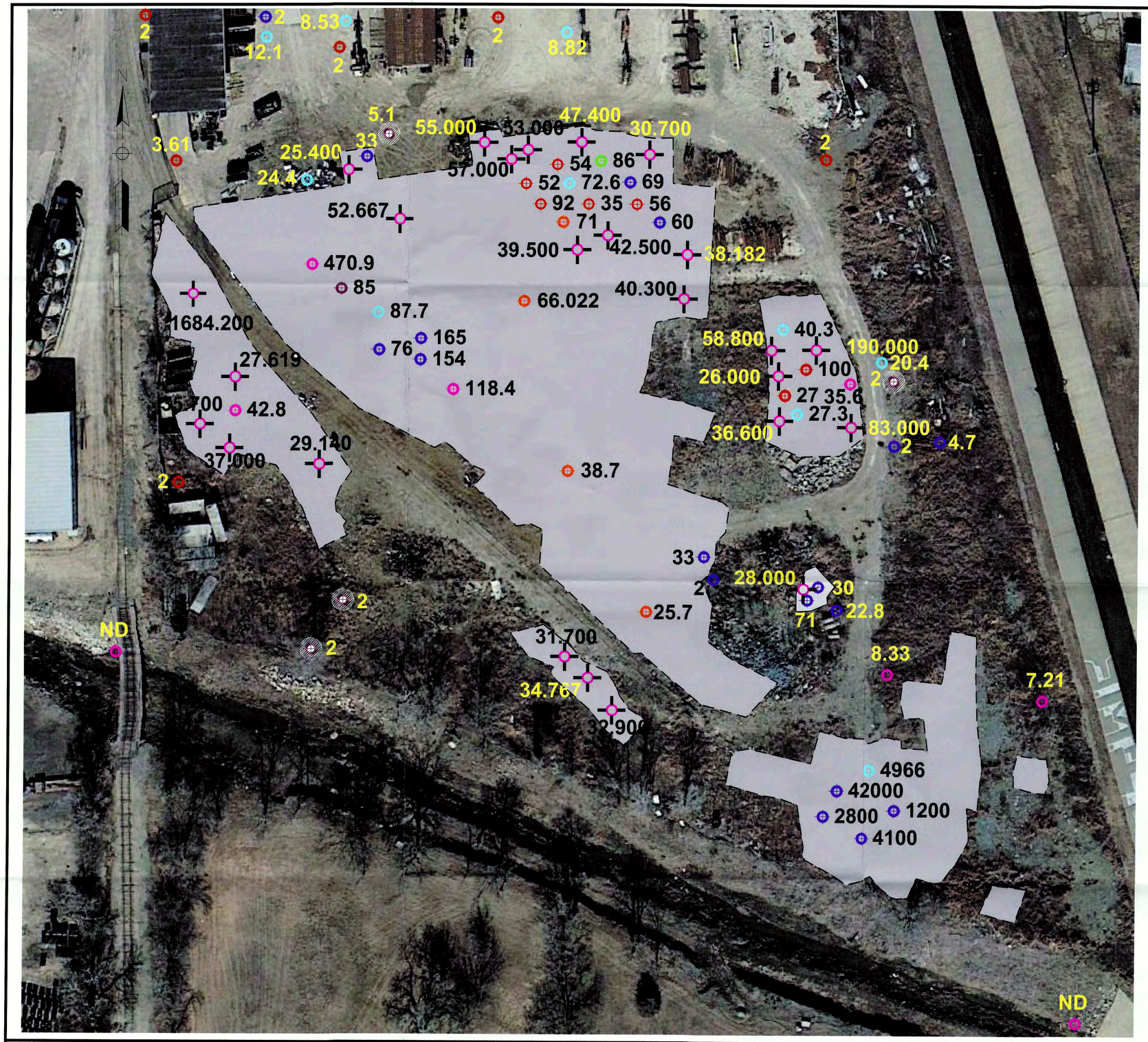
615-730-5059

DRAWN BY: DMP
CHECKED BY: JKW
ENGINEER: JCT
DATE: 1/28/2014

FORMER NIM SITE
HISTORICAL PCB RESULTS AND INTERIM MEASURES CLEANUP AREA

FORMER NOVICK IRON AND METAL
WICHITA, KANSAS

SCALE: 1" = 35'
PROJECT NO.: 14006
EXHIBIT NO. 5



INTERIM MEASURES CLEANUP AREA LEGEND

APPROXIMATE LOCATIONS OF PCB RESULTS BASED ON PREVIOUS INVESTIGATIONS

- TERRACON 1989
- TERRACON 1990
- TERRACON 1991
- TERRACON 2003
- INTEGRATED SOLUTIONS 2003
- A&M ENGINEERING 2004
- TERRACON 2008

NOTE: REFER TO SECTION 2 OF THE REPORT FOR SAMPLE IDENTIFICATIONS

SURFACE INVESTIGATION SAMPLES COLLECTED AND CLEANED UP DURING THE CLEANUP PHASE BY WZB (AUG.- DEC 2013.)

NOTE: SAMPLES < 25 INSIDE CLEAN-UP AREA NOT SHOWN.

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615-730-5059

DRAWN BY:	DMP
CHECKED BY:	JKW
ENGINEER:	JCT
DATE:	1/28/2014

FORMER NIM SITE
HISTORICAL PCB RESULTS AND INTERIM MEASURES CLEANUP AREA

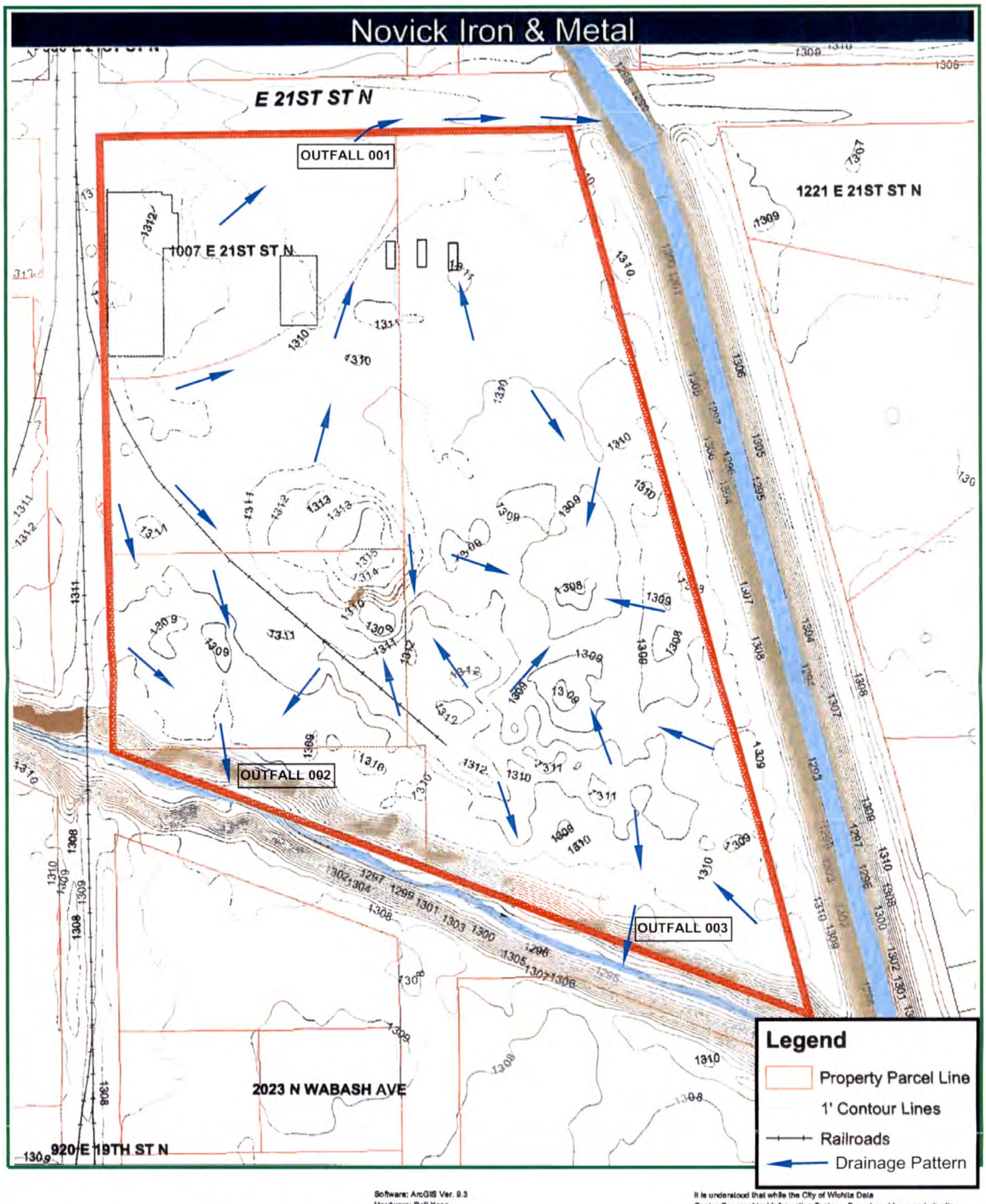
FORMER NOVICK IRON AND METAL
WICHITA, KANSAS

SCALE:	1" = 35'
PROJECT NO.:	14006
EXHIBIT NO.	5

Exhibit No. 6

Surface Water Topographic Map / Drainage

Novick Iron & Metal



FEET 0 50 100

N

Software: ArcGIS Ver. 9.3
Hardware: Dell Xeon
Plotter: HP 5000PS
Map Data Source:
Road centerlines provided by City of Wichita GIS and Sedgwick County GIS.
Friday, July 27, 2012 12:54:52 PM
X:\giswork\Projwork\PublicMapRequests\Baumgartner\1007E21stSL.mxd

It is understood that while the City of Wichita Data Center Geographical Information Systems Department have no indication and reason to believe that there are inaccuracies in information incorporated in the base map, the Data Center-GIS personnel make no warranty or representation, either expressed or implied, with respect to the information, or data displayed.
Note: Public property represented on this map is not intended to be inclusive.

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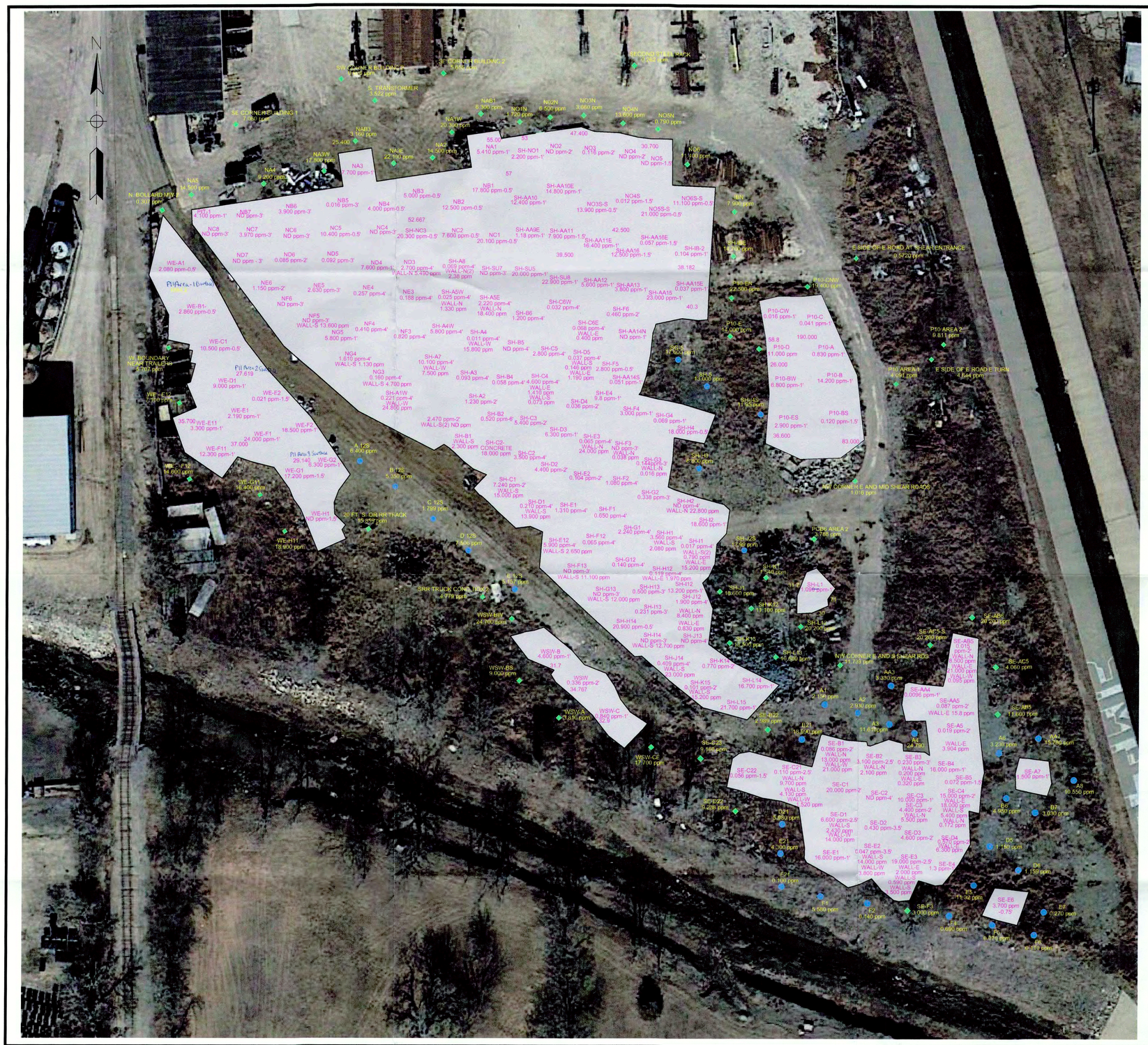
615-730-5059

DRAWN BY: CLG	SURFACE WATER DRAINAGE INTERIM MEASURES	SCALE: 1"= 100'	PROJECT NO: 14006
CHECKED BY: JKW			
ENGINEER: JCT	FORMER NOVICK IRON & METAL WICHITA, KANSAS	CONTOUR INTERVAL: 1'	EXHIBIT NO: 6
DATE: 5/28/2014			

Exhibit No. 7

Site Cleanup PCB Verification Results Map



LEGEND

SURFACE SAMPLE COLLECTED DURING THE CLEAN-UP PHASE <25 ppm

INVESTIGATION SAMPLE COLLECTED BY W.Z.B. PRIOR TO THE CLEAN-UP < 25 ppm

APPROXIMATE EXCAVATED CLEAN-UP AREA ON AERIAL PHOTO BASED ON SURVEY.

0.000 ppm — ALL RESULTS REPORTED IN PPM TO 3 DECIMAL PLACES

AREA IDENTIFICATION

WE - WEST AREA
(LOCATION OF ELEVATED "P-II" RESULTS)

NO - NORTH EAST SHEAR AREA
(LOCATION OF ELEVATED SURFACE SAMPLE RESULTS)

N - NORTH WEST SHEAR AREA
(LOCATION OF ELEVATED SURFACE SAMPLE RESULTS)

P10 - EAST AREA
(INVESTIGATED TO LOCATE ELEVATED HISTORICAL RESULT P10)

SH - SHEAR AREA
(ELEVATED HISTORICAL RESULTS)

SE - SOUTH EAST AREA
(ELEVATED HISTORICAL RESULTS)

WSW - WEST SOUTH WEST AREA
(LOCATION OF ELEVATED SURFACE SAMPLE RESULTS RESULTS)

SAMPLE IDENTIFICATION

SH-G3 (SH = AREA LOCATION)
(G3 = GRID IDENTIFICATION)

0.118 ppm -3'
(VERIFICATION OF FLOOR)
(PCB CONCENTRATION FROM ORIGINAL
(SURFACE TO FINAL DEPTH)

WALL - N
0.016 ppm
(WALL N - PCB WALL VERIFICATION SAMPLE
LOCATED ON NORTH SIDE (N) OF GRID,
RESULTS IN ppm.)

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NO.	REVISIONS	DATE	ENGR

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NASHVILLE,TENNESSEE 37204
615-730-5059

DRAWN BY:	DMP
CHECKED BY:	JKW
ENGINEER:	JCT
DATE:	5/28/2014

PCB VERIFICATION RESULTS
INTERIM MEASURES CLEANUP

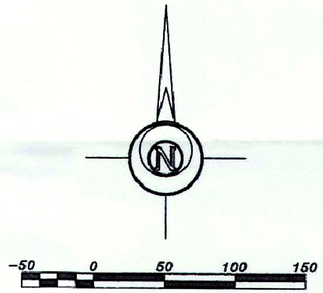
FORMER NOVICK IRON AND METAL
WICHITA, KANSAS

SCALE:	1" = 35'
PROJECT NO.:	14006
EXHIBIT NO.	7

Exhibit No. 8

Topographic Extent of Excavation Map

TOPOGRAPHIC EXTENT OF EXCAVATION



LEGEND

- - - Excavation Limits Surveyed by Others.

NOTES:

1.) Topographic survey information shown other than contours were placed on this drawing approximately to give proper reference to site location only.

2.) Buildings, concrete, fences, streets, railroads and drainage channels are not survey accurate.

3.) Areas within border identified by bold dashed lines were not surveyed by Garber Surveying crews but are based on excavation information provided by contractor.

4.) Excavation areas surveyed: October 3, 2013
October 24, 2013
November 13, 2013

BENCHMARK: MW-1A

Top of Monitor Well Casing on North Side of Subject Property, East of Property Entrance and South of East 21st Street North. Location plotted on this sheet.

Elevation=1309.31

SURVEYOR'S CERTIFICATE:

I hereby certify this plat to be a true, correct and complete representation of the topography of the site shown hereon, as surveyed under my supervision, this 30th day of May, 2014.

DANIEL E. GARBER
REGISTERED
LS-663
5-30-2014
KANSAS
LAND SURVEYOR

EXHIBIT N0. 8

Prepared For: **REMEDIATION SERVICES**	*Description:* **EXCAVATION LIMITS 1007 EAST 21ST ST. NORTH WICHITA, KANSAS**

Prepared By: **Garber Surveying Service, P.A.**

GSS

HUTCHINSON (Main Office) 2908 North Plum St. 67502 Ph. 620-663-7032 Fax: 620-663-7401
McPHERSON (Branch Office) 115 East Merlin 67460 Ph. 620-241-4441 Fax: 620-241-4458
NEWTON (Branch Office) 511 North Poplar St. 67114 Ph. 316-283-5053 Fax: 316-283-5073

Drawn By: WJA	Scale: 1"=50'	Date of Field Work: April 17, 2014	Job No:
Checked By: DEG	Date: 05/30/2014	Sheet 1 of 1 Sheet(s)	G2013-643

Exhibit No. 9

PCB Results Tabulation

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
NE6-FLOOR-2	11/19/13	1311995	1.150
NG4-WALL-S	11/19/13	1311995	1.130
NF3-FLOOR-4	11/19/13	1311995	0.820
NF4-FLOOR-4	11/19/13	1311995	0.410
NE4-FLOOR-4	11/19/13	1311995	0.257
NE3-FLOOR-4	11/19/13	1311995	0.188
NG3-FLOOR-4	11/19/13	1311995	0.160
ND5-FLOOR-3	11/19/13	1311995	0.092
ND6-FLOOR-2	11/19/13	1311995	0.085
NC4-FLOOR-1	11/20/13	13111045	60.000
NB6-FLOOR-0.5	11/20/13	13111045	57.800
NC8-FLOOR-0.5	11/20/13	13111045	50.000
NB5-FLOOR-0.5	11/20/13	13111045	47.000
NB7-FLOOR-0.5	11/20/13	13111045	42.000
NC7-FLOOR-0.5	11/20/13	13111045	40.800
NC6-FLOOR-0.5	11/20/13	13111045	37.400
ND7-FLOOR-0.5	11/20/13	13111045	35.300
NA3E-SURFACE	11/20/13	13111045	22.100
NA1W-SURFACE	11/20/13	13111045	20.300
NA3W-SURFACE	11/20/13	13111045	17.800
NC5-FLOOR-0.5	11/20/13	13111045	10.400
NA3-FLOOR-1	11/20/13	13111045	7.700
NA1-FLOOR-1	11/20/13	13111045	5.410
NC4-FLOOR-3	12/18/13	13127790	ND
NC6-FLOOR-3	12/18/13	13127790	ND
NC8-FLOOR-3	12/18/13	13127790	ND
ND7-FLOOR-3	12/18/13	13127790	ND
NF6-FLOOR-3	12/18/13	13127790	ND
NB7-FLOOR-3	12/18/13	13127790	ND
ND3-WALL-N	12/18/13	13127790	5.490
NG3-WALL-S	12/18/13	13127790	4.700
NC7-FLOOR-3	12/18/13	13127790	3.970

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
SE-C21-FLOOR-1	8/26/13	13081035	180.000
SE-D1-FLOOR-1	8/26/13	13081035	120.000
SE-C1-FLOOR-2	8/26/13	13081035	20.000
SE-E1-FLOOR-1	8/26/13	13081035	16.000
SE-E2-FLOOR-2	8/27/13	13081107	9200.000
SE-D2-FLOOR-2	8/27/13	13081107	880.000
SE-C1-WALL-S	8/27/13	13081107	440.000
SE-B3-FLOOR-2	8/27/13	13081107	430.000
DUP-1 (SE-C1-WALL-S)	8/27/13	13081107	420.000
SE-C1-WALL-W	8/27/13	13081107	380.000
SE-C2-FLOOR-1	8/27/13	13081107	350.000
SE-E3-FLOOR-1	8/27/13	13081107	270.000
SE-C1-WALL-E	8/27/13	13081107	140.000
SE-C1-WALL-N	8/27/13	13081107	100.000
SE-B4-FLOOR-1	8/27/13	13081107	16.000
SE-C4-FLOOR-2	8/27/13	13081107	15.000
SE-C3-FLOOR-1	8/27/13	13081107	10.000
SE-D3-FLOOR-2	8/27/13	13081107	4.600
SE-C3-FLOOR-2	8/27/13	13081107	4.400
SE-A7-FLOOR-1	8/27/13	13081107	1.500
SE-E4-FLOOR-1	8/27/13	13081107	1.300
SE-D4-FLOOR-2	8/27/13	13081107	0.570
SE-C3-WALL-N	8/28/13	13081170	62.000
SE-C4-WALL-W	8/28/13	13081170	50.000
SE-C4-WALL-E	8/28/13	13081170	18.000
SE-C4-WALL-N	8/28/13	13081170	14.000
SE-C4-WALL-S	8/28/13	13081170	5.400
SE-E3-WALL-S	8/28/13	13081170	0.590
SH-G3-FLOOR-2	8/29/13	13081222	550.000
SH-G2-FLOOR-2	8/29/13	13081222	310.000
SH-F3-FLOOR-2	8/29/13	13081222	64.000
SH-F6-FLOOR-1	8/29/13	13081222	45.000
DUP-2 (SH-F3-FLOOR-2)	8/29/13	13081222	22.000
SH-E4-FLOOR-1	8/29/13	13081222	9.800
SH-D3-FLOOR-1	8/29/13	13081222	6.300
SH-F4-FLOOR-1	8/29/13	13081222	3.000
SH-G4-FLOOR-1	8/29/13	13081222	0.069
SH-C6E-FLOOR-4	8/29/13	13081222	0.068
SH-E3-FLOOR-4	8/29/13	13081222	0.065

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
SH-D5-FLOOR-4	8/29/13	13081222	0.037
SH-D4-FLOOR-2	8/29/13	13081222	0.036
SH-C6W-FLOOR-4	8/29/13	13081222	0.032
SH-U7-FLOOR-1	8/30/13	1309024	38.000
SH-U5-FLOOR-1	8/30/13	1309024	20.000
SH-U5-FLOOR-1 (SPLIT/DUP)	8/30/13	490-34385	2.678
SE-E2-FLOOR-2 (REPLICATE)	8/30/13	490-34385	624.000
SE-D2-FLOOR-3	9/4/13	1309161	370.000
SE-C2-WALL-N	9/4/13	1309161	260.000
SE-B3-WALL-W	9/4/13	1309161	260.000
SE-E3-WALL-E	9/4/13	1309161	250.000
SE-B3-WALL-S	9/4/13	1309161	150.000
SE-B3-WALL-N	9/4/13	1309161	130.000
SE-C2-FLOOR-2.5	9/4/13	1309161	110.000
SE-D1-WALL-S	9/4/13	1309161	87.000
SE-B5-FLOOR-0.5	9/4/13	1309161	46.000
SE-C1-WALL-N	9/4/13	1309161	34.000
SE-E2-FLOOR-3	9/4/13	1309161	32.000
SE-E3-FLOOR-2.5	9/4/13	1309161	19.000
SE-D1-WALL-W	9/4/13	1309161	14.000
SE-E2-WALL-S	9/4/13	1309161	14.000
SE-C21-WALL-N	9/4/13	1309161	9.700
SE-D1-FLOOR-2.5	9/4/13	1309161	6.600
SE-C3-WALL-N	9/4/13	1309161	5.500
SE-C21-WALL-S	9/4/13	1309161	4.100
SE-E2-WALL-W	9/4/13	1309161	3.800
SE-E6-FLOOR-0.75	9/4/13	1309161	3.700
SE-E3-WALL-S	9/4/13	1309161	3.500
SE-C21-WALL-W	9/4/13	1309161	1.520
SE-B3-WALL-E	9/4/13	1309161	0.320
SE-B3-FLOOR-3	9/4/13	1309161	0.230
SE-C4-WALL-N	9/4/13	1309161	0.172
SE-C21-FLOOR-2.5	9/4/13	1309161	0.110
SE-A5-FLOOR-2	9/4/13	1309161	0.019
SH-AA12-13-14-PILE	9/5/13	1309218	260.000
SH-TIRES	9/5/13	1309218	77.000
SE-C22-PILE	9/5/13	1309218	67.000
SH-G13-H12-PILE	9/5/13	1309218	60.000
SH-C2-FLOOR-4	9/5/13	1309218	33.000

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
SH-H4-FLOOR-0.5	9/5/13	1309218	18.000
SH-C2-CONCRETE	9/5/13	1309218	18.000
SH-C3-FLOOR-2	9/5/13	1309218	5.400
SH-C4-FLOOR-4	9/5/13	1309218	4.600
SH-D2-FLOOR-2	9/5/13	1309218	4.400
SH-F5-FLOOR-0.5	9/5/13	1309218	2.800
SH-C5-FLOOR-4	9/5/13	1309218	2.800
SH-B6-FLOOR-4	9/5/13	1309218	1.200
SE-B2-WALL-NW	9/12/13	1309543	410.000
SH-AA16-FLOOR-1	9/12/13	1309543	101.000
SE-D4-WALL-3	9/12/13	1309543	46.000
SE-C1-WALL-N	9/12/13	1309543	42.000
SE-C2-FLOOR-3	9/12/13	1309543	37.000
SE-AA4-FLOOR-1	9/12/13	1309543	26.000
SH-AA15-FLOOR-1	9/12/13	1309543	23.000
SE-B2-FLOOR-2.5	9/12/13	1309543	3.100
SE-F3-FLOOR-0.5	9/12/13	1309543	3.000
SH-A1-FLOOR-2	9/12/13	1309543	2.470
SH-A5E-FLOOR-4	9/12/13	1309543	2.220
SE-E3-WALL-E	9/12/13	1309543	2.000
SH-A2-FLOOR-2	9/12/13	1309543	1.230
SH-F6-FLOOR-2	9/12/13	1309543	0.460
SE-D2-FLOOR-3.5	9/12/13	1309543	0.430
SE-B3-WALL-N	9/12/13	1309543	0.200
SH-A8-FLOOR-4	9/12/13	1309543	0.069
SE-C22-FLOOR-1.5	9/12/13	1309543	0.056
SH-AA14S-FLOOR-1	9/12/13	1309543	0.051
SE-E2-FLOOR-3.5	9/12/13	1309543	0.047
SH-A5W-FLOOR-4	9/12/13	1309543	0.025
WATER-EB	9/13/13	1309598	ND
SH-I1-FLOOR-1	9/13/13	1309598	53.400
SH-H1-FLOOR-4	9/13/13	1309598	3.560
SH-G1-FLOOR-4	9/13/13	1309598	2.240
SE-D1-WALL-S	9/13/13	1309598	1.600
SH-I1-FLOOR-1 (SPLIT)	9/13/13	490-35338	31.685
SE-D1-WALL-S (SPLIT)	9/13/13	490-35338	2.430
SH-H1-FLOOR-4 (SPLIT)	9/13/13	490-35338	0.982
SH-G1-FLOOR-4 (SPLIT)	9/13/13	490-35338	0.789
SH-F3-FLOOR-3	9/16/13	1309671	ND

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
SH-G2-FLOOR-3	9/16/13	1309671	0.338
SH-G3-FLOOR-3	9/16/13	1309671	0.144
SH-B5-FLOOR-4	9/17/13	1309726	ND
SH-SU7-FLOOR-2	9/17/13	1309726	166.000
SH-J2-FLOOR-1	9/17/13	1309726	25.900
SH-E3-WALL-N	9/17/13	1309726	24.000
SH-SU8-FLOOR-1	9/17/13	1309726	22.900
SH-A5E-WALL-N	9/17/13	1309726	18.400
SH-AA12-FLOOR-1	9/17/13	1309726	5.600
SH-AA13-FLOOR-1	9/17/13	1309726	3.800
SH-C2-FLOOR-4	9/17/13	1309726	3.500
SH-C4-WALL-E	9/17/13	1309726	1.410
SH-A5W-WALL-N	9/17/13	1309726	1.330
SH-D5-WALL-E	9/17/13	1309726	1.190
SH-F2-FLOOR-4	9/17/13	1309726	1.080
SH-B2-FLOOR-6	9/17/13	1309726	0.520
SH-C6E-WALL-E	9/17/13	1309726	0.400
SH-D5-WALL-S	9/17/13	1309726	0.146
SH-C4-WALL-S	9/17/13	1309726	0.073
SH-B4-FLOOR-4	9/17/13	1309726	0.058
SH-F3-WALL-N	9/17/13	1309726	0.038
SH-G3-WALL-N	9/17/13	1309726	0.016
SE-D4-WALL-E	9/18/13	1309796	6.300
SE-B2-WALL-N	9/18/13	1309796	2.100
SH-F1-FLOOR-4	9/18/13	1309796	0.650
SH-E2-FLOOR-2	9/18/13	1309796	0.104
SH-A4-FLOOR-4	9/18/13	1309796	0.011
DUP (SE-A5-WALL-N)	9/18/13	490-35635	402.150
SE-A5-WALL-W	9/18/13	490-35635	31.951
SE-A5-WALL-N (DUP >25)	9/18/13	490-35635	15.213
SE-D22-S-0.5	9/18/13	490-35635	9.238
SE-C23-S-0.5	9/18/13	490-35635	9.160
SE-A5-WALL-E	9/18/13	490-35635	3.904
SE-B22-S-0.5	9/18/13	490-35635	2.989
SUR-N. Side of Well	9/18/13	490-35637	52.667
SUR-S. of RR track near conc. Box	9/18/13	490-35637	34.767
SUR-20 Ft S. of RR Track	9/18/13	490-35637	15.859
SUR-W. Boundary Near Trailers	9/18/13	490-35637	5.707
SUR-SE Corner Bldg 2	9/18/13	490-35637	5.655

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
SUR-SE Corner Bldg 1	9/18/13	490-35637	0.706
SUR-E side of E rd at Shear Entrance	9/18/13	490-35637	0.572
SUR-N. bollard MW-2	9/18/13	490-35637	0.307
SE-C2-FLOOR-4	9/19/13	1309876	ND
SH-I1-FLOOR-2	9/19/13	1309876	129.000
SE-B1-WALL-W	9/19/13	1309876	21.000
SE-B1-WALL-N	9/19/13	1309876	13.000
SH-C1-FLOOR-2	9/19/13	1309876	7.240
SH-E1-FLOOR-4	9/19/13	1309876	1.310
SE-B5-FLOOR-1.5	9/19/13	1309876	0.072
SH-D1-FLOOR-4	9/19/13	1309876	0.210
SE-B1-FLOOR-2	9/19/13	1309876	0.086
SUR-NW Corner Wire Bands	9/19/13	490-35775	47.400
SUR-S of I beam E of AA15	9/19/13	490-35775	40.300
SUR-NW Corner iron pipe	9/19/13	490-35775	30.700
SUR-NW corner E and S Shear Rds	9/19/13	490-35775	11.739
SUR-E side of E road E turn	9/19/13	490-35775	4.844
SUR-NW corner E and Mid Shear Rds	9/19/13	490-35775	1.016
SUR-SW Corner Bldg 2	9/19/13	490-35775	0.608
SUR-Second Steel Rack	9/19/13	490-35775	0.262
SH-AA14N-FLOOR-1	9/20/13	1309934	ND
SH-SU7-FLOOR-3	9/20/13	1309934	ND
SH-H2-FLOOR-2	9/20/13	1309934	80.000
SH-H12-FLOOR-1	9/20/13	1309934	36.700
SH-I12-FLOOR-1	9/20/13	1309934	13.200
SH-A3-FLOOR-4	9/20/13	1309934	0.093
SH-H2-FLOOR-4	9/25/13	13091177	ND
SE-A5-WALL-N	9/25/13	13091177	2170.000
SH-G1-WALL-S	9/25/13	13091177	176.000
SH-I1-WALL-S	9/25/13	13091177	170.000
SH-H12-FLOOR-2	9/25/13	13091177	150.000
SH-A7-WALL-W	9/25/13	13091177	98.000
SH-A4-WALL-W	9/25/13	13091177	91.000
SH-A8-WALL-S	9/25/13	13091177	86.000
SH-D1-WALL-S	9/25/13	13091177	86.000
SH-A1-WALL-S	9/25/13	13091177	67.000
SE-A5-WALL-W	9/25/13	13091177	58.500
SH-E1-WALL-S	9/25/13	13091177	44.800
SH-F1-WALL-S	9/25/13	13091177	44.400

FORMER NOVICK IRON & METAL SITE
SITE CLEANUP PCB SAMPLE RESULTS
RED INDICATES ≥25 PPM

Sample ID	Sample Date	Lab Report ID	PCB mg/kg-dry
SH-A8-WALL-W	9/25/13	13091177	35.000
SH-A1W-FLOOR-4	9/25/13	13091177	32.300
SH-A8-WALL-N	9/25/13	13091177	25.900
SH-A1W-WALL-W	9/25/13	13091177	24.800
SH-H2-WALL-N	9/25/13	13091177	22.800
SH-I2-FLOOR-1	9/25/13	13091177	18.600
SH-I1-WALL-E	9/25/13	13091177	15.200
SH-C1-WALL-S	9/25/13	13091177	15.000
SH-AA16-FLOOR-1.5	9/25/13	13091177	12.500
SH-A7-FLOOR-4	9/25/13	13091177	10.100
SH-A4-FLOOR-4	9/25/13	13091177	5.800
SH-B1-WALL-S	9/25/13	13091177	2.300
SH-H1-WALL-S	9/25/13	13091177	2.080
SH-I1-FLOOR-4	9/25/13	13091177	0.017
SE-AA4-FLOOR-1	9/25/13	13091177	0.0096
P11 Area-1 (surface)	9/25/13	490-35242	1684.000
SUR-I Beams on Concrete	9/25/13	490-35242	38.182
SUR-P11 Area 3	9/25/13	490-35242	29.140
SUR-P11 Area-2	9/25/13	490-35242	27.619
SUR-P10 Area-2	9/25/13	490-35242	9.811
SUR-SRR Track Conc. Box 2	9/25/13	490-35242	4.779
SUR-P10 Area-1	9/25/13	490-35242	4.091
SUR-PCB6 Area-2	9/25/13	490-35242	3.788
SUR-S.Transformer	9/25/13	490-35242	3.522
SH-A1-WALL-S (2)	10/2/13	1310155	ND
SH-F1-WALL-S (2)	10/2/13	1310155	160.000
SH-A7-WALL-W (2)	10/2/13	1310155	126.000
SH-E1-WALL-S (2)	10/2/13	1310155	90.000
SH-A8-WALL-W (2)	10/2/13	1310155	52.000
SH-A8-WALL-S (2)	10/2/13	1310155	42.400
SE-AA5-WALL-N	10/2/13	1310155	40.000
SH-G1-WALL-S (2)	10/2/13	1310155	40.000
SE-AA5-WALL-E	10/2/13	1310155	15.800
SH-A4-WALL-W (2)	10/2/13	1310155	15.800
SH-D1-WALL-S (2)	10/2/13	1310155	13.900
SH-A8-WALL-N (2)	10/2/13	1310155	2.380
SH-I1-WALL-S (2)	10/2/13	1310155	0.790
SH-A1W-FLOOR-4	10/2/13	1310155	0.221
ESH-WOOD-MID	10/3/13	1310237	190.000

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
NO-1 (SURFACE)	10/3/13	1310237	57.000
NO-2 (SURFACE)	10/3/13	1310237	53.000
SH-H12-WALL-S	10/3/13	1310237	11.000
SH-H12-WALL-E	10/3/13	1310237	1.970
SH-H12-WALL-W	10/3/13	1310237	0.950
SH-H12-FLOOR-4	10/3/13	1310237	0.119
SH-IB-2 (1 FT)	10/3/13	1310237	0.104
SH-G13-FLOOR-0.5	10/4/13	1310279	200.000
SH-H13-FLOOR-0.5	10/4/13	1310279	129.000
SH-F12-FLOOR-0.5	10/4/13	1310279	127.000
SH-G12-FLOOR-0.5	10/4/13	1310279	77.000
WE-E1-FLOOR-0.5	10/4/13	1310279	67.000
WE-E2-FLOOR-0.5	10/4/13	1310279	67.000
WE-F2-FLOOR-0.5	10/4/13	1310279	59.000
WE-H1-FLOOR-0.5	10/4/13	1310279	57.000
SH-I14-FLOOR-0.5	10/4/13	1310279	52.000
WE-G1-FLOOR-0.5	10/4/13	1310279	45.000
WSW-1-FLOOR-0.5	10/4/13	1310279	44.000
WE-D1-FLOOR-0.5	10/4/13	1310279	42.000
WE-G2-FLOOR-0.5	10/4/13	1310279	37.000
SH-I13-FLOOR-0.5	10/4/13	1310279	33.700
WE-F1-FLOOR-0.5	10/4/13	1310279	24.000
SH-H14-FLOOR-0.5	10/4/13	1310279	20.900
WE-C1-FLOOR-0.5	10/4/13	1310279	10.500
WE-B1-FLOOR-0.5	10/4/13	1310279	2.860
WE-A1-FLOOR-0.5	10/4/13	1310279	2.080
SE-AA5-WALL-N	10/8/13	1310431	121.000
SH-AA9E-1	10/8/13	1310431	45.000
SH-AA11-0.5	10/8/13	1310431	40.700
SH-AA11E-0.5	10/8/13	1310431	34.200
SH-AA10-1	10/8/13	1310431	12.400
SH-NO1-1	10/8/13	1310431	2.200
SE-AA5-FLOOR-2	10/8/13	1310431	0.087
SH-F12-WALL-S	10/9/13	1310480	178.000
SH-G12-WALL-S	10/9/13	1310480	77.000
SH-E12-WALL-S	10/9/13	1310480	73.000
SH-NO2-FLOOR-1	10/9/13	1310480	64.000
SH-J12-0.5	10/9/13	1310480	36.900
SH-E12-FLOOR-4	10/9/13	1310480	5.900

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
SH-G12-FLOOR-4	10/9/13	1310480	0.140
SH-F12-FLOOR-4	10/9/13	1310480	0.065
SH-I13-FLOOR-1.5	10/9/13	1310667	170.000
SH-I14-FLOOR-1.5	10/9/13	1310667	62.000
SH-H13-FLOOR-1.5	10/9/13	1310667	61.000
P10-C-SURFACE	10/10/13	1310564	93.000
P10-B-SURFACE	10/10/13	1310564	86.000
SH-J14-FLOOR-0.5	10/10/13	1310564	62.000
SH-NO3-SURFACE	10/10/13	1310564	37.200
SH-J1-SURFACE	10/10/13	1310564	16.600
SE-AB5-SURFACE	10/10/13	1310564	11.600
P10-D-SURFACE	10/10/13	1310564	11.000
SE-AC5-SURFACE	10/10/13	1310564	4.060
P10-A-FLOOR-1	10/10/13	1310564	0.830
WSW-FLOOR-2	10/10/13	1310564	0.336
SH-AA15E-FLOOR-1	10/10/13	1310564	0.037
NO2-FLOOR-2	10/15/13	1310735	ND
P10BS-S	10/15/13	1310735	83.000
SE-AA5-WALL-N(2)	10/15/13	1310735	59.000
P10CW-S	10/15/13	1310735	58.800
SH-AA16E-FLOOR-1.5	10/15/13	1310735	55.000
P10BW-S	10/15/13	1310735	33.600
P10ES-S	10/15/13	1310735	26.000
P10EN-S	10/15/13	1310735	22.500
SE-AC5-S	10/15/13	1310735	20.200
P10CNW-S	10/15/13	1310735	19.400
P10B-FLOOR-1	10/15/13	1310735	14.200
P10E-S	10/15/13	1310735	14.000
SH-AA9E-FLOOR-1	10/15/13	1310735	1.180
NO3-FLOOR-2	10/15/13	1310735	0.116
P10C-FLOOR-1	10/15/13	1310735	0.041
SH-J13-FLOOR-1	10/16/13	1310797	590.000
WE-G1-FLOOR-1	10/16/13	1310797	45.000
SH-K14-FLOOR-1	10/16/13	1310797	44.000
WE-H1-FLOOR-1	10/16/13	1310797	38.000
SH-K15-FLOOR-2	10/16/13	1310797	37.600
WE-F11-S	10/16/13	1310797	37.000
WE-E11-S	10/16/13	1310797	35.700
SH-AA11-FLOOR-1	10/16/13	1310797	28.400

FORMER NOVICK IRON & METAL SITE
SITE CLEANUP PCB SAMPLE RESULTS
RED INDICATES ≥25 PPM

Sample ID	Sample Date	Lab Report ID	PCB mg/kg-dry
SH-L1-S	10/16/13	1310797	28.000
WE-E2-FLOOR-1	10/16/13	1310797	27.300
SH-L15-FLOOR-1	10/16/13	1310797	21.700
SH-L12-S	10/16/13	1310797	20.200
WE-H11-S	10/16/13	1310797	18.900
WE-F2-FLOOR-1	10/16/13	1310797	18.500
SH-L14-FLOOR-1	10/16/13	1310797	16.700
SH-AA11E-FLOOR-1	10/16/13	1310797	16.400
WE-G11-S	10/16/13	1310797	16.400
SH-K13-S	10/16/13	1310797	13.500
SH-K12-S	10/16/13	1310797	11.100
SH-L13-S	10/16/13	1310797	10.600
WE-D1-FLOOR-1	10/16/13	1310797	9.000
WE-G2-FLOOR-1	10/16/13	1310797	6.300
WE-E1-FLOOR-1	10/16/13	1310797	2.190
SH-K1-S	10/16/13	1310797	1.540
P10BS-FLOOR-1	10/17/13	1310846	91.000
SE-AB5-WALL-E	10/17/13	1310846	21.000
SE-AB6-S	10/17/13	1310846	20.200
SE-AB5-WALL-N	10/17/13	1310846	8.500
P10-BW-FLOOR-1	10/17/13	1310846	6.800
P10ES-FLOOR-1	10/17/13	1310846	2.900
SE-AB5-WALL-W	10/17/13	1310846	0.095
P10CW-FLOOR-1	10/17/13	1310846	0.016
SE-AB5-FLOOR-2	10/17/13	1310846	0.015
SH-NO4-SURFACE	10/22/13	13101015	49.500
SH-A4W-WALL-W	10/22/13	13101015	47.400
SH-A8-WALL-W	10/22/13	13101015	39.700
SH-IBE-SURFACE	10/22/13	13101015	14.700
SH-A7-WALL-W	10/22/13	13101015	7.500
SH-L1-FLOOR-1	10/22/13	13101015	1.090
P10BS-FLOOR-1.5	10/22/13	13101015	0.120
SH-AA16E-FLOOR-1.5	10/22/13	13101015	0.057
SH-J13-FLOOR-4	10/23/13	13101087	ND
WSW-C-SURFACE	10/23/13	13101087	32.900
WSW-B-SURFACE	10/23/13	13101087	31.700
SH-J14-WALL-S	10/23/13	13101087	23.000
SH-K15-WALL-SOUTH	10/23/13	13101087	15.200
SH-J12-WALL-N	10/23/13	13101087	8.400

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
WSW-A-SURFACE	10/23/13	13101087	3.810
SH-J12-FLOOR-4	10/23/13	13101087	1.900
SH-J12-WALL-E	10/23/13	13101087	0.830
SH-K14-FLOOR-2	10/23/13	13101087	0.770
SH-J14-FLOOR-4	10/23/13	13101087	0.409
SH-K15-FLOOR-2	10/23/13	13101087	0.101
NO4-FLOOR-2	11/5/13	1311257	ND
SH-FI13-FLOOR-3	11/5/13	1311257	ND
SH-G13-FLOOR-3	11/5/13	1311257	ND
SH-I14-FLOOR-3	11/5/13	1311257	ND
SH-F13-WALL-S	11/5/13	1311257	620.000
SH-E12-WALL-S	11/5/13	1311257	538.000
SH-G13-WALL-S	11/5/13	1311257	494.000
SH-I14-WALL-S	11/5/13	1311257	63.100
NO5-S	11/5/13	1311257	42.500
WSW-BW-S	11/5/13	1311257	24.700
WSW-CE-S	11/5/13	1311257	17.700
WE-F12-S	11/5/13	1311257	14.600
WE-F11-FLOOR-1	11/5/13	1311257	12.300
NO6-S	11/5/13	1311257	11.400
WSW-BS-S	11/5/13	1311257	9.000
IBN-S	11/5/13	1311257	7.900
WE-E12-S	11/5/13	1311257	7.100
WSW-B-FLOOR-1	11/5/13	1311257	4.600
WE-E11-FLOOR-1	11/5/13	1311257	3.300
WSW-C-FLOOR-1	11/5/13	1311257	0.840
SH-H13-FLOOR-3	11/5/13	1311257	0.500
SH-I13-FLOOR-3	11/5/13	1311257	0.231
WE-H1-FLOOR-1.5	11/6/13	1311331	ND
PIT-4 (2' DEPTH)	11/6/13	1311331	68.000
PIT-3 (2' DEPTH)	11/6/13	1311331	54.000
PIT-2 (2' DEPTH)	11/6/13	1311331	34.000
WE-G1-FLOOR-1.5	11/6/13	1311331	17.200
SH-AA11-FLOOR-1.5	11/6/13	1311331	7.900
PIT-1 (1' DEPTH)	11/6/13	1311331	4.100
WE-E2-FLOOR-1.5	11/6/13	1311331	0.021
SH-E12-WALL-S (2)	11/8/13	1311454	100.000
NO4S-S	11/8/13	1311454	39.500
NO5S-S	11/8/13	1311454	21.000

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
AA10E-S	11/8/13	1311454	14.800
NO3S-S	11/8/13	1311454	13.900
NO4N-S	11/8/13	1311454	13.600
SH-I14-WALL-S (2)	11/8/13	1311454	12.700
SH-G13-WALL-S (2)	11/8/13	1311454	12.000
SH-F13-WALL-S (2)	11/8/13	1311454	11.100
NO6S-S	11/8/13	1311454	11.000
NO2N-S	11/8/13	1311454	6.500
NO3N-S	11/8/13	1311454	3.660
NO1N-S	11/8/13	1311454	1.720
NO5N-S	11/8/13	1311454	0.790
NO5-FLOOR-1.5	11/13/13	1311658	ND
NA1-SURFACE	11/13/13	1311658	55.000
NC4-FLOOR-0.5	11/13/13	1311658	25.700
NA3-SURFACE	11/13/13	1311658	25.400
NC3-FLOOR-0.5	11/13/13	1311658	20.300
NC1-FLOOR-0.5	11/13/13	1311658	20.100
NB1-FLOOR-0.5	11/13/13	1311658	17.800
NA5-SURFACE	11/13/13	1311658	14.500
NA2-SURFACE	11/13/13	1311658	14.500
NB2-FLOOR-0.5	11/13/13	1311658	12.500
NA4-SURFACE	11/13/13	1311658	9.200
NC2-FOOR-0.5	11/13/13	1311658	7.600
NB3-FLOOR-0.5	11/13/13	1311658	5.000
NB4-FLOOR-0.5	11/13/13	1311658	4.000
SH-E12-WALL-S (3)	11/13/13	1311658	2.650
NO4S-FLOOR-1.5	11/13/13	1311658	0.012
NF5-FLOOR-3	11/19/13	1311995	ND
ND3-WALL-N	11/19/13	1311995	58.600
NF6-FLOOR-1	11/19/13	1311995	49.000
NG3-WALL-S	11/19/13	1311995	38.800
NF5-WALL-S	11/19/13	1311995	13.600
ND4-FLOOR-1	11/19/13	1311995	7.600
NAB1-SURFACE	11/19/13	1311995	6.300
NG5-FLOOR-1	11/19/13	1311995	5.800
NAB3-SURFACE	11/19/13	1311995	3.160
ND3-FLOOR-4	11/19/13	1311995	2.700
NE5-FLOOR-3	11/19/13	1311995	2.630
NG4-FLOOR-4	11/19/13	1311995	1.610

FORMER NOVICK IRON & METAL SITE SITE CLEANUP PCB SAMPLE RESULTS RED INDICATES ≥25 PPM			
Sample ID	**Sample Date**	**Lab Report ID**	**PCB mg/kg-dry**
NE6-FLOOR-2	11/19/13	1311995	1.150
NG4-WALL-S	11/19/13	1311995	1.130
NF3-FLOOR-4	11/19/13	1311995	0.820
NF4-FLOOR-4	11/19/13	1311995	0.410
NE4-FLOOR-4	11/19/13	1311995	0.257
NE3-FLOOR-4	11/19/13	1311995	0.188
NG3-FLOOR-4	11/19/13	1311995	0.160
ND5-FLOOR-3	11/19/13	1311995	0.092
ND6-FLOOR-2	11/19/13	1311995	0.085
NC4-FLOOR-1	11/20/13	13111045	60.000
NB6-FLOOR-0.5	11/20/13	13111045	57.800
NC8-FLOOR-0.5	11/20/13	13111045	50.000
NB5-FLOOR-0.5	11/20/13	13111045	47.000
NB7-FLOOR-0.5	11/20/13	13111045	42.000
NC7-FLOOR-0.5	11/20/13	13111045	40.800
NC6-FLOOR-0.5	11/20/13	13111045	37.400
ND7-FLOOR-0.5	11/20/13	13111045	35.300
NA3E-SURFACE	11/20/13	13111045	22.100
NA1W-SURFACE	11/20/13	13111045	20.300
NA3W-SURFACE	11/20/13	13111045	17.800
NC5-FLOOR-0.5	11/20/13	13111045	10.400
NA3-FLOOR-1	11/20/13	13111045	7.700
NA1-FLOOR-1	11/20/13	13111045	5.410
NC4-FLOOR-3	12/18/13	13127790	ND
NC6-FLOOR-3	12/18/13	13127790	ND
NC8-FLOOR-3	12/18/13	13127790	ND
ND7-FLOOR-3	12/18/13	13127790	ND
NF6-FLOOR-3	12/18/13	13127790	ND
NB7-FLOOR-3	12/18/13	13127790	ND
ND3-WALL-N	12/18/13	13127790	5.490
NG3-WALL-S	12/18/13	13127790	4.700
NC7-FLOOR-3	12/18/13	13127790	3.970

Exhibit No. 10

Other Parameter Results Tabulation

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	*SE-C2-FLOOR-2.5	SE-C21-FLOOR-2.5	SE-C4-FLOOR-2'	SE-C2-FLOOR-3	SH-A2-FLOOR-4'	SH-B5-FLOOR-4'	SH-E3-FLOOR-4'
	Residential Soil	Soil-to-GW	Non-Residential		04-Sep-13	04-Sep-13	04-Sep-13	12-Sep-13	17-Sep-13	17-Sep-13	17-Sep-13
					1309372-02	1309372-01	1309372-03	1309543-17	1309735-02	1309735-01	1309735-03
Petroleum Hydrocarbons (IA OA-2, OA-1)											
EPH - Diesel Range	2000	7,830	20,000	mg/Kg	32	94	56		180	2.3	3
EPH - Oil Range				mg/Kg	270	2800	260		3600	8.6	42
VPH - Gasoline Range Organics	220	79.3	450	mg/Kg	<0.020	<0.020	<0.020		0.082	<0.020	<0.020
Metals (SW6020, SW7471A)											
Arsenic	18.9		63.2	mg/Kg	4.05	3.2	3.19		3.9	4.02	3.67
Barium	15300		277000	mg/Kg	185	192	161				
Cadmium	39		965	mg/Kg	3.09	0.864	4.32		0.969	0.139	0.442
Chromium	33.6		111	mg/Kg	38.1	10.7	27.4	11.4	13.6	11.4	12.2
Lead	400		1000	mg/Kg	3680	50.1	260	11.6	91.7	11.6	438
Selenium	391		10200	mg/Kg	0.681	0.739	0.621		0.7	0.713	0.691
Silver	391		10200	mg/Kg	1.19	0.113 J	0.81		0.162	<0.0700	0.105
Mercury	2		20	mg/Kg	0.0103	0.0328	0.0708		0.754	0.0148	0.329
SEMIVOLATILES SW2870											
1,1-Biphenyl				ug/Kg	<9.0	<9.0	<9.0		2.4	<0.90	2.4
2,4,5-Trichlorophenol	6110	454	88100	ug/Kg	<16	<16	<16		<1.6	<1.6	<1.6
2,4,6-Trichlorophenol	61.1	4.57	881	ug/Kg	<11	<11	<11		<1.1	<1.1	<1.1
2,4-Dichlorophenol	183	4.22	2640	ug/Kg	<12	<12	<12		<1.2	<1.2	<1.2
2,4-Dimethylphenol	1220	29.9	17600	ug/Kg	<7.0	<7.0	<7.0		2	<0.70	<0.70
2,4-Dinitrophenol	122	2.98	1760	ug/Kg	<10	<10	<10		<1.0	<1.0	<1.0
2,4-Dinitrotoluene	25.7	0.318	79.6	ug/Kg	<13	<13	<13		<1.3	<1.3	<1.3
2,6-Dinitrotoluene	5.31	0.0677	16.4	ug/Kg	<9.0	<9.0	<9.0		<0.90	<0.90	<0.90
2-Chloronaphthalene	4350	172	30900	ug/Kg	<12	<12	<12		<1.2	<1.2	<1.2
2-Chlorophenol				ug/Kg	<11	<11	<11		<1.1	<1.1	<1.1
2-Methylnaphthalene	209	8.34	1280	ug/Kg	28	<7.0	38		14	<0.70	11
2-Methylphenol	3060	0.744	44000	ug/Kg	<12	<12	<12		<1.2	6	<1.2
2-Nitroaniline				ug/Kg	<15	<15	<15		<1.5	<1.5	<1.5
2-Nitrophenol				ug/Kg	<13	<13	<13		<1.3	<1.3	<1.3
3&4-Methylphenol				ug/Kg	<11	<11	<11		4.2	4.1	3.1
3,3'-Dichlorobenzidine				ug/Kg	<9.0	<9.0	<9.0		<0.90	<0.90	<0.90
3-Nitroaniline				ug/Kg	<13	<13	<13		<1.3	<1.3	<1.3
4,6-Dinitro-2-methlphenol				ug/Kg	<12	<12	<12		<1.2	<1.2	<1.2
4-Bromophenyl phenyl ether				ug/Kg	<13	<13	<13		<1.3	<1.3	<1.3
4-Chloro-3-methylphenol				ug/Kg	<18	<18	<18		<1.8	<1.8	<1.8
4-Chloroaniline				ug/Kg	<7.0	<7.0	<7.0		<0.70	<0.70	<0.70
4-Chlorophenyl phenyl ether				ug/Kg	<15	<15	<15		<1.5	<1.5	<1.5
4-Nitroaniline				ug/Kg	<16	<16	<16		<1.6	<1.6	<1.6
4-Nitrophenol				ug/Kg	<16	<16	<16		<1.6	<1.6	<1.6
Acenaphthene	3420	255	30600	ug/Kg	<8.0	<8.0	<8.0		3.5	<.0.80	3
Acenaphthylene				ug/Kg	<7.0	<7.0	<7.0		2.9	<0.70	3.7
Acetophenone	5200	7.1	31300	ug/Kg	<7.0	<7.0	27		3.8	2.3	4.1
Anthracene	18000	3770	221000	ug/Kg	18	<12	44		4.3	<1.2	8.4
Atrazine	34.6	0.147	107	ug/Kg	<21	<21	<21		<2.1	<2.1	<2.1
Benz(a)anthracene	10.9	7.89	33.8	ug/Kg	120	39	140		26	1.2	67
Benzaldehyde				ug/Kg	32	<8.0	18		4.4	4.8	5.9
Benzo(a)pyrene	1.09	23.5	3.38	ug/Kg	140	55	310		36	2.2	120
Benzo(b)fluoranthene	10.9	19.2	33.8	ug/Kg	88	<7.0	220		46	2.3	160
Benzo(g,h,i)perylene				ug/Kg	1,500	100	2,400		30	2.1	100

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	*SE-C2-FLOOR-2.5	SE-C21-FLOOR-2.5	SE-C4-FLOOR-2'	SE-C2-FLOOR-3	SH-A2-FLOOR-4'	SH-B5-FLOOR-4'	SH-E3-FLOOR-4'
	Residential Soil	Soil-to-GW	Non-Residential		04-Sep-13	04-Sep-13	04-Sep-13	12-Sep-13	17-Sep-13	17-Sep-13	17-Sep-13
					1309372-02	1309372-01	1309372-03	1309543-17	1309735-02	1309735-01	1309735-03
Benzo(k)fluoranthene	109	190	338	ug/Kg	120	<7.0	200		20	1.4	69
Bis(2-chloroethoxy)methane				ug/Kg	<9.0	<9.0	<9.0		<0.90	<0.90	<0.90
Bis(2-chloroethyl)ether	2.92	0.00129	6.01	ug/Kg	<8.0	<8.0	<8.0		<0.80	<0.80	<0.80
Bis(2-chloroisoproplyl)ether				ug/Kg	<16	<16	<16		<1.6	<1.6	<1.6
Bis(2-ethylhexyl)phthalate	569	144	1760	ug/Kg	58	450	170		690	7.9	110
Butyl benzyl phthalate	4190	478	13000	ug/Kg	<13	<13	<13		<1.3	<1.3	15
Captolactam	30600	69.2	440000	ug/Kg	<12	<12	<12		33	9.3	6.5
Carbazole	398	52.7	1230	ug/Kg	<10	<10	<10		<1.0	<1.0	6.8
Chrysene	1090	805	3380	ug/Kg	130	43	140		38	1.8	92
Dibenz(a,h)anthracene	1.09	3.08	3.38	ug/Kg	62	<10	590		7.2	<1.0	21
Dibenzofuran	58.2	7.59	579	ug/Kg	<10	<10	<10		3.9	<1.0	4.8
Diethyl phthalate	48900	305	705000	ug/Kg	<7.0	<7.0	<7.0		4.5	<0.70	<0.70
Dimethyl phthalate				ug/Kg	<10	<10	79		<1.0	<1.0	<1.0
Di-n-butyl phthalate				ug/Kg	<6.0	<6.0	61		13	2.9	5.7
Di-n-octyl phthalate	1220	518	17600	ug/Kg	<6.0	<6.0	<6.0		<0.60	<0.60	<0.60
Fluoranthene	2440	2830	35200	ug/Kg	23	86	78		41	2.5	71
Fluorene	2360	297	25900	ug/Kg	<13	<13	<13		6.6	<1.3	3.9
Hexachlorobenzene	4.97	1.24	15.4	ug/Kg	<8.0	<8.0	<8.0		<0.80	<0.80	4.2
Hexachlorobutadiene	61.1	1.1	316	ug/Kg	<11	<11	<11		<1.1	<1.1	<1.1
Hexachlorocyclopentadiene	366	14.3	5210	ug/Kg	<17	<17	<17		<1.7	<1.7	<1.7
Hexachloroethane	42.8	0.399	617	ug/Kg	<18	<18	<18		<1.8	<1.8	<1.8
Indeno(1,2,3-cd)pyrene	10.9	45.5	33.8	ug/Kg	150	26	320		29	2	110
Isophorone				ug/Kg	<9.0	<9.0	<9.0		<0.90	<0.90	<0.90
Naphthalene	30.5	0.349	64.7	ug/Kg	<8.0	<8.0	24		8	<0.80	16
Nitrobenzene	32.2	0.0496	72.9	ug/Kg	<10	<10	<10		<1.0	<1.0	<1.0
N-Nitrosodi-n-propylamine				ug/Kg	<14	<14	<14		<1.4	<1.4	<1.4
N-Nitrosodiphenylamine				ug/Kg	<13	<13	<13		<1.3	<1.3	<1.3
Pentachlorophenol	19.9	0.996	61.7	ug/Kg	<9.0	<9.0	<9.0		7.4	9.1	7.2
Phenanthrene				ug/Kg	30	31	65		44	<0.70	41
Phenol	18300	189	264000	ug/Kg	<7.0	<7.0	<7.0		1.9	<0.70	2.3
Pyrene	1830	2190	26400	ug/Kg	51	73	120		56	1.9	69
Volatiles (SW8260C)											
1,1,1-Trichloroethane	11800	2.8	18100	ug/Kg	<1.7	<1.7	<1.7		<1.7	<1.7	<1.7
1,1,2,2-Tetrachloroethane	8.21	0.016	15.2	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
1,1,2-Trichlor-1,2,2-trifluoroethane	13800	321	60000	ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.3
1,1,2-Trichloroethane	2.38	0.081	3.37	ug/Kg	<2.0	<2.0	<2.0		<2.0	<2.0	<2.0
1,1-Dichloroethane	46.8	0.269	79.9	ug/Kg	<0.50	<0.50	< 0.50		<0.50	<0.50	<0.50
1,1,-Dichloroethene	313	0.0859	484	ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5
1,2,4-Trichlorobenzene	89.2	19.3	144	ug/Kg	120	<0.90	<1.3		<0.90	<0.90	<0.90
1,2-Dibromo-3-chloropropane	9.93	0.00543	30.7	ug/Kg	<1.3	<1.3	<0.70		<1.3	<1.3	<1.3
1,2-Dibromoethane				ug/Kg	<0.70	<0.70	<0.80		<0.70	<0.70	<0.70
1,2-Dichlorobenzene	2340	48.4	5340	ug/Kg	<0.80	<0.80	<0.60		<0.80	<0.80	<0.80
1,2-Dichloroethane	6.27	0.06	10.9	ug/Kg	<0.60	<0.60	<0.50		<0.60	<0.60	<0.60
1,2-Dichloropropane	12.9	0.0817	22.3	ug/Kg	<0.50	<0.50	<0.90		<0.50	<0.50	<0.50
1,3-Dichlorobenzene				ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
1,4-Dichlorobenzene	37.5	5.94	63.7	ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	<0.70
2-Butanone				ug/Kg	<2.2	<2.2	<2.2		<2.2	<2.2	<2.2
2-Hexanone				ug/Kg	<1.7	<1.7	<1.7		<1.7	<1.7	<1.7

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	*SE-C2-FLOOR-2.5	SE-C21-FLOOR-2.5	SE-C4-FLOOR-2'	SE-C2-FLOOR-3	SH-A2-FLOOR-4'	SH-B5-FLOOR-4'	SH-E3-FLOOR-4'
	Residential Soil	Soil-to-GW	Non-Residential		04-Sep-13	04-Sep-13	04-Sep-13	12-Sep-13	17-Sep-13	17-Sep-13	17-Sep-13
					1309372-02	1309372-01	1309372-03	1309543-17	1309735-02	1309735-01	1309735-03
4-Methyl-2-pentanone				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Acetone	50300	51.6	406000	ug/Kg	<4.6	<4.6	<4.6		<4.6	<4.6	<4.6
Benzene	15.9	0.168	28.2	ug/Kg	<0.60	<0.60	0.72		<0.60	<0.60	<0.60
Bromodichloromethane	3.93	0.841	6.69	ug/Kg	<0.60	<0.60	<0.60		<0.60	<0.60	<0.60
Bromoform	1010	0.832	3120	ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	<0.70
Bromomethane	9.39	0.0503	14.6	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Carbon disulfide	1020	6.71	1680	ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<1.6
Carbon tetrachloride	8.44	0.0734	14.7	ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.2
Chlorobenzene	380	5.1	740	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Chloroethane				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Chloroform	4.22	0.85	7.14	ug/Kg	<1.8	<1.8	<1.8		<1.8	<1.8	<1.8
Chloromethane	146	0.924	223	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
cis-1,2-Dichloroethene	23	0.855	38.7	ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5
cis-1,3-Dichloropropene	23.3	0.0916	45.2	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Cyclohexane	8770	307	13300	ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.2
Dibromochloromethane	94.7	0.834	294	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Dichlorodifluoromethane	227	13.5	323	ug/Kg	<1.8	<1.8	<1.8		<1.8	<1.8	<1.8
Dichloromethane				ug/Kg	<1.4	<1.4	<1.4		<1.4	<1.4	<1.4
Ethylbenzene	82	65.6	145	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
Isopropylbenzene				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
m,p-Xylene	936	809	1410	ug/Kg	<1.7	<1.7	<1.7		<1.7	<1.7	<1.7
Methyl acetate				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Methyl tert-btyl ether	585	0.848	1050	ug/Kg	<1.9	<1.9	<1.9		<1.9	<1.9	<1.9
Methylcyclohexane				ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5
o-Xylene	936	809	1410	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Styrene	7020	9.34	20400	ug/Kg	<0.60	<0.60	<0.60		<0.60	<0.60	<0.60
Tetrachloroethene	109	0.121	210	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Toluene	4320	51.2	29800	ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	<0.70
trans-1,2-Dichloroethene	202	1.22	333	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
trans-1,3-Dichloropropene				ug/Kg	,0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Trichloroethene	5.85	0.0842	9.91	ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<1.6
Trichlorofluoromethane	1000	21.5	1470	ug/Kg	<0.80	<0.80	<0.80		<0.80	<0.80	<0.80
Vinyl chloride	4.47	0.0205	9.21	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Xylenes, Total	936	809	1410	ug/Kg	<2.6	<2.6	<2.6		<2.6	<2.6	<2.6
Moisture (SW3550)											
% Moistures				wt%					15	14.8	14.7

** Indicates further excavation in grid after sample collection*

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-F6-FLOOR-2'	SH-H1-FLOOR-4'	SE-AA5-FLOOR-2	SE-AA5-FLOOR-2	SH-A1W-FLOOR-4	SH-A4W-FLOOR-4	*SH-AA16-FLOOR-1
	Residential Soil	Soil-to-GW	Non-Residential		17-Sep-13	17-Sep-13	02-Oct-13	02-Oct-13	3-Oct-13	3-Oct-13	3-Oct-13
					1309735-05	1309735-04	1310161-01	1310161-01	1310268-03	1310268-04	1310268-05
Petroleum Hydrocarbons (IA OA-2, OA-1)											
EPH - Diesel Range	2000	7,830	20,000	mg/Kg	5.3	3.1	150	150	2.3	4.1	79
EPH - Oil Range				mg/Kg	51	36	490	490	6	15	680
VPH - Gasoline Range Organics	220	79.3	450	mg/Kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Metals (SW6020, SW7471A)											
Arsenic	18.9		63.2	mg/Kg	3.49	2.49	1.73	1.73	3.28	4.61	19.7
Barium	15300		277000	mg/Kg			136	136	143	172	258
Cadmium	39		965	mg/Kg	0.624	0.574	0.217 J	0.217 J	0.1	0.166	29.1
Chromium	33.6		111	mg/Kg	10.1	6.27	7.55	7.55	8.49	10.8	290
Lead	400		1000	mg/Kg	58.8	192	13.1	13.1	8.65	15.8	4760
Selenium	391		10200	mg/Kg	0.553	0.416	0.498	0.498	0.508	0.81	<3.35
Silver	391		10200	mg/Kg	0.104	0.108	0.0452 J	0.0452 J	<0.0777	<0.0768	8.84
Mercury	2		20	mg/Kg	0.0115	0.0222	0.0229	0.0229	0.00169	0.0147	1.64
SEMIVOLATILES SW2870											
1,1-Biphenyl				ug/Kg	<0.90	<0.90	1.6		<0.90	<0.90	11
2,4,5-Trichlorophenol	6110	454	88100	ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<2.4
2,4,6-Trichlorophenol	61.1	4.57	881	ug/Kg	<1.1	<1.1	<1.1		<1.1	<1.1	<1.6
2,4-Dichlorophenol	183	4.22	2640	ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.8
2,4-Dimethylphenol	1220	29.9	17600	ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	5.3
2,4-Dinitrophenol	122	2.98	1760	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.5
2,4-Dinitrotoluene	25.7	0.318	79.6	ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.9
2,6-Dinitrotoluene	5.31	0.0677	16.4	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<1.3
2-Chloronaphthalene	4350	172	30900	ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.8
2-Chlorophenol				ug/Kg	<1.1	<1.1	<1.1		<1.1	<1.1	<1.6
2-Methylnaphthalene	209	8.34	1280	ug/Kg	4.1	6.3	16		<0.70	7.6	62
2-Methylphenol	3060	0.744	44000	ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.8
2-Nitroaniline				ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<2.2
2-Nitrophenol				ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.9
3&4-Methylphenol				ug/Kg	<1.1	1.9	4.2		<1.1	5.1	10
3,3'-Dichlorobenzidine				ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<1.3
3-Nitroaniline				ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.9
4,6-Dinitro-2-methlphenol				ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.8
4-Bromophenyl phenyl ether				ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.9
4-Chloro-3-methylphenol				ug/Kg	<1.8	<1.8	<1.8		<1.8	<1.8	<2.7
4-Chloroaniline				ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	<1.0
4-Chlorophenyl phenyl ether				ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<2.2
4-Nitroaniline				ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<2.4
4-Nitrophenol				ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<2.4
Acenaphthene	3420	255	30600	ug/Kg	<0.80	<0.80	1.7		<0.80	2.7	18
Acenaphthylene				ug/Kg	3.2	3.2	4		<0.70	3.6	53
Acetophenone	5200	7.1	31300	ug/Kg	2	2.8	<0.70		1.8	3.2	79
Anthracene	18000	3770	221000	ug/Kg	2.8	4	19		<1.2	10	82
Atrazine	34.6	0.147	107	ug/Kg	<2.1	<2.1	<2.1		<2.1	<2.1	<3.1
Benz(a)anthracene	10.9	7.89	33.8	ug/Kg	11	8.7	90		<0.90	24	300
Benzaldehyde				ug/Kg	2.7	3.5	4.4		2.4	5.6	29
Benzo(a)pyrene	1.09	23.5	3.38	ug/Kg	12	14	320		<0.60	26	350
Benzo(b)fluoranthene	10.9	19.2	33.8	ug/Kg	19	21	<0.70		<0.70	25	270
Benzo(g,h,i)perylene				ug/Kg	13	19	2200		<0.70	16	350

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-F6-FLOOR-2'	SH-H1-FLOOR-4'	SE-AA5-FLOOR-2	SE-AA5-FLOOR-2	SH-A1W-FLOOR-4	SH-A4W-FLOOR-4	*SH-AA16-FLOOR-1
	Residential Soil	Soil-to-GW	Non-Residential		17-Sep-13	17-Sep-13	02-Oct-13	02-Oct-13	3-Oct-13	3-Oct-13	3-Oct-13
					1309735-05	1309735-04	1310161-01	1310161-01	1310268-03	1310268-04	1310268-05
Benzo(k)fluoranthene	109	190	338	ug/Kg	7.4	11	670		<0.70	18	450
Bis(2-chloroethoxy)methane				ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<1.3
Bis(2-chloroethyl)ether	2.92	0.00129	6.01	ug/Kg	<0.80	<0.80	<0.80		<0.80	<0.80	<1.2
Bis(2-chloroisoproplyl)ether				ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<2.4
Bis(2-ethylhexyl)phthalate	569	144	1760	ug/Kg	28	54	<1.5		3.4	7	1400
Butyl benzyl phthalate	4190	478	13000	ug/Kg	21	10	<1.3		<1.3	<1.3	<1.9
Captolactam	30600	69.2	440000	ug/Kg	12	19	<1.2		8.1	18	<1.8
Carbazole	398	52.7	1230	ug/Kg	1.4	<1.0	<1.0		<1.0	6.5	52
Chrysene	1090	805	3380	ug/Kg	15	17	330		<0.60	36	420
Dibenz(a,h)anthracene	1.09	3.08	3.38	ug/Kg	2.8	<1.0	480		<1.0	<1.0	77
Dibenzofuran	58.2	7.59	579	ug/Kg	<1.0	2.5	4.8		<1.0	4.4	29
Diethyl phthalate	48900	305	705000	ug/Kg	<0.70	3.4	<0.70		3.5	5	8
Dimethyl phthalate				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	56
Di-n-butyl phthalate				ug/Kg	3.3	4.1	<0.60		<0.60	3.2	400
Di-n-octyl phthalate	1220	518	17600	ug/Kg	17	<0.60	<0.60		<0.60	<0.60	<0.90
Fluoranthene	2440	2830	35200	ug/Kg	19	19	39		1.4	54	620
Fluorene	2360	297	25900	ug/Kg	<1.3	1.9	3.9		<1.3	4.3	19
Hexachlorobenzene	4.97	1.24	15.4	ug/Kg	2.2	3.9	<0.80		<0.80	<0.80	31
Hexachlorobutadiene	61.1	1.1	316	ug/Kg	<1.1	<1.1	<1.1		<1.1	<1.1	<1.6
Hexachlorocyclopentadiene	366	14.3	5210	ug/Kg	<1.7	<1.7	<1.7		<1.7	<1.7	<2.5
Hexachloroethane	42.8	0.399	617	ug/Kg	<1.8	<1.8	<1.8		<1.8	<1.8	<2.7
Indeno(1,2,3-cd)pyrene	10.9	45.5	33.8	ug/Kg	13	12	410		<0.90	19	290
Isophorone				ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<1.3
Naphthalene	30.5	0.349	64.7	ug/Kg	2.6	4.6	6.5		<0.80	4.9	42
Nitrobenzene	32.2	0.0496	72.9	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.5
N-Nitrosodi-n-propylamine				ug/Kg	<1.4	<1.4	<1.4		<1.4	<1.4	8.8
N-Nitrosodiphenylamine				ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.9
Pentachlorophenol	19.9	0.996	61.7	ug/Kg	4.3	7.2	<0.90		<0.90	<0.90	<1.3
Phenanthrene				ug/Kg	11	18	41		<0.70	50	350
Phenol	18300	189	264000	ug/Kg	<0.70	<0.70	<0.70		<0.70	2.8	20
Pyrene	1830	2190	26400	ug/Kg	17	19	65		1.4	53	600
Volatiles (SW8260C)											
1,1,1-Trichloroethane	11800	2.8	18100	ug/Kg	<1.7	<1.7	<1.7		<1.7	<1.7	<1.7
1,1,2,2-Tetrachloroethane	8.21	0.016	15.2	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
1,1,2-Trichlor-1,2,2-trifluoroethane	13800	321	60000	ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.3
1,1,2-Trichloroethane	2.38	0.081	3.37	ug/Kg	<2.0	<2.0	<2.0		<2.0	<2.0	<2.0
1,1-Dichloroethane	46.8	0.269	79.9	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
1,1,-Dichloroethene	313	0.0859	484	ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5
1,2,4-Trichlorobenzene	89.2	19.3	144	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
1,2-Dibromo-3-chloropropane	9.93	0.00543	30.7	ug/Kg	<1.3	<1.3	<1.3		<1.3	<1.3	<1.3
1,2-Dibromoethane				ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	<0.70
1,2-Dichlorobenzene	2340	48.4	5340	ug/Kg	<0.80	<0.80	<0.80		<0.80	<0.80	<0.80
1,2-Dichloroethane	6.27	0.06	10.9	ug/Kg	<0.60	<0.60	<0.60		<0.60	<0.60	<0.60
1,2-Dichloropropane	12.9	0.0817	22.3	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
1,3-Dichlorobenzene				ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
1,4-Dichlorobenzene	37.5	5.94	63.7	ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	<0.70
2-Butanone				ug/Kg	<2.2	<2.2	<2.2		2.2	<2.2	<2.2
2-Hexanone				ug/Kg	<1.7	<1.7	<1.7		<1.7	<1.7	<1.7

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-F6-FLOOR-2'	SH-H1-FLOOR-4'	SE-AA5-FLOOR-2	SE-AA5-FLOOR-2	SH-A1W-FLOOR-4	SH-A4W-FLOOR-4	*SH-AA16-FLOOR-1
	Residential Soil	Soil-to-GW	Non-Residential		17-Sep-13	17-Sep-13	02-Oct-13	02-Oct-13	3-Oct-13	3-Oct-13	3-Oct-13
					1309735-05	1309735-04	1310161-01	1310161-01	1310268-03	1310268-04	1310268-05
4-Methyl-2-pentanone				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Acetone	50300	51.6	406000	ug/Kg	<4.6	<4.6	<4.6		120	12	<4.6
Benzene	15.9	0.168	28.2	ug/Kg	<0.60	<0.60	<0.60		<0.60	<0.60	9.2
Bromodichloromethane	3.93	0.841	6.69	ug/Kg	<0.60	<0.60	<0.60		<0.60	<0.60	<0.60
Bromoform	1010	0.832	3120	ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	<0.70
Bromomethane	9.39	0.0503	14.6	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Carbon disulfide	1020	6.71	1680	ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<1.6
Carbon tetrachloride	8.44	0.0734	14.7	ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.2
Chlorobenzene	380	5.1	740	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Chloroethane				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Chloroform	4.22	0.85	7.14	ug/Kg	<1.8	<1.8	<1.8		<1.8	<1.8	<1.8
Chloromethane	146	0.924	223	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
cis-1,2-Dichloroethene	23	0.855	38.7	ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5
cis-1,3-Dichloropropene	23.3	0.0916	45.2	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Cyclohexane	8770	307	13300	ug/Kg	<1.2	<1.2	<1.2		<1.2	<1.2	<1.2
Dibromochloromethane	94.7	0.834	294	ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Dichlorodifluoromethane	227	13.5	323	ug/Kg	<1.8	<1.8	<1.8		<1.8	<1.8	<1.8
Dichloromethane				ug/Kg	<1.4	<1.4	<1.4		<1.4	<1.4	<1.4
Ethylbenzene	82	65.6	145	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
Isopropylbenzene				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
m,p-Xylene	936	809	1410	ug/Kg	<1.7	<1.7	<1.7		<1.7	<1.7	<1.7
Methyl acetate				ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Methyl tert-btyl ether	585	0.848	1050	ug/Kg	<1.9	<1.9	<1.9		<1.9	<1.9	<1.9
Methylcyclohexane				ug/Kg	<1.5	<1.5	<1.5		<1.5	<1.5	<1.5
o-Xylene	936	809	1410	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Styrene	7020	9.34	20400	ug/Kg	<0.60	<0.60	<0.60		<0.60	<0.60	<0.60
Tetrachloroethene	109	0.121	210	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Toluene	4320	51.2	29800	ug/Kg	<0.70	<0.70	<0.70		<0.70	<0.70	6.5
trans-1,2-Dichloroethene	202	1.22	333	ug/Kg	<0.90	<0.90	<0.90		<0.90	<0.90	<0.90
trans-1,3-Dichloropropene				ug/Kg	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50
Trichloroethene	5.85	0.0842	9.91	ug/Kg	<1.6	<1.6	<1.6		<1.6	<1.6	<1.6
Trichlorofluoromethane	1000	21.5	1470	ug/Kg	<0.80	<0.80	<0.80		<0.80	<0.80	<0.80
Vinyl chloride	4.47	0.0205	9.21	ug/Kg	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Xylenes, Total	936	809	1410	ug/Kg	<2.6	<2.6	<2.6		<2.6	<2.6	<2.6
Moisture (SW3550)											
% Moistures				wt%	12.3	11.1	13.8		15.3	12.3	7.58

**** Indicates further excavation in grid after sample collection***

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-E1-FLOOR-4	*SH-F12-FLOOR-1	P10-A-FLOOR-1	SH-AA16-FLOOR-1.5	SH-F12-FLOOR-4	SH-H14-FLOOR-3	SH-H4-FLOOR-0.5
	Residential Soil	Soil-to-GW	Non-Residential		3-Oct-13	3-Oct-13	7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13
					1310268-02	1310268-01	1311459-08	1311459-09	1311459-02	1311459-04	1311459-07
Petroleum Hydrocarbons (IA OA-2, OA-1)											
EPH - Diesel Range	2000	7,830	20,000	mg/Kg	<0.50	430	10			1.9	30
EPH - Oil Range				mg/Kg	4.6	3400	32			37	240
VPH - Gasoline Range Organics	220	79.3	450	mg/Kg	<0.020	<0.020	<0.020			<0.020	<0.020
Metals (SW6020, SW7471A)											
Arsenic	18.9		63.2	mg/Kg	3.72	10.2	2.48			2.89	7.3
Barium	15300		277000	mg/Kg	170	546	173			169	590
Cadmium	39		965	mg/Kg	0.289	24.3	0.7			0.515	18.9
Chromium	33.6		111	mg/Kg	10.6	200	10.5	6.17	12.2	9.79	65.2
Lead	400		1000	mg/Kg	86.5	3750	93.8	109	248	232	4430
Selenium	391		10200	mg/Kg	0.586	1.47	0.723			0.507	1.04
Silver	391		10200	mg/Kg	<0.0751	4.03	0.0524			0.039	6.64
Mercury	2		20	mg/Kg	0.00722	4.22	0.107			0.0215	0.578
SEMIVOLATILES SW2870											
1,1-Biphenyl				ug/Kg	<0.90	<13	<9.0			<0.90	<9.0
2,4,5-Trichlorophenol	6110	454	88100	ug/Kg	<1.6	<24	<16			<1.6	<16
2,4,6-Trichlorophenol	61.1	4.57	881	ug/Kg	<1.1	<16	<11			<1.1	<11
2,4-Dichlorophenol	183	4.22	2640	ug/Kg	<1.2	<18	<12			<1.2	<12
2,4-Dimethylphenol	1220	29.9	17600	ug/Kg	<0.70	<10	<7.0			<0.70	<7.0
2,4-Dinitrophenol	122	2.98	1760	ug/Kg	<1.0	<15	<10			<1.0	<10
2,4-Dinitrotoluene	25.7	0.318	79.6	ug/Kg	<1.3	<19	<13			<1.3	<13
2,6-Dinitrotoluene	5.31	0.0677	16.4	ug/Kg	<0.90	<13	<9.0			<0.90	<9.0
2-Chloronaphthalene	4350	172	30900	ug/Kg	<1.2	<18	<12			<1.2	<12
2-Chlorophenol				ug/Kg	<1.1	<16	<11			<1.1	<11
2-Methylnaphthalene	209	8.34	1280	ug/Kg	1.9	130	24			2.8	50
2-Methylphenol	3060	0.744	44000	ug/Kg	<1.2	<18	<12			<1.2	<12
2-Nitroaniline				ug/Kg	<1.5	<22	<15			<1.5	<15
2-Nitrophenol				ug/Kg	<1.3	<19	<13			<1.3	<13
3&4-Methylphenol				ug/Kg	<1.1	33	<11			<1.1	<11
3,3'-Dichlorobenzidine				ug/Kg	<0.90	<13	<9.0			<0.90	<9.0
3-Nitroaniline				ug/Kg	<1.3	<19	<13			<1.3	<13
4,6-Dinitro-2-methlphenol				ug/Kg	<1.2	<18	<12			<1.2	<12
4-Bromophenyl phenyl ether				ug/Kg	<1.3	<19	<13			<1.3	<13
4-Chloro-3-methylphenol				ug/Kg	<1.8	<27	<18			<1.8	<18
4-Chloroaniline				ug/Kg	<0.70	<10	<7.0			<0.70	<7.0
4-Chlorophenyl phenyl ether				ug/Kg	<1.5	<22	<15			<1.5	<15
4-Nitroaniline				ug/Kg	<1.6	<24	<16			<1.6	<16
4-Nitrophenol				ug/Kg	<1.6	<24	<16			<1.6	<16
Acenaphthene	3420	255	30600	ug/Kg	<0.80	120	14			1.8	29
Acenaphthylene				ug/Kg	<0.70	58	21			<0.70	55
Acetophenone	5200	7.1	31300	ug/Kg	<0.70	160	<7.0			<0.70	42
Anthracene	18000	3770	221000	ug/Kg	<1.2	560	210			5.4	120
Atrazine	34.6	0.147	107	ug/Kg	<2.1	<31	<21			<2.1	<21
Benz(a)anthracene	10.9	7.89	33.8	ug/Kg	11	1500	440			9.8	500
Benzaldehyde				ug/Kg	2.9	140	<8.0			<0.80	20
Benzo(a)pyrene	1.09	23.5	3.38	ug/Kg	11	1900	470			17	1100
Benzo(b)fluoranthene	10.9	19.2	33.8	ug/Kg	5.2	1800	460			17	1300
Benzo(g,h,i)perylene				ug/Kg	<0.70	1600	350			16	1,200

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-E1-FLOOR-4	*SH-F12-FLOOR-1	P10-A-FLOOR-1	SH-AA16-FLOOR-1.5	SH-F12-FLOOR-4	SH-H14-FLOOR-3	SH-H4-FLOOR-0.5
	Residential Soil	Soil-to-GW	Non-Residential		3-Oct-13	3-Oct-13	7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13
					1310268-02	1310268-01	1311459-08	1311459-09	1311459-02	1311459-04	1311459-07
Benzo(k)fluoranthene	109	190	338	ug/Kg	15	2000	230			11	570
Bis(2-chloroethoxy)methane				ug/Kg	<0.90	<13	<9.0			<0.90	<9.0
Bis(2-chloroethyl)ether	2.92	0.00129	6.01	ug/Kg	<0.80	<12	<8.0			<0.80	<8.0
Bis(2-chloroisoproplyl)ether				ug/Kg	<1.6	<24	<16			<1.6	<16
Bis(2-ethylhexyl)phthalate	569	144	1760	ug/Kg	<1.5	7200	160			9.2	300
Butyl benzyl phthalate	4190	478	13000	ug/Kg	<1.3	2200	<13			<1.3	170
Captolactam	30600	69.2	440000	ug/Kg	16	<18	<12			<1.2	<12
Carbazole	398	52.7	1230	ug/Kg	<1.0	240	42			2.3	32
Chrysene	1090	805	3380	ug/Kg	11	2300	760			18	860
Dibenz(a,h)anthracene	1.09	3.08	3.38	ug/Kg	<1.0	430	<10			4.8	420
Dibenzofuran	58.2	7.59	579	ug/Kg	<1.0	97	<10			<1.0	<10
Diethyl phthalate	48900	305	705000	ug/Kg	5.9	28	<7.0			2.1	<7.0
Dimethyl phthalate				ug/Kg	<1.0	550	<10			<1.0	<10
Di-n-butyl phthalate				ug/Kg	3.1	360	<6.0			2.5	61
Di-n-octyl phthalate	1220	518	17600	ug/Kg	<0.60	<9.0	<6.0			<0.60	<6.0
Fluoranthene	2440	2830	35200	ug/Kg	9.3	3100	1100			18	680
Fluorene	2360	297	25900	ug/Kg	<1.3	150	29			<1.3	19
Hexachlorobenzene	4.97	1.24	15.4	ug/Kg	<0.80	90	<8.0			<0.80	<8.0
Hexachlorobutadiene	61.1	1.1	316	ug/Kg	<1.1	<16	<11			<1.1	<11
Hexachlorocyclopentadiene	366	14.3	5210	ug/Kg	<1.7	<25	<17			<1.7	<17
Hexachloroethane	42.8	0.399	617	ug/Kg	<1.8	<27	<18			<1.8	<18
Indeno(1,2,3-cd)pyrene	10.9	45.5	33.8	ug/Kg	<0.90	1400	240			13	590
Isophorone				ug/Kg	<0.90	<13	<9.0			<0.90	<9.0
Naphthalene	30.5	0.349	64.7	ug/Kg	1.8	95	<8.0			2.2	29
Nitrobenzene	32.2	0.0496	72.9	ug/Kg	<1.0	<15	<10			<1.0	<10
N-Nitrosodi-n-propylamine				ug/Kg	<1.4	<21	<14			<1.4	<14
N-Nitrosodiphenylamine				ug/Kg	<1.3	55	<13			<1.3	<13
Pentachlorophenol	19.9	0.996	61.7	ug/Kg	<0.90	<13	<9.0			<0.90	<9.0
Phenanthrene				ug/Kg	5.8	1600	570			11	280
Phenol	18300	189	264000	ug/Kg	2.2	77	<7.0			<0.70	<7.0
Pyrene	1830	2190	26400	ug/Kg	10	2900	1000			17	640
Volatiles (SW8260C)											
1,1,1-Trichloroethane	11800	2.8	18100	ug/Kg	<1.7	<1.7	<1.7			<1.7	<1.7
1,1,2,2-Tetrachloroethane	8.21	0.016	15.2	ug/Kg	<0.50	<0.50	<0.50			<0.50	<0.50
1,1,2-Trichlor-1,2,2-trifluoroethane	13800	321	60000	ug/Kg	<1.3	<1.3	<1.3			<1.3	<1.3
1,1,2-Trichloroethane	2.38	0.081	3.37	ug/Kg	<2.0	<2.0	<2.0			<2.0	<2.0
1,1-Dichloroethane	46.8	0.269	79.9	ug/Kg	<0.50	<0.50	<.0.50			<0.50	<.0.50
1,1,-Dichloroethene	313	0.0859	484	ug/Kg	<1.5	<1.5	<1.5			<1.5	<1.5
1,2,4-Trichlorobenzene	89.2	19.3	144	ug/Kg	<0.90	<0.90	<0.90			<0.90	<0.90
1,2-Dibromo-3-chloropropane	9.93	0.00543	30.7	ug/Kg	<1.3	<1.3	<1.3			<1.3	<1.3
1,2-Dibromoethane				ug/Kg	<0.70	<0.70	<0.70			<0.70	<0.70
1,2-Dichlorobenzene	2340	48.4	5340	ug/Kg	<0.80	<0.80	<0.80			<0.80	<0.80
1,2-Dichloroethane	6.27	0.06	10.9	ug/Kg	<0.60	<0.60	<0.60			<0.60	<0.60
1,2-Dichloropropane	12.9	0.0817	22.3	ug/Kg	<0.50	<0.50	<0.50			<0.50	<0.50
1,3-Dichlorobenzene				ug/Kg	<0.90	<0.90	<0.90			<0.90	<0.90
1,4-Dichlorobenzene	37.5	5.94	63.7	ug/Kg	<0.70	<0.70	<0.70			<0.70	<0.70
2-Butanone				ug/Kg	<2.2	<2.2	<2.2			2.2	<2.2
2-Hexanone				ug/Kg	<1.7	<1.7	<1.7			<1.7	<1.7

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-E1-FLOOR-4	*SH-F12-FLOOR-1	P10-A-FLOOR-1	SH-AA16-FLOOR-1.5	SH-F12-FLOOR-4	SH-H14-FLOOR-3	SH-H4-FLOOR-0.5
	Residential Soil	Soil-to-GW	Non-Residential		3-Oct-13	3-Oct-13	7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13
					1310268-02	1310268-01	1311459-08	1311459-09	1311459-02	1311459-04	1311459-07
4-Methyl-2-pentanone				ug/Kg	<1.0	<1.0	<1.0			<1.0	<1.0
Acetone	50300	51.6	406000	ug/Kg	47	27	<4.6			18	<4.6
Benzene	15.9	0.168	28.2	ug/Kg	<0.60	11	<0.60			<0.60	<0.60
Bromodichloromethane	3.93	0.841	6.69	ug/Kg	<0.60	<0.60	<0.60			<0.60	<0.60
Bromoform	1010	0.832	3120	ug/Kg	<0.70	<0.70	<0.70			<0.70	<0.70
Bromomethane	9.39	0.0503	14.6	ug/Kg	<1.0	<1.0	<1.0			<1.0	<1.0
Carbon disulfide	1020	6.71	1680	ug/Kg	<1.6	3.1	<1.6			<1.6	<1.6
Carbon tetrachloride	8.44	0.0734	14.7	ug/Kg	<1.2	<1.2	<1.2			<1.2	<1.2
Chlorobenzene	380	5.1	740	ug/Kg	<0.50	<0.50	<0.50			<0.50	<0.50
Chloroethane				ug/Kg	<1.0	<1.0	<1.0			<1.0	<1.0
Chloroform	4.22	0.85	7.14	ug/Kg	<1.8	<1.8	<1.8			<1.8	<1.8
Chloromethane	146	0.924	223	ug/Kg	<0.90	<0.90	<0.90			<0.90	<0.90
cis-1,2-Dichloroethene	23	0.855	38.7	ug/Kg	<1.5	<1.5	<1.5			<1.5	<1.5
cis-1,3-Dichloropropene	23.3	0.0916	45.2	ug/Kg	<0.50	<0.50	<0.50			<0.50	<0.50
Cyclohexane	8770	307	13300	ug/Kg	<1.2	<1.2	<1.2			<1.2	<1.2
Dibromochloromethane	94.7	0.834	294	ug/Kg	<0.50	<0.50	<0.50			<0.50	<0.50
Dichlorodifluoromethane	227	13.5	323	ug/Kg	<1.8	<1.8	<1.8			<1.8	<1.8
Dichloromethane				ug/Kg	<1.4	<1.4	<1.4			<1.4	<1.4
Ethylbenzene	82	65.6	145	ug/Kg	<0.90	<0.90	<0.90			<0.90	<0.90
Isopropylbenzene				ug/Kg	<1.0	<1.0	<1.0			<1.0	<1.0
m,p-Xylene	936	809	1410	ug/Kg	<1.7	<1.7	<1.7			<1.7	<1.7
Methyl acetate				ug/Kg	<1.0	<1.0	<1.0			<1.0	<1.0
Methyl tert-btyl ether	585	0.848	1050	ug/Kg	<1.9	<1.9	<1.9			<1.9	<1.9
Methylcyclohexane				ug/Kg	<1.5	3	<1.5			<1.5	<1.5
o-Xylene	936	809	1410	ug/Kg	<1.0	<1.0	<1.0			<1.0	<1.0
Styrene	7020	9.34	20400	ug/Kg	<0.60	3.4	<0.60			<0.60	<0.60
Tetrachloroethene	109	0.121	210	ug/Kg	<1.0	1.1	<1.0			<1.0	<1.0
Toluene	4320	51.2	29800	ug/Kg	<0.70	13	<0.70			<0.70	<0.70
trans-1,2-Dichloroethene	202	1.22	333	ug/Kg	<0.90	<0.90	<0.90			<0.90	<0.90
trans-1,3-Dichloropropene				ug/Kg	<0.50	<0.50	<0.50			<0.50	<0.50
Trichloroethene	5.85	0.0842	9.91	ug/Kg	<1.6	<1.6	<1.6			<1.6	<1.6
Trichlorofluoromethane	1000	21.5	1470	ug/Kg	<0.80	<0.80	<0.80			<0.80	<0.80
Vinyl chloride	4.47	0.0205	9.21	ug/Kg	<1.0	<1.0	<1.0			<1.0	<1.0
Xylenes, Total	936	809	1410	ug/Kg	<2.6	<2.6	<2.6			<2.6	<2.6
Moisture (SW3550)											
% Moistures				wt%	19.1	6.32	16.8			17.5	13.6

Indicates further excavation in grid after sample collection

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-J14-FLOOR-3	SH-L1-FLOOR-1	WE-D1-FLOOR-1.5	WSW-B-FLOOR-1	NE4-FLOOR-4
	Residential Soil	Soil-to-GW	Non-Residential		7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13	12-Dec-13
					1311459-05	1311459-06	1311459-01	1311459-03	1312779-12
Petroleum Hydrocarbons (IA OA-2, OA-1)									
EPH - Diesel Range	2000	7,830	20,000	mg/Kg	12	180	160	85	
EPH - Oil Range				mg/Kg	150	1900	650	630	
VPH - Gasoline Range Organics	220	79.3	450	mg/Kg	<0.020	<0.020	<0.020	<0.020	
Metals (SW6020, SW7471A)									
Arsenic	18.9		63.2	mg/Kg	2.43	2.07	10.5	7.83	
Barium	15300		277000	mg/Kg	114	132	266	231	
Cadmium	39		965	mg/Kg	1.47	2.3	25.8	17.3	
Chromium	33.6		111	mg/Kg	14.6	97.4	51	192	12.4
Lead	400		1000	mg/Kg	698	620	1840	1390	743
Selenium	391		10200	mg/Kg	0.45	0.57	0.798	0.65	
Silver	391		10200	mg/Kg	0.0549	0.177	2.58	1.02	
Mercury	2		20	mg/Kg	0.0524	0.52	4.13	0.68	
SEMIVOLATILES SW2870									
1,1-Biphenyl				ug/Kg	<13	<14	22	<13	
2,4,5-Trichlorophenol	6110	454	88100	ug/Kg	<24	<24	<24	<24	
2,4,6-Trichlorophenol	61.1	4.57	881	ug/Kg	<16	<16	<16	<16	
2,4-Dichlorophenol	183	4.22	2640	ug/Kg	<18	<18	<18	<18	
2,4-Dimethylphenol	1220	29.9	17600	ug/Kg	<10	<10	<10	<10	
2,4-Dinitrophenol	122	2.98	1760	ug/Kg	<15	<15	<15	<15	
2,4-Dinitrotoluene	25.7	0.318	79.6	ug/Kg	<19	<20	<19	<19	
2,6-Dinitrotoluene	5.31	0.0677	16.4	ug/Kg	<13	<14	<13	<13	
2-Chloronaphthalene	4350	172	30900	ug/Kg	<18	<18	<18	<18	
2-Chlorophenol				ug/Kg	<16	<16	<16	<16	
2-Methylnaphthalene	209	8.34	1280	ug/Kg	<10	200	160	28	
2-Methylphenol	3060	0.744	44000	ug/Kg	<18	<18	<18	<18	
2-Nitroaniline				ug/Kg	<22	<22	<22	<22	
2-Nitrophenol				ug/Kg	<19	<20	<19	<19	
3&4-Methylphenol				ug/Kg	<16	<16	<16	<16	
3,3'-Dichlorobenzidine				ug/Kg	<13	<14	<13	<13	
3-Nitroaniline				ug/Kg	<19	<20	<19	<19	
4,6-Dinitro-2-methlphenol				ug/Kg	<18	<18	<18	<18	
4-Bromophenyl phenyl ether				ug/Kg	<19	<20	<19	<19	
4-Chloro-3-methylphenol				ug/Kg	<27	<27	<27	<27	
4-Chloroaniline				ug/Kg	<10	<10	<10	<10	
4-Chlorophenyl phenyl ether				ug/Kg	<22	<22	<22	<22	
4-Nitroaniline				ug/Kg	<24	<24	<24	<24	
4-Nitrophenol				ug/Kg	<24	<24	<24	<24	
Acenaphthene	3420	255	30600	ug/Kg	<12	27	86	51	
Acenaphthylene				ug/Kg	<10	37	210	<10	
Acetophenone	5200	7.1	31300	ug/Kg	<10	<10	<10	<10	
Anthracene	18000	3770	221000	ug/Kg	41	220	630	130	
Atrazine	34.6	0.147	107	ug/Kg	<31	<32	<31	<31	
Benz(a)anthracene	10.9	7.89	33.8	ug/Kg	110	1400	1100	190	
Benzaldehyde				ug/Kg	<12	<12	<12	<12	
Benzo(a)pyrene	1.09	23.5	3.38	ug/Kg	110	1500	1300	230	
Benzo(b)fluoranthene	10.9	19.2	33.8	ug/Kg	110	1100	1200	250	
Benzo(g,h,i)perylene				ug/Kg	140	37000	980	390	

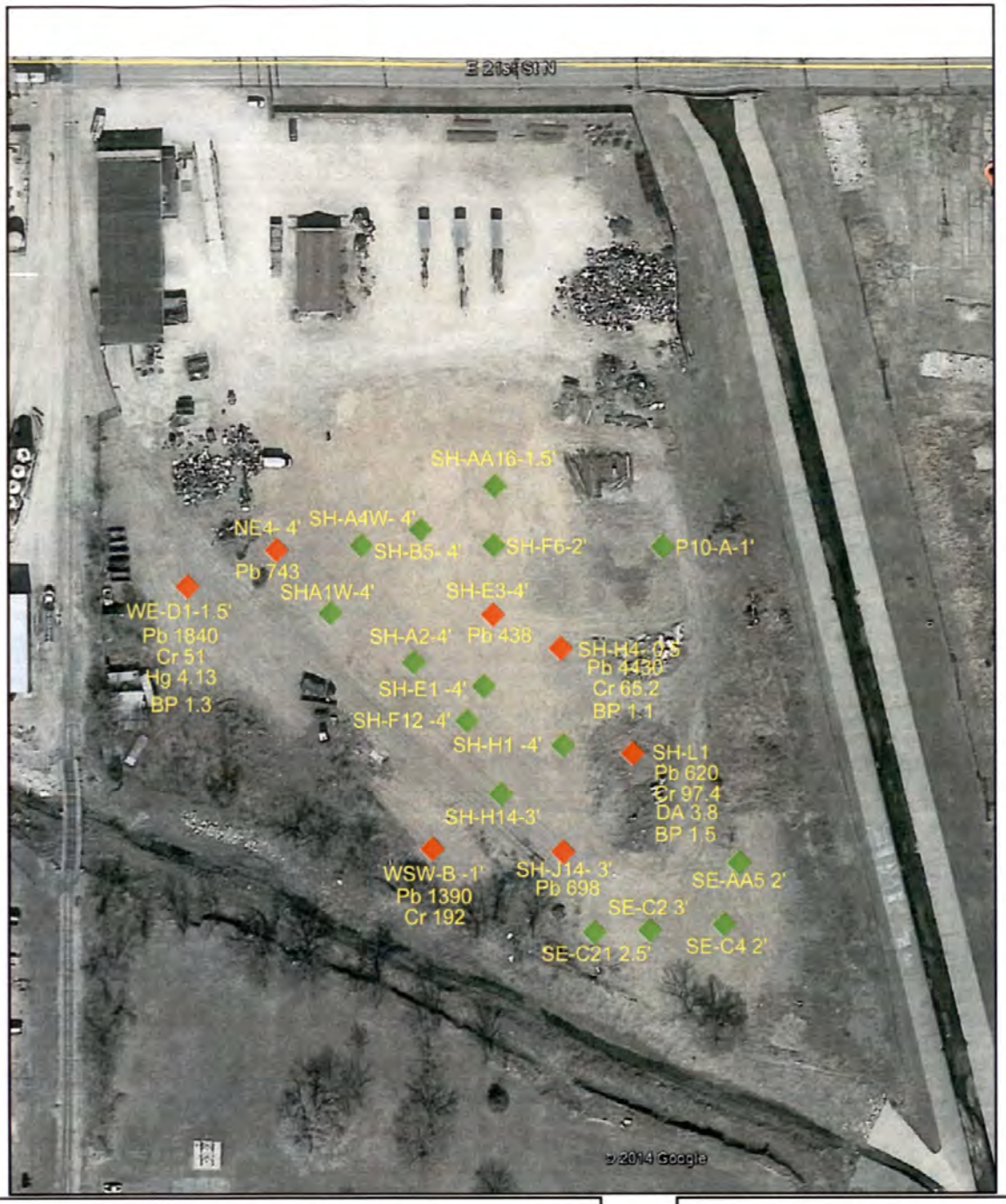
EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-J14-FLOOR-3	SH-L1-FLOOR-1	WE-D1-FLOOR-1.5	WSW-B-FLOOR-1	NE4-FLOOR-4
	Residential Soil	Soil-to-GW	Non-Residential		7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13	12-Dec-13
					1311459-05	1311459-06	1311459-01	1311459-03	1312779-12
Benzo(k)fluoranthene	109	190	338	ug/Kg	73	840	840	210	
Bis(2-chloroethoxy)methane				ug/Kg	<13	<14	<13	<13	
Bis(2-chloroethyl)ether	2.92	0.00129	6.01	ug/Kg	<12	<12	<12	<12	
Bis(2-chloroisoproplyl)ether				ug/Kg	<24	<24	<24	<24	
Bis(2-ethylhexyl)phthalate	569	144	1760	ug/Kg	490	290	790	27000	
Butyl benzyl phthalate	4190	478	13000	ug/Kg	<19	<20	86	320	
Captolactam	30600	69.2	440000	ug/Kg	<18	<18	<18	<18	
Carbazole	398	52.7	1230	ug/Kg	<15	61	190	<15	
Chrysene	1090	805	3380	ug/Kg	170	21000	1900	450	
Dibenz(a,h)anthracene	1.09	3.08	3.38	ug/Kg	<15	3800	300	110	
Dibenzofuran	58.2	7.59	579	ug/Kg	<15	27	44	17	
Diethyl phthalate	48900	305	705000	ug/Kg	<10	<10	<10	<10	
Dimethyl phthalate				ug/Kg	<15	<15	60	<15	
Di-n-butyl phthalate				ug/Kg	31	<9.0	120	95	
Di-n-octyl phthalate	1220	518	17600	ug/Kg	<9.0	<9.0	230	<9.0	
Fluoranthene	2440	2830	35200	ug/Kg	270	560	2200	540	
Fluorene	2360	297	25900	ug/Kg	<19	<20	250	32	
Hexachlorobenzene	4.97	1.24	15.4	ug/Kg	<12	<12	<12	37	
Hexachlorobutadiene	61.1	1.1	316	ug/Kg	<16	<16	<16	<16	
Hexachlorocyclopentadiene	366	14.3	5210	ug/Kg	<25	<26	<25	<25	
Hexachloroethane	42.8	0.399	617	ug/Kg	<27	<27	<27	<27	
Indeno(1,2,3-cd)pyrene	10.9	45.5	33.8	ug/Kg	59	2000	900	150	
Isophorone				ug/Kg	<13	<14	<13	<13	
Naphthalene	30.5	0.349	64.7	ug/Kg	<12	95	79	<12	
Nitrobenzene	32.2	0.0496	72.9	ug/Kg	<15	<15	<15	<15	
N-Nitrosodi-n-propylamine				ug/Kg	<21	<21	<21	<21	
N-Nitrosodiphenylamine				ug/Kg	<19	<21	<19	<19	
Pentachlorophenol	19.9	0.996	61.7	ug/Kg	<13	<14	<13	<13	
Phenanthrene				ug/Kg	170	390	2400	340	
Phenol	18300	189	264000	ug/Kg	<10	<10	<10	<10	
Pyrene	1830	2190	26400	ug/Kg	260	750	2800	480	
Volatiles (SW8260C)									
1,1,1-Trichloroethane	11800	2.8	18100	ug/Kg	<1.7	<1.7	<1.7	<1.7	
1,1,2,2-Tetrachloroethane	8.21	0.016	15.2	ug/Kg	<0.50	<0.50	<0.50	<0.50	
1,1,2-Trichlor-1,2,2-trifluoroethane	13800	321	60000	ug/Kg	<1.3	<1.3	<1.3	<1.3	
1,1,2-Trichloroethane	2.38	0.081	3.37	ug/Kg	<2.0	<2.0	<2.0	<2.0	
1,1-Dichloroethane	46.8	0.269	79.9	ug/Kg	<0.50	<0.50	<0.50	<0.50	
1,1,-Dichloroethene	313	0.0859	484	ug/Kg	<1.5	<1.5	<1.5	<1.5	
1,2,4-Trichlorobenzene	89.2	19.3	144	ug/Kg	<0.90	<0.90	<0.90	<0.90	
1,2-Dibromo-3-chloropropane	9.93	0.00543	30.7	ug/Kg	<1.3	<1.3	<1.3	<1.3	
1,2-Dibromoethane				ug/Kg	<0.70	<0.70	<0.70	<0.70	
1,2-Dichlorobenzene	2340	48.4	5340	ug/Kg	<0.80	<0.80	<0.80	<0.80	
1,2-Dichloroethane	6.27	0.06	10.9	ug/Kg	<0.60	<0.60	<0.60	<0.60	
1,2-Dichloropropane	12.9	0.0817	22.3	ug/Kg	<0.50	<0.50	<0.50	<0.50	
1,3-Dichlorobenzene				ug/Kg	<0.90	<0.90	<0.90	<0.90	
1,4-Dichlorobenzene	37.5	5.94	63.7	ug/Kg	<0.70	<0.70	<0.70	<0.70	
2-Butanone				ug/Kg	<2.2	<2.2	<2.2	<2.2	
2-Hexanone				ug/Kg	<1.7	<1.7	<1.7	<1.7	

EXHIBIT NO. 10 FORMER NOVICK IRON & METAL INTERIM MEASURES SITE CLEAN-UP ADDITIONAL PARAMETER RESULTS	KHDH TIER 2 RSK (mg/kg)			Units	SH-J14-FLOOR-3	SH-L1-FLOOR-1	WE-D1-FLOOR-1.5	WSW-B-FLOOR-1	NE4-FLOOR-4
	Residential Soil	Soil-to-GW	Non-Residential		7-Nov-13	7-Nov-13	7-Nov-13	7-Nov-13	12-Dec-13
					1311459-05	1311459-06	1311459-01	1311459-03	1312779-12
4-Methyl-2-pentanone				ug/Kg	<1.0	<1.0	<1.0	<1.0	
Acetone	50300	51.6	406000	ug/Kg	<4.6	<4.6	<4.6	57	
Benzene	15.9	0.168	28.2	ug/Kg	<0.60	<0.60	<0.60	<0.60	
Bromodichloromethane	3.93	0.841	6.69	ug/Kg	<0.60	<0.60	<0.60	<0.60	
Bromoform	1010	0.832	3120	ug/Kg	<0.70	<0.70	<0.70	<0.70	
Bromomethane	9.39	0.0503	14.6	ug/Kg	<1.0	<1.0	<1.0	<1.0	
Carbon disulfide	1020	6.71	1680	ug/Kg	<1.6	<1.6	<1.6	<1.6	
Carbon tetrachloride	8.44	0.0734	14.7	ug/Kg	<1.2	<1.2	<1.2	<1.2	
Chlorobenzene	380	5.1	740	ug/Kg	<0.50	<0.50	<0.50	<0.50	
Chloroethane				ug/Kg	<1.0	<1.0	<1.0	<1.0	
Chloroform	4.22	0.85	7.14	ug/Kg	<1.8	<1.8	<1.8	<1.8	
Chloromethane	146	0.924	223	ug/Kg	<0.90	<0.90	<0.90	<0.90	
cis-1,2-Dichloroethene	23	0.855	38.7	ug/Kg	<1.5	<1.5	<1.5	<1.5	
cis-1,3-Dichloropropene	23.3	0.0916	45.2	ug/Kg	<0.50	<0.50	<0.50	<0.50	
Cyclohexane	8770	307	13300	ug/Kg	<1.2	<1.2	<1.2	<1.2	
Dibromochloromethane	94.7	0.834	294	ug/Kg	<0.50	<0.50	<0.50	<0.50	
Dichlorodifluoromethane	227	13.5	323	ug/Kg	<1.8	<1.8	<1.8	<1.8	
Dichloromethane				ug/Kg	<1.4	<1.4	<1.4	<1.4	
Ethylbenzene	82	65.6	145	ug/Kg	<0.90	<0.90	<0.90	<0.90	
Isopropylbenzene				ug/Kg	<1.0	<1.0	<1.0	<1.0	
m,p-Xylene	936	809	1410	ug/Kg	<1.7	<1.7	<1.7	<1.7	
Methyl acetate				ug/Kg	<1.0	<1.0	<1.0	<1.0	
Methyl tert-btyl ether	585	0.848	1050	ug/Kg	<1.9	<1.9	<1.9	<1.9	
Methylcyclohexane				ug/Kg	<1.5	<1.5	<1.5	<1.5	
o-Xylene	936	809	1410	ug/Kg	<1.0	<1.0	<1.0	<1.0	
Styrene	7020	9.34	20400	ug/Kg	<0.80	<0.60	<0.60	<0.80	
Tetrachloroethene	109	0.121	210	ug/Kg	<1.0	<1.0	<1.0	32	
Toluene	4320	51.2	29800	ug/Kg	<0.70	<0.70	1.4	1.4	
trans-1,2-Dichloroethene	202	1.22	333	ug/Kg	<0.90	<0.90	<0.90	<0.90	
trans-1,3-Dichloropropene				ug/Kg	<0.50	<0.50	<0.50	<0.50	
Trichloroethene	5.85	0.0842	9.91	ug/Kg	<1.6	<1.6	<1.6	<1.6	
Trichlorofluoromethane	1000	21.5	1470	ug/Kg	<0.80	<0.80	<0.80	<0.80	
Vinyl chloride	4.47	0.0205	9.21	ug/Kg	<1.0	<1.0	<1.0	<1.0	
Xylenes, Total	936	809	1410	ug/Kg	<2.6	<2.6	<2.6	<2.6	
Moisture (SW3550)									
% Moistures				wt%	12.4	19.7	20.8	20.3	28.7

Indicates further excavation in grid after sample collection

Exhibit No. 11

Other Parameter Verification Samples and RSK Exceedances



KANSAS TIER 2 RSK VALUES (Mg/Kg)

	RES SOIL	SOIL TO GROUNDWATER	NON RES SOIL
DIBENZO(A,H) ANTHRACENE (DA)	1.09	3.08	3.38
CHROMIUM (Cr)	33.6	_	111
LEAD (Pb)	400	_	1000
MERCURY (Hg)	2	_	20
BENZO (a) PYRANE (BP)	1.09	23.5	3.38

LEGEND

SH-A2 4'	FLOOR SAMPLE ID WITH DEPTH
SE-AA5- 2'	ALL PARAMETERS < RSK VALUES
SH-LI- 1' Pb 620 Cr 97.4 DA 3.8 BP 1.5	HAS PARAMETER > RSK VALUE WITH CONCENTRATION IN Mg/Kg

iec INDUSTRIAL ENVIRONMENTAL CONSULTANTS

2603 FESSEY PARK ROAD
P.O. BOX 40066
NASHVILLE,TENNESSEE 37204
615-730-5059

OTHER PARAMETER VERIFICATION SAMPLE LOCATIONS AND RESULTS > KANSAS RSK

FORMER NOVICK IRON & METAL
WICHITA, KANSAS

DRAWN BY:	JKW/CLG	EXHIBIT NO.	11
CHECKED BY:	JKW	PROJECT NO.	14012
ENGINEER:	JCT	SCALE:	1"= 70'
DATE:	5/28/2014		

N

ADDENDUM NO. 1

TO THE

INTERIM MEASURES SITE CLEANUP
& COMPREHENSIVE INVESTIGATION REPORT
FORMER NOVICK IRON & METAL SITE
1007 E. 21ST STREET
WICHITA, KANSAS

Why NIM Inc. Did Not Contaminate Groundwater

Prepared By:

NIM, INC.
710 SOUTH HANLEY ROAD #7D
ST. LOUIS, MO 63105

May 31, 2014

Site History

Mr. Novick, son of a rural blacksmith in Poland, came to Wichita in 1949 after serving as a Partisan against Hitler during WWII. He did not speak English when he arrived and only had a sixth grade education, having to leave school to work with his father to support the family. The Novicks met and married while Refugees in a Displaced Persons Refugee Camp in the American Zone after WWII. The Novicks immigrated to America in 1949, sponsored by Mr. Novick's Uncle who lived in Wichita. Mr. Novick worked menial jobs until he bought a truck and started his own business, buying scrap metal, preparing it and selling it for recycling.

The Novicks purchased their property from Dow Chemical in 1966. Until the ultimate sale of the business in 2003, Novick Iron acted as a middle-man in the recycling process: it bought people's scrap metal and stored, packaged and prepared it for recycling. They also sold new and used pipe and metals. The business involved storing metals on the ground's surface, with different metals separated into piles waiting for sufficient accumulation or market forces, for sale and shipment offsite to foundries and larger buyers for recycling. The business never was involved in petroleum products or oil refining. There was never any subsurface disposal system. Since 2003, the Yaffe Company has been in complete ownership and control of the metal recycling business and the property.

Because of the lasting impact of Novick Iron's characterization as a Groundwater PRP, a brief discussion is required about the City of Wichita's attempt in 1984 to auction the abandoned Johns Refinery for back property taxes. Johns Refinery had its oil re-refining operation next door to the Novick Iron Site. To summarize, the City of Wichita knew the site was overrun with environmental contaminants. Based on the EPA's Initial Site inspection but before the sampling results were available, the EPA had instructed the City not to sell it at a public auction, due to the contamination. The City decided to hold the tax auction anyway, even before the EPA Sampling Results were available. On the day of the auction, the former Mayor, Sheldon Kamen, telephoned Mr. Novick, informed him about the auction, advising him to go and buy the property. Mr. Novick followed the Mayor's advice and purchased the abandoned Johns Refinery. A few

months later, a judge set aside the sale and declared it void because the City failed to properly disclose the very high levels of contamination at the abandoned Johns Refinery site. Novick Iron was put on the PRP list for the Johns Refinery Site because of its temporary relationship to the site in 1984, prior to the sale being voided by the Court. (See USEPA, Johns Refinery, After Action Report; also see USEPA, Johns Refinery, CERCLA Order)

The first environmental inspection of the former Novick Iron site was in 1988, by the Kansas Department of Health and Environment, under contract with EPA, after a visual inspection by EPA in 1987. EPA's concern from the visual inspection was lead contamination from stacks of batteries on-site waiting packaging, sale, and shipment to a reclaimer. By the time of the 1988 inspection, the batteries had been shipped on to a reclaimer in the usual course of business. An underground fuel tank and old gas pump were present but no longer in use. [Under the direction of KDHE's Ralph O'Connor, Novick Iron removed the intact tank and pump in 1989.] Samples were taken during the 1988 inspection. Regarding heavy metals and PCBs, the EPA concluded: "Metal concentrations detected in the soil are most likely directly related to the varying percentage of metals found in the different waste piles on site. High zinc levels, for example, may correspond to scrap piles containing a high percentage of galvanized material." (EPA, Final Report, Novick Iron, Nov. 3, 1988, p.8-2.)

Specifically with regard to the presence of semi-volatile organics, the EPA concluded in their Final Report that: "the site is located in an industrial area which also is likely to be responsible for many of these chemicals." (EPA Hazardous Site Evaluation Division, Field Investigation Team, Zone II: "Final Report, Novick Iron & Metal," Nov. 3, 1988)

In early 1989, KDHE's District Geologist cautioned Novick Iron against joining the 29th & Meade Superfund group: "I certainly would caution you against this approach as it would be vastly more expensive. Beyond the cost, the two problems are entirely different and unrelated. Yours is primarily a surface soils heavy metals problem whereas 29th & Meade is a TCE groundwater problem." (Groundwater Exhibit GW-9)(KDHE Letter to Novick Iron from Ralph O'Connor, District Geologist, January 25, 1989.)

In July 1989, KDHE first notified Novick Iron that since it owned or operated property in the North Industrial Corridor, it would be considered as a PRP for NIC groundwater contamination. (Letter from Attorney L. Patricia Casey, KDHE to Mr. Novick, July 24, 1989).

In 1990, EPA Region VII formally notified Novick Iron, after conducting a TSCA inspection, there were "No violations of the PCB Final Rule were observed during the inspection." (EPA Notice of Compliance signed by David Phillippi, December, 10, 1990)

In 1991, Novick Iron submitted to KDHE analytical results of a large-scale soil sampling done in 1990 at the request and under the direction of KDHE, analyzed for heavy metals and PCBs. Novick Iron brought these results to the attention of Mr. Ralph O'Connor and Mr. Larry Knoche of KDHE. There was no correspondence from KDHE regarding cleanup from 1991 until 2006, fifteen years after the results were submitted and three years after the sale of the property. (KDHE Letter to Novick by Donna Marie DeCarlo, Geologist II, January 17, 2006).

In addition, Novick Iron sold the site to Yaffe in 2003, and both parties performed soil sampling with Novick Iron performing remediation pursuant to the sale, the results of which were submitted to but not conducted under the direction of KDHE. Since 2003, the Yaffe Company has been in complete ownership and control of the metal recycling business and the property, buying, selling, storing and processing scrap metals, moving and grading surface soil and otherwise conducting their business operation.

Introduction

NIM's former operation as a scrap metal recycler, buying scrap metal, storing it in piles on top of the ground, then selling it and shipping it on for re-processing, never had any impact on groundwater. Our analysis corroborates the 1989 conclusion of Ralph O'Connor, District Geologist who was directly familiar with operations at the former Novick Iron facility: "the two problems [surface soil versus groundwater] are entirely different and unrelated. Yours is primarily a surface soils heavy metals problem whereas 29th & Meade is a TCE groundwater problem." (Groundwater Exhibit GW-9)(KDHE Letter to Novick Iron from Ralph O'Connor, District Geologist, January 25, 1989.) For that reason, NIM Inc. requests that it be removed from classification as an Identified PRP for the groundwater or surface water contamination in the North Indus-

trial Corridor. (Hereafter "NIC.") There are other, documented, direct and actual sources that completely explain the groundwater contamination.

Two of the worst water polluters in the NIC were immediately next door to the former Novick Iron site, one to the North (Coastal/Derby), which started activities in 1920, and the other to the West (Johns Refinery), re-refining waste oils since the 1950's. Examination of the North Industrial Corridor's large and overlapping contamination plumes as they flow in a south-southeasterly path down-gradient into Chisholm Creek also show the profound effect the activities occurring at other facilities had in causing the contamination plaguing the NIC's groundwater and the groundwater beneath the former Novick Iron site. (See Groundwater Addendum, Exhibits GW-2 through GW-6).

The key to understanding that the former Novick Iron business operations did not cause groundwater contamination is that it was only in the business of purchasing, storing, repackaging or cutting, and selling scrap metal to other businesses in the reclamation, recycling or foundry business. Unlike its neighbors to the North and the West, Coastal/Derby Refinery and Johns Refinery, Novick Iron was not in the refinery, oil or chemical business. An aerial photograph from 1989 confirms that the former Novick Iron site was used for metal storage and recycling. Compare the aerial photograph of the former Novick Iron facility in 1989 with a 2014 post-remediation photograph of the site. (See Groundwater Exhibit GW-8.) Then, by comparing the 1989 photograph of former Novick Iron and its piles of metal on the surface with the 1984 Johns Refinery Site Investigation photographs that show dozens of oil re-refining tanks next door at the Johns Refinery site, the difference is apparent between running a scrap yard and running a refinery. (Compare Groundwater Exhibit GW-8 and Group Groundwater Exhibit GW-7) It is important to note that NIM Inc. has neither owned nor operated the former Novick Iron facility since 2003, more than a decade ago.

Brief Note on Hydrology

The branches of Chisholm Creek in the vicinity of the former Novick Iron site include the East Fork, the West Fork, the former Middle and the unnamed middle drainage canal. The confluence of the West Fork and the unnamed middle drainage canal is at the southeast corner of the

former Novick property. This waterway flows into the East Fork just south of the property. (City of Wichita "Site-Wide Groundwater Feasibility Study," June 2011, pp. 1-13,14)(Map, Groundwater Exhibit GW-1).

In the Southeastern part of NIC, the groundwater flow "is strongly influenced by Chisholm Creek in the Southeastern part of NIC." "The branches and tributaries to Chisholm Creek are the principal streams within the NIC Site. The majority of these streams within the NIC Site are gaining streams, meaning that groundwater discharges to surface water. Ultimately surface water in Chisholm Creek discharges to the Arkansas River south of the Site." (KDHE, NIC Final CAD, 2012, p.3).

North Industrial Corridor ("NIC")

The North Industrial Corridor contains about 4,011 acres of property, established in 1995 to coordinate site environmental investigation and remediation. (City of Wichita "Site-Wide Groundwater Feasibility Study," June 2011, p. 1-3; also see KDHE NIC Final CAD 2012, p.2) The NIC is divided into Ground Water Units ("GWU"s) "to facilitate the development of feasible remediation strategies for areas with similar COCs and/or physical limitations." (City of Wichita "Site-Wide Groundwater Feasibility Study," June 2011, p. 1-16, see Figure 1-3 for map of GWU 1 - GWU 5, with TCE groundwater plumes shown)(Groundwater Exhibit GW-2).

We confine our comments here to GWU-2 and GWU-5, focusing on areas of closer physical proximity to the former Novick Iron site, and with the recognition that some contaminants, for example, chlorinated solvent contaminants, have migrated from GWU-1 to GWU-5 and beyond. (City of Wichita NIC Groundwater Feasibility Study, p.6) Directly down-gradient from the 140 acre GWU-5 Coastal/Derby Refinery Site, lies the former Novick Iron scrapyard, under which the contaminants present in Coastal/Derby Refinery groundwater continue to migrate. (Wichita Groundwater Feasibility Study, 2011, Appendix F, Figures F3-2 to F3-5 and Figures F3-12 to F3-16.) (See group of maps, Groundwater Exhibit GW- 6) The groundwater flow and migration of contaminants from the north, GWU-5, and the northwest, GWU-2, down-gradient to the former Novick Iron facility and beyond, is undeniable. (See Groundwater Addendum Exhibits, GW-2 - GW-6)

Of further interest, regarding migration in GWU-2, groundwater velocity near 21st and Mosley, just up-gradient from the former Novick Iron site, has an approximate 5-year travel distance of 3,562 feet (712 ft/yr). (City of Wichita Feasibility Study, 2011, p.28, Section 4.5)

The former Novick Iron site was assigned to be the last parcel on the southeastern border of GWU-2, down-gradient from most of the contaminators of GWU-2. The former Novick Iron site also serves as the northern border of the southeast end of GWU-2, immediately below and down-gradient from the vast contamination of GWU-5 (Coastal/Derby Refinery). (See Groundwater Addendum, Exhibit GW-3)

The City of Wichita's NIC Site-Wide Groundwater Monitoring Study

The City of Wichita performed Site-wide groundwater monitoring in 2007-2008. (City of Wichita Groundwater Feasibility Study, 2011, Section 2.) There are volatile organic compound (VOC) results for wells sampled by the City of Wichita in 2007/2008 (City of Wichita Groundwater Feasibility Study, 2011, Table 2-2.), VOC results for wells sampled approximately concurrently in 2007 (City of Wichita Groundwater Feasibility Study, 2011, Table 2-3), and VOC results as a summary of 2001-2007 groundwater well results. (City of Wichita Groundwater Feasibility Study, 2011, Table 2-4.)(Available online at KDHE website.)

The City of Wichita made several observations about the 2007-20008 results: "[a] continued increase in TCE [trichloroethene] concentration .. is noted in a general area encompassing portions of the ... Coastal-Derby Refinery Site... ." (City of Wichita Groundwater Feasibility Study, 2011, p. 2-8) Also, elevated Benzene was detected in Coastal/Derby wells. (Id., p. 2-10). These observations were made five years after NIM had sold the business.

Areas with "historical PCE [tetrachloroethene] concentrations in groundwater exceeding 100 ug/L include ... Coleman Northeast... " There was an increase in PCE concentration down-gradient of the Coleman Northeast Source area. (City of Wichita Groundwater Feasibility Study, 2011, p. 2-9.) The former Novick Iron is down-gradient from the Coleman Northeast Source Area.

NIC Well Site Analysis

In order to demonstrate that the former Novick Iron facility did not cause NIC groundwater contamination, we have selected some wells within GWU-2 and GW-5 and, using the 2007 data in the City of Wichita's Feasibility Study, Tables 2-2, 2-3 and 2-4, will illustrate that the source of contamination is not the former Novick Iron facility. (City of Wichita Groundwater Feasibility Study, 2011) The wells chosen are up-gradient and either nearby or in a groundwater plume that includes the former Novick Iron site but emanates from above the Novick Iron site.

By way of illustration, using only 2007 data, and taking data from monitoring wells to the north and west of the site, Table 1 presents some relevant results within the NIC where contaminants are above KDHE Tier 2 action level for residential groundwater pathway:

Table 1
Selected NIC Groundwater Wells Showing Contamination and Source Areas Above The Former Novick Iron Site

NIC Well Site	TCE (ug/L)	C12DCE (ug/L)	Other chemicals (ug/L)
DRB-MW-30			BEN - 399
DRB-MW-300			BEN - 900
DRB-MW-370			BEN - 840
DRB-490	27		PCE - 5.6
DRB-MW-512	14		
EXC-MW-05B	119		
EXC-MW-06A	39.6		
EXC-MW-06B	24.4		
EXC-MW-07B	101		
NMW-04D	133	69.2	CT - 9.1; VC - 4.1
NMW-04S	85.2	69.6	
NMW-39S		87.3	VC - 6.9
NMW-39I	32.3		VC - 2.6
NMW-42D	77.7		

Table 1
Selected NIC Groundwater Wells Showing Contamination and Source Areas Above The Former Novick Iron Site

NIC Well Site	TCE (ug/L)	C12DCE (ug/L)	Other chemicals (ug/L)
NMW-42S	31.7		
NMW-43D	21.1		
NMW-44D	77.2		
NMW-45D	14.1		
NMW-47S	37.9	149	VC - 1.5
WND-21D	139		
WND-21S	10.8		
WND-34D	5.4		BEN - 101
WND-34S			BEN - 167
WND-36D	27.2		
WND-36S			BEN - 295
WND-37DR	107		
WNC-37DR	108		VC - 6.7
WNC-37S	42.3		VC - 5.9

Notes:

Source: City of Wichita Groundwater Feasibility Study, 2011, Tables 2-2, 2-3 and 2-4
C12DCE – cis-1,2-dichloroethylene
BEN – Benzene
VC – Vinyl Chloride
CT - Carbon Tetrachloride

The Table above does not include every contaminant, nor does it include data from years prior to 2007. The Table does illustrate high levels of contaminants present above Novick Iron that flow down-gradient to the former Novick Iron site and beyond. It should be noted that the 2007/2008 data was generated four years after the former Novick Iron facility and property were sold to Yaffe, not caused by the former Novick Iron's actions. Below is a broader list of VOCs and some of their sources, as reported by the City of Wichita in its Groundwater Feasibility Study, 2011:

- Benzene (Derby/Coastal Refinery, the former 29th and Meade area, and WND),
- 1,1-DCA (1,1-dichloroethane) – (former 29th and Meade, WNC, WND),
- 1,1-DCE (1,1-dichloroethene) – (Excel, former 29th and Meade, WNC, WND),
- C12DCE (Excel, former 29th and Meade, WNC, WND),
- T12DCE (trans-1,2-dichloroethene) – (former 29th and Meade, WNC),
- TCE (Excel, former 29th and Meade, WNC, WND),
- CT (former 29th and Meade)
- VC (former 29th and Meade, WNC, WND).

GWU-2

Groundwater Unit 2 consists of 17 sites listed by the City of Wichita, at least 9 of which are up-gradient from the former Novick Iron site and have confirmed historical down-gradient groundwater contamination impact. For example, according to KDHE and the City of Wichita, historical groundwater impact down-gradient in GWU-2 is confirmed at the following sites: the Former Coastal Refinery Boneyard (significant concentrations of TCE migrated to the southern half of GWU-2); Coleman North (Chlorinated solvent, TCE, PCE, 111TCA, at least through southern GWU-2, also total petroleum hydrocarbons [TPH]); Love Box (PCE and TCE down-gradient in GWU-2); National By-Products, (TCE impact down-gradient); Stockyard Properties (TCE impact down-gradient at least through southern extent of GWU-2). For other Source Areas, down-gradient impact was suspected but not confirmed, e.g., from the Barnsdall Refinery (TPH and free product, Metals, PCBs, TCE and Benzene) and Excel (TCE). (City of Wichita, Site-Wide Groundwater Feasibility Study, 2011, Table 1-2.)

Contamination problems in GWU2 include chlorinated solvents and petroleum hydrocarbons (refinery related). (KDHE, NIC Final CAD p.6) There is a large chlorinated solvent plume in the groundwater from 37th Street North to the southern site (NIC) boundary (KDHE, NIC Final CAD, 2012, p.3)

For a graphic representation of the TCE plumes in deep aquifer, migrating south and directly impacting groundwater at the former Novick Iron site, with as much as 100 ug/L TCE, see Goundwater Addendum Exhibit GW-4. (City of Wichita, Site-Wide Feasibility Study, 2011, Appendix F, Figure 26)

For a map of the location of Possible Responsible Parties up-gradient, which also shows TCE isoconcentration lines, see Groundwater Exhibit GW-5. (City of Wichita, Site-Wide Feasibility Study, 2011, Figure 2-10) For general site background and source control measures for each identified source area or PRP, see City of Wichita Groundwater Feasibility Study, 2011, Appendix B which is informative in establishing sources for groundwater contamination under the former Novick Iron site.

GWU-2 - Johns Refinery Superfund Site

The former Johns Refinery (JRF) facility operated from 1950 until 1970 as the Super Refined Oil Company,. in the business of re-refining used motor oil and waste oils, located at 915 E. 21st North, directly west of the Novick Iron site.

Johns Refinery's recycling process used sulfuric acid and clay to precipitate and adsorb contaminants from the oil, thereby creating acidic sludge containing elevated levels of lead. Polychlorinated biphenyls (PCBs) were introduced into the sludge through the recycling of dielectric fluids. (Explained in USEPA 2012. Fifth Five-Year Review Report for Johns' Sludge Pond Superfund Site, p.6)

The Johns Refinery facility had been abandoned for about thirteen years when, in 1983, the EPA' s Emergency Response Branch investigated the abandoned facility because Johns Refinery was the source of the contaminants at the Johns Sludge Pond. The Johns Refinery site had 32 above ground waste oil tanks on the property, large standing pools of liquid (apparently waste oil) and 7 underground storage tanks. Two of the underground tanks were 10'x 30' (18,000 gallon capacity). (USEPA Region VII, 1985. After Action Report, Superfund Immediate Removal – Johns' Refinery, Wichita, Kansas, - Site No. P-6.)

The 32 storage tanks still on the ground held from 8,000 - 40,000 gallons of capacity, several of which still contained "contaminated waste sludge and liquid material," in quantities ranging "from several inches to ten feet." Some of the tanks were in poor repair and had leaked, resulting in releases of hazardous substances at the facility. Pools of oil and visually oil-contaminated soil were present. Metals, PCB, and Petroleum Contamination Sampling data collected by the EPA prior to the RA detected product materials at Johns Refinery containing up to

742 mg/kg PCBs and 3,180 mg/kg lead. (USEPA Region VII, 1984. Report on Sampling Investigation, Johns' Refinery Company, a.k.a. Super Refined Oil Co., Wichita, Kansas,- Superfund Site; # P-6.) (See Exh. GW-7, Group Exhibit with maps, aerial views and initial site investigation report regarding Johns Refinery.)

In 1984, the EPA conducted a removal action at the Johns Refinery, removing and disposing the waste in the tanks, dismantling the tanks, excavating soil and underground tanks, and backfilling with clay topped with gravel. "PCBs were distributed throughout the tanks in varying concentrations." (KDHE, Identified Sites List, Johns Refinery Site Narrative.)

In EPA's removal, 98,000 lbs (2 1/2 tanker trucks) of PCB waste oil liquid were hauled away and 515,000 pounds (12 truck loads) of PCB contaminated sludge was solidified and disposed of in a landfill. pp. 4-5. (USEPA Region VII, 1985. After Action Report, Superfund Immediate Removal – Johns' Refinery, Wichita, Kansas, - Site No. P-6.)

Wash water from cleaning the metal tanks ran into "an earthen sump pump" which was contaminated; on occasion, sampled waste water was discharged into the sewer. ("Potential Hazardous Waste Site Inspection Report, Part 2 - Waste Information)(In Group Groundwater Exhibit GW-7) TCEs in the groundwater were discovered at 16 feet. The EPA determined that the groundwater contamination present at the Refinery was from up-gradient sources, and EPA "concluded that the TCE in the groundwater was beyond the scope of the immediate removal and, consequently, was not further investigated" (USEPA Region VII, 1985. After Action Report, Superfund Immediate Removal – Johns' Refinery, Wichita, Kansas, - Site No. P-6. pgs. 5-6). The EPA reported 16 groundwater samples were taken and tested at the Johns site. The groundwater testing results found 1000 ppb of trichloroethene (TCE). USEPASample AKDP6132.

No one ever investigated potential groundwater impact from the business at Johns Refinery. (KDHE Identified Sites list, Johns' Refinery, Site Narrative) Neither independent research nor an EPA FOIA search has found any written report on the EPA's groundwater investigation, even though EPA's Site Inspection Report refers to a Groundwater Investigation Report dated 6/27/84 (included in Groundwater Addendum Group Exhibit GW-7).

What we know about the impact on groundwater of Johns Refinery's 20 year refining operation we must glean from what we know about the contaminants found in the leaking and decaying storage tanks and sludge hoppers, the fact that contaminants were flushed into the public sewers, and what we know about the effect of the contaminants taken from Johns Refinery by the truck load and dumped into Johns Sludge Pond. Discussion about the Johns Sludge Pond follows.

Johns Sludge Pond Superfund Site

"In the 1950s and 1960s up to 1970, the Johns Sludge Pond site was used by the Johns Refinery located on 21st Street for the disposal of waste oil and oily sludge generated in its recycling/reclamation of motor oil, and other oils at the Johns' Refinery." Johns Sludge Pond contained an estimated 15,000 cubic yards of oily sludge prior to cleanup (USEPA 2012. Fifth Five-Year Review Report for Johns' Sludge Pond Superfund Site, p.8). A map showing the location of the two facilities is included in Groundwater Addendum Group Exhibit GW-7.

Johns Refinery disposed of waste oil and oily sludge generated at the Refinery in its recycling/reclaiming of motor oil and other oils at Johns Sludge Pond, located to the Northeast of Johns Refinery, near the East Fork of Chisholm Creek and 29th Street (USEPA 2012. Fifth Five-Year Review Report, Johns' Sludge Pond Superfund Site, p.6). Also, see map identifying Johns' Refinery and Johns Sludge Pond, in Groundwater Exhibit GW-7. Johns Sludge Pond is also in GWU-2 of NIC.

Johns Refinery's "method of sludge disposal was to transport the semi-liquid, oily sludge from Johns' Refinery to Johns Sludge [Pond] Site via truck and transfer it into the pond. The owner used sulfuric acid at the time in refining waste oil for recycling. The inflow of surface water into the disposal cell resulted in a very acidic layer of water over the sludge layer. The cell was unlined and had no leachate collection system. Originally the cell lacked berms or any other measures to prevent the overflow and release of contaminated waters into nearby surface waters. During heavy rains the site would release contaminated water into the drainage of Chisholm Creek that flows into the Arkansas River." (USEPA 2012. Fifth Five-Year Review Report, Johns' Sludge Pond Superfund Site, p.8)

In 1983, during investigations by the City of Wichita and Sedgwick County, "the sludge and water in the pond were found to be acidic with a low pH level. The sludge was found to contain elevated concentrations of lead and low levels of PCBs, other metals and in-organics. Some of the wastes disposed of at the site were flammable. Occasional fires occurred in the years before the EPA's involvement with the site." (USEPA 2012. Fifth Five-Year Review Report, Johns' Sludge Pond Superfund Site, p.8)

"Surface water runoff from the [Johns Sludge Pond] site drains into the East Fork of Chisholm Creek. Chisholm Creek then drains into a concrete-lined drainage ditch approximately 6,000 feet south of the site. The ditch parallels the adjacent Interstate 135 and receives runoff from the highway before discharging into the Arkansas River in the southern part of the city about seven miles south of the site." (USEPA 2012. Fifth Five-Year Review Report for Johns' Sludge Pond Superfund Site, p.6)

The sludge pond illustrates contamination of the groundwater up-gradient from Novick Iron in two ways: first, it demonstrates the kind of contaminants present at its source, the Johns Refinery site, next to the former Novick Iron site; second, it documents chemicals flowing into Chisholm Creek and into the groundwater above the former Novick Iron site.

GWU-5: Coastal/Derby Refinery

GWU-5 consists of the 140-acre former Coastal/Derby Refinery. "This GWU is designed to address the significant petroleum hydrocarbon-related contamination of the soils and groundwater associated with former refinery operations." (City of Wichita Groundwater Feasibility Study, 2011, p. 1-17 and Table 1-2). Coastal Derby Refinery is the source of petroleum hydrocarbon-related groundwater contamination identified in GWU-5. (KDHE, Final CAD p.10)

The Coastal/Derby site began operating in 1920 under the name Derby Oil Company. Over its fifty years, the refinery manufactured gasoline, distillates, propane, residual fuels and coke. The site was acquired by Coastal in 1973, which continued the refinery operations until 1993, when it discontinued refinery operations and became an asphalt blending facility until 2004, when it started demolishing and dismantling the refinery (El Paso Merchant Energy Pro-

gress Report, "April through June 2011 Combined groundwater monitoring," September, 2011, p.1).

As an indication of the extent of groundwater contamination by Coastal/Derby, the plan to remediate the contamination required removal and treatment of huge amounts of groundwater. A light non-aqueous phase liquid [NAPL] recovery system was in place at Coastal/Derby Refinery from the 1980s until 2004, when it was shut down because of refinery demolition activities. Groundwater recovered by this system was either re-injected up-gradient or treated and discharged into the unnamed tributary to the West Fork of Chisholm Creek" (KDHE, Final CAD, p10). In 2007, three seep interceptor trenches were installed along the East Fork of Chisholm Creek, two on the north and one on the south side of 21st Street, to eliminate active NAPL seeps into the creek (El Paso Merchant Energy Progress Report, "April through June 2011 Combined groundwater monitoring," September, 2011, p.4). 1,508,000 gallons of contaminated groundwater and 2,648,762 gallons of NAPL were recovered in total. (KDHE, Final CAD, p.11) Residual NAPL between the trench and the East fork still comes to the surface of the Creek (KDHE, Final NIC CAD, 2012).

For a more detailed analysis of the control measures required to remediate the extensive contamination at the Coastal/Derby site, see the City of Wichita's Groundwater Feasibility Study, Appendix B, Section B.5.1.

In addition, Coastal/Derby's 2011 progress report details the historic analytical concentration levels in monitoring wells which show significant presence of Arsenic, Chromium and Lead in the groundwater (El Paso Merchant Energy Progress Report, "April through June 2011 Combined Groundwater Monitoring" September 2011; DRB-MW-490, MW-370). There apparently was no PCB sampling at the Coastal/Derby Site even though such contamination is not uncommon at refinery sites.

Conclusion

After years of meticulous testing, careful study and massive remediation certain conclusions can be drawn about the former NIM site. First, it appears to be clear and uncontested that NIM, Inc. never engaged in any activity involving waste oil storage or processing which has his-

torically been recognized by the EPA and KDHE as the source for groundwater contamination of the type in question here. When it is considered that NIM was literally surrounded by entities that processed millions of gallons of waste oil every year for many years prior to, during and after Novick's period of ownership.

Certainly NIM came into possession of transformers prior to 1977, and while emptied before arriving at the former Novick Iron site, each retained residual pockets of PCB laden oil that over the years caused the surface soil problem that has now been remediated pursuant to the exacting standards required by EPA and KDHE. However, it is equally clear that the former Novick Iron facility did not engage in activities associated with groundwater contamination.

As the EPA and KDHE knows, during the 60s and 70s when scrap yards like NIM were taking in PCB infected transformers no one provided any warning whatsoever to junkyards across this country, like NIM, that electric transformers were loaded with PCBs. The utility companies from whence the transformers came did not warn NIM or anyone else. Monsanto, the manufacturer of 99% of all PCBs in this country, provided no warning and finally no governmental entity ever warned NIM that it was poisoning the environment by parting out transformers.

Hindsight may be 20/20 but it is important to recognize that there was little understanding of just what was at stake regarding PCBs in the 60's and 70's. Nevertheless, as difficult as it was, the Novicks have embraced the concept of exactly what a PRP is under the statute regarding PCBs and as a proud first generation Americans were determined to do the right thing.

The Novicks have acted in good faith. NIM, Inc. has removed 119 railcars and dozens of truckloads of PCB laden dirt and replaced that dirt, up to depths of four feet or more, across most of the site with pristine dirt. The data that Mrs. Novick's team has gathered from the NIC records plainly establishes and documents the truth of what Mr. O'Connor said so long ago. Nor did the recent extensive remediation activities by NIM, Inc. uncover any fact that would support NIM, Inc. or the former Novick Iron facility being a source of groundwater contamination.

Mrs. Novick, a widow about 90 years old, has been trying to resolve all issues related to NIM, Inc. during her lifetime. In 2009, when Mrs. Novick realized that she had a team that

would not or could not do the remediation work, she fired them. She immediately found the best team she could to accomplish her goal and travelled to Topeka in 2009 to meet with anyone who would talk with her about what NIM needed to do. Now, five more years have passed and she has seen to it that NIM, Inc. has dug up the contaminants, properly disposed of them and replaced that which was removed with pristine dirt.

This report documents many sources of both surface and groundwater contamination caused by others but it is not exhaustive. It is impossible for a small company like NIM to document each and every source of groundwater contamination that has occurred in the NIC over the last 50 or 60 years or before, all of which could have had an impact on the surface or groundwater within the NIC. On the other hand, there is nothing to support the proposition that the former Novick Iron contributed to either surface water or groundwater contamination. There is a wealth of data that supports the conclusion that surrounding facilities were and are in fact the source of such contamination.

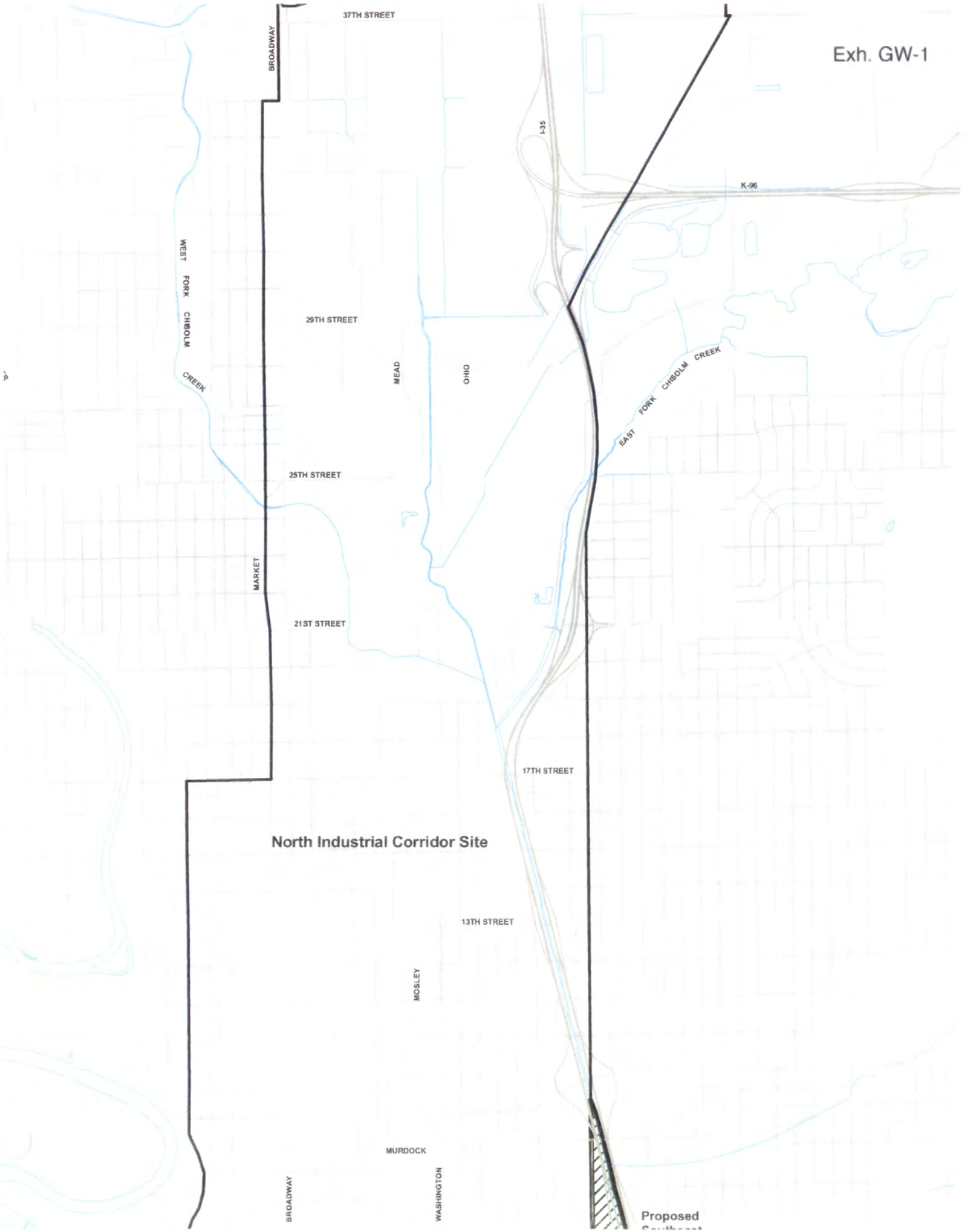
NIM, Inc. respectfully suggests that it has established that the former Novick Iron's activities did not impact groundwater or surface water in the NIC, and requests the former Novick Iron site and NIM, Inc. be removed from the PRP list for groundwater, that they be allowed to proceed to complete their EUC and, having cleaned their former scrap yard to the most exacting standards, as required, be discharged, having fulfilled their duties under law to the people of Kansas and the United States of America, and for such other relief as the EPA and KDHE believes is just and proper.

Groundwater Addendum Exhibits

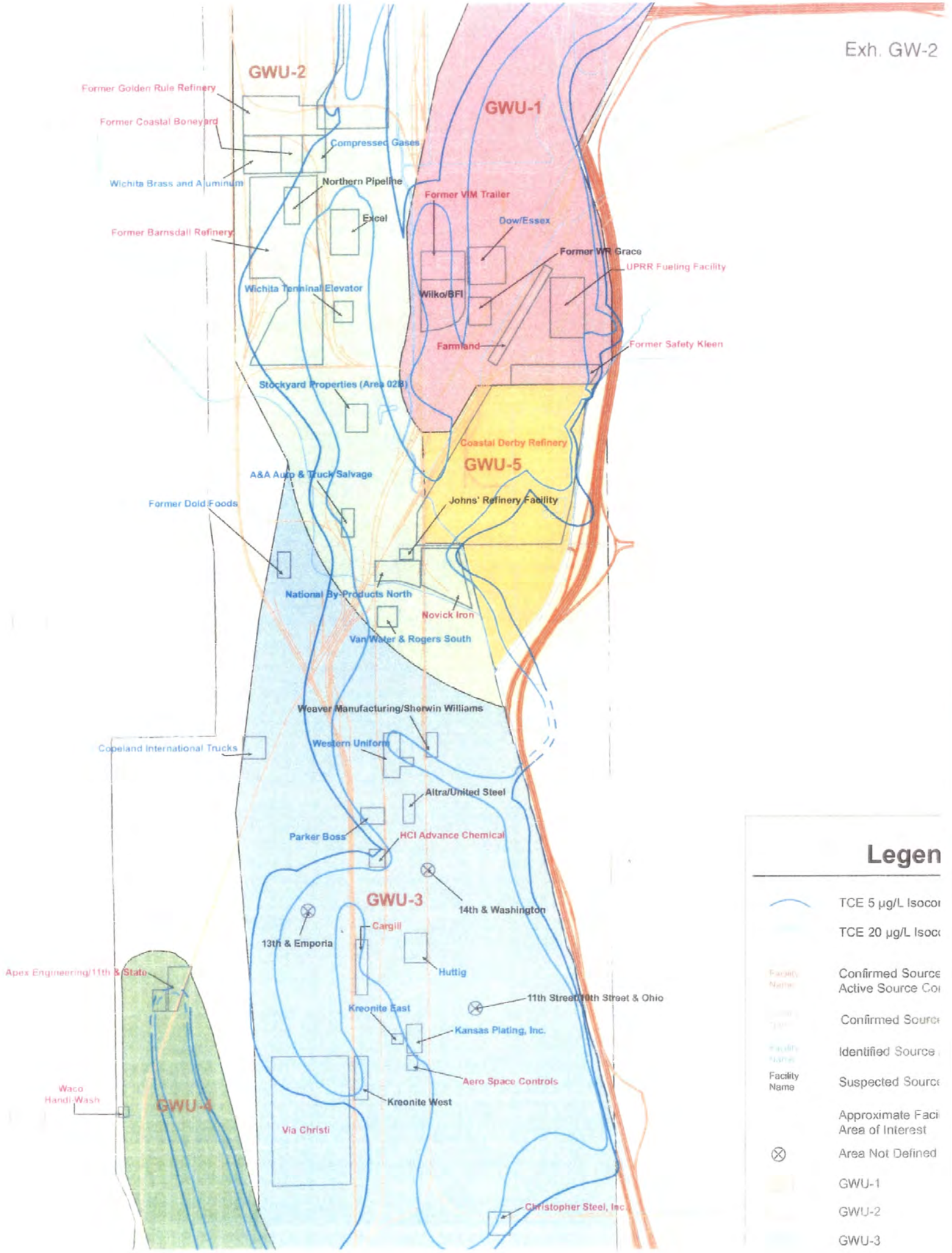
Table of Contents
Groundwater Addendum Exhibits

Exhibit GW-1*	Map, Chisholm Creek, Related canals. City of Wichita, June 2011.
Exhibit GW-2*	Map of NIC with TCE groundwater plumes shown. City of Wichita, June 2011, Figure 1-3.
Exhibit GW-3*	Water gradient Figure. City of Wichita, June 2011.
Exhibit GW-4	TCE Plumes in Deep Aquifer. City of Wichita, June 2011, Figure 26.
Exhibit GW-5*	Map of some facilities in NIC showing TCE isoconcentration lines. City of Wichita, June 2011, Figure 2-10.
Exhibit GW-6	Group Exhibit, Water Level Trends and Particle Tracking Figures. City of Wichita, 2011, Appendix F, Fig. F3-2 to F3-5, Fig. F3-12 to F3-16.
Exhibit GW-7	Group Exhibit. USEPA, 1984. Report on Sampling Investigation, Johns' Refinery, Including: - area map with Johns Refinery and Sludge Pond, - Johns Refinery Site Sketch, - 1984 Aerial Photo, - Photos from Site Inspection, - Site Inspection Report.
Exhibit GW-8	Two photographs, 1989 [copyright unknown] and 2014.
Exhibit GW-9	Letter, KDHE's Ralph O'Conner to Novick Iron, January 25, 1989.

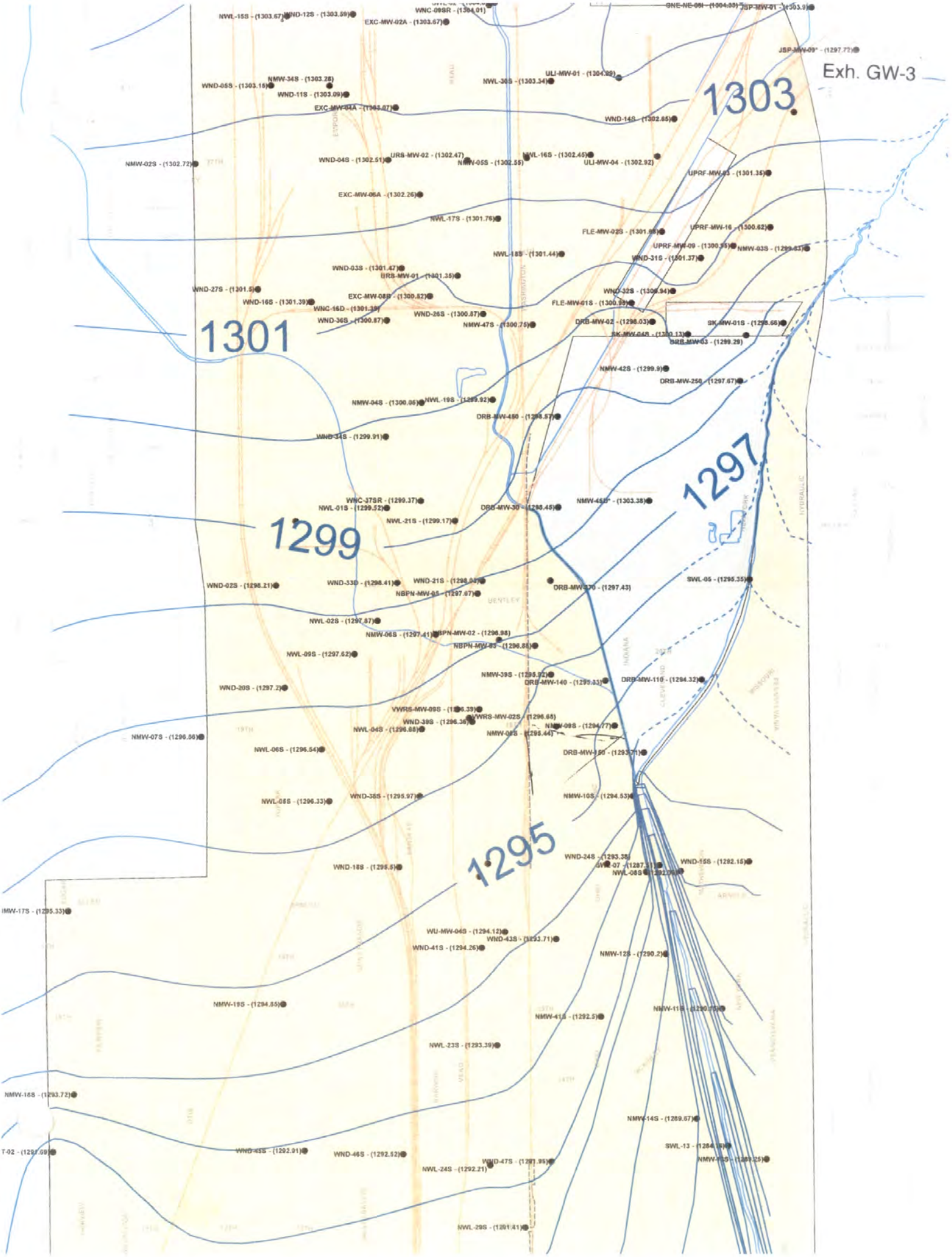
* Unfortunately, and as can be seen from these full page exhibits, when downloading from the KDHE website a small portion of the document page is missing.


Exh. GW-1
37TH STREET
BROADWAY
I-35
K-96
WEST FORK CHISOLM CREEK
29TH STREET
MEAD
OHIO
EAST FORK CHISOLM CREEK
25TH STREET
MARKET
21ST STREET
17TH STREET
North Industrial Corridor Site
13TH STREET
MOSLEY
MURDOCK
BROADWAY
WASHINGTON
Proposed

Exh. GW-2


GWU-2
GWU-1
GWU-5
GWU-3
GWU-4
Former Golden Rule Refinery
Former Coastal Boneyard
Compressed Gases
Wichita Brass and Aluminum
Northern Pipeline
Former VIM Trailer
Excel
Dow/Essex
Former Barnsdall Refinery
Former WR Grace
UPRR Fueling Facility
Wichita Terminal Elevator
Wilko/BFI
Farmland
Former Safety Kleen
Stockyard Properties (Area 028)
Coastal Derby Refinery
A&A Auto & Truck Salvage
Johns' Refinery Facility
Former Dold Foods
National By-Products North
Novick Iron
Van Water & Rogers South
Weaver Manufacturing/Sherwin Williams
Copeland International Trucks
Western Uniform
Altra/United Steel
Parker Boss
HCI Advance Chemical
14th & Washington
Cargill
13th & Emporia
Huttig
Apex Engineering/11th & State
11th Street/10th Street & Ohio
Kreonite East
Kansas Plating, Inc.
Aero Space Controls
Waco Handi-Wash
Kreonite West
Via Christi
Christopher Steel, Inc.
Legen
TCE 5 µg/L Isocor
TCE 20 µg/L Isoc
Confirmed Source
Active Source Co
Confirmed Sourc
Identified Source
Facility Name
Suspected Sourc
Approximate Faci
Area of Interest
Area Not Defined
GWU-1
GWU-2
GWU-3

Exh. GW-3


1303
1301
1299
1297
1295
NWL-15S - (1303.67)
WND-12S - (1303.59)
WNC-09SR - (1304.01)
EXC-MW-02A - (1303.67)
GNE-NE-06I - (1304.55)
JSP-MW-01 - (1303.9)
JSP-MW-09* - (1297.77)
ULI-MW-01 - (1304.99)
NWL-30S - (1303.34)
NMW-34S - (1303.28)
WND-05S - (1303.15)
WND-11S - (1303.09)
EXC-MW-04A - (1303.07)
WND-14S - (1302.85)
NMW-02S - (1302.72)
WND-04S - (1302.51)
URS-MW-02 - (1302.47)
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NWL-16S - (1302.45)
ULI-MW-04 - (1302.92)
UPRF-MW-03 - (1301.35)
EXC-MW-06A - (1302.26)
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FLE-MW-02S - (1301.88)
UPRF-MW-16 - (1300.62)
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WND-31S - (1301.37)
WND-03S - (1301.47)
URS-MW-01 - (1301.35)
WND-27S - (1301.5)
WND-32S - (1300.94)
EXC-MW-08S - (1300.82)
WND-16S - (1301.39)
WNC-16D - (1301.39)
FLE-MW-01S - (1300.98)
WND-36S - (1300.87)
WND-26S - (1300.87)
NMW-47S - (1300.75)
DRB-MW-02 - (1298.03)
SK-MW-01S - (1298.66)
SK-MW-04S - (1300.13)
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NMW-04S - (1300.06)
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NWL-01S - (1299.52)
DRB-MW-30 - (1298.45)
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WND-21S - (1298.09)
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NMW-39S - (1295.92)
DRB-MW-14D - (1295.33)
DRB-MW-11D - (1294.32)
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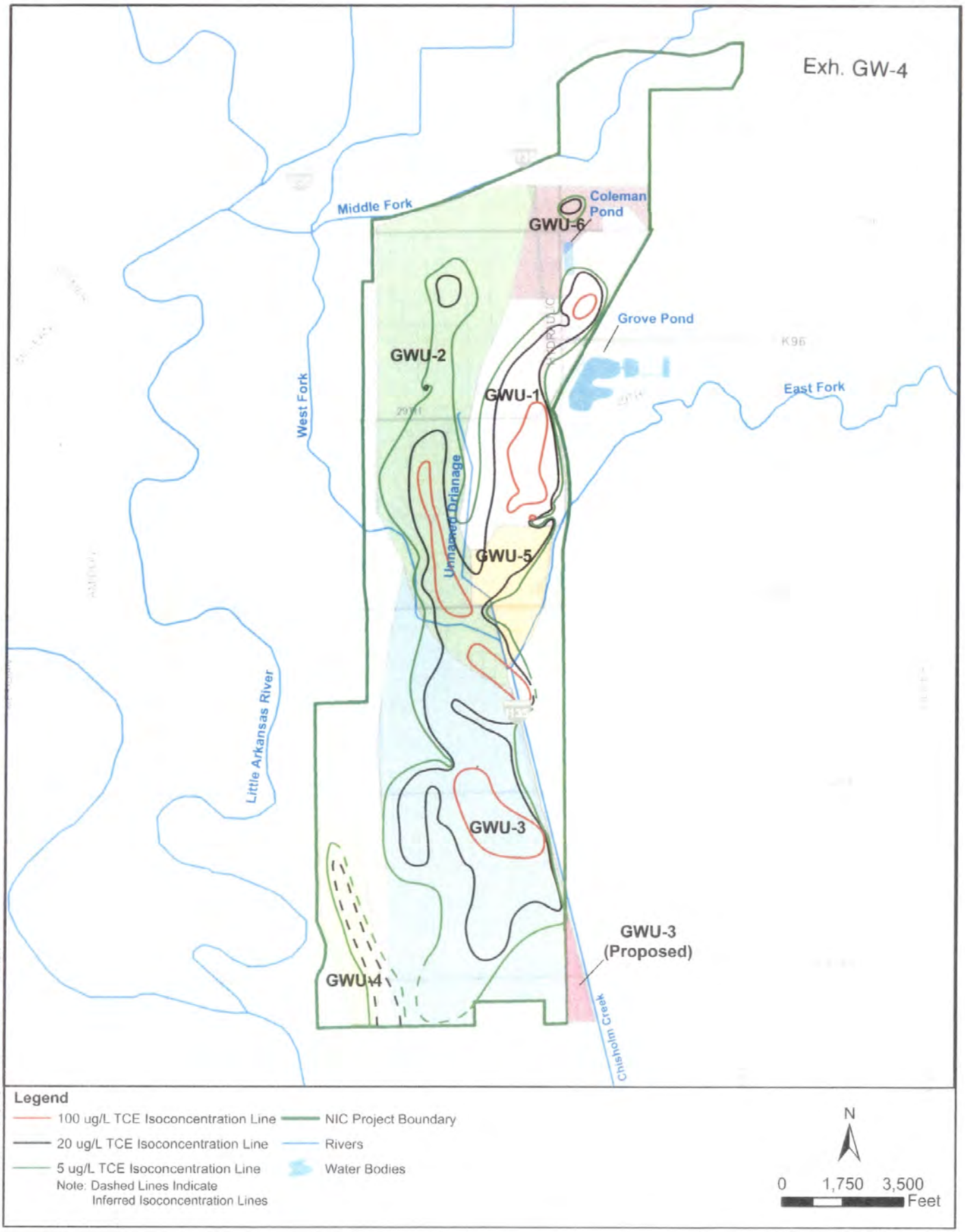

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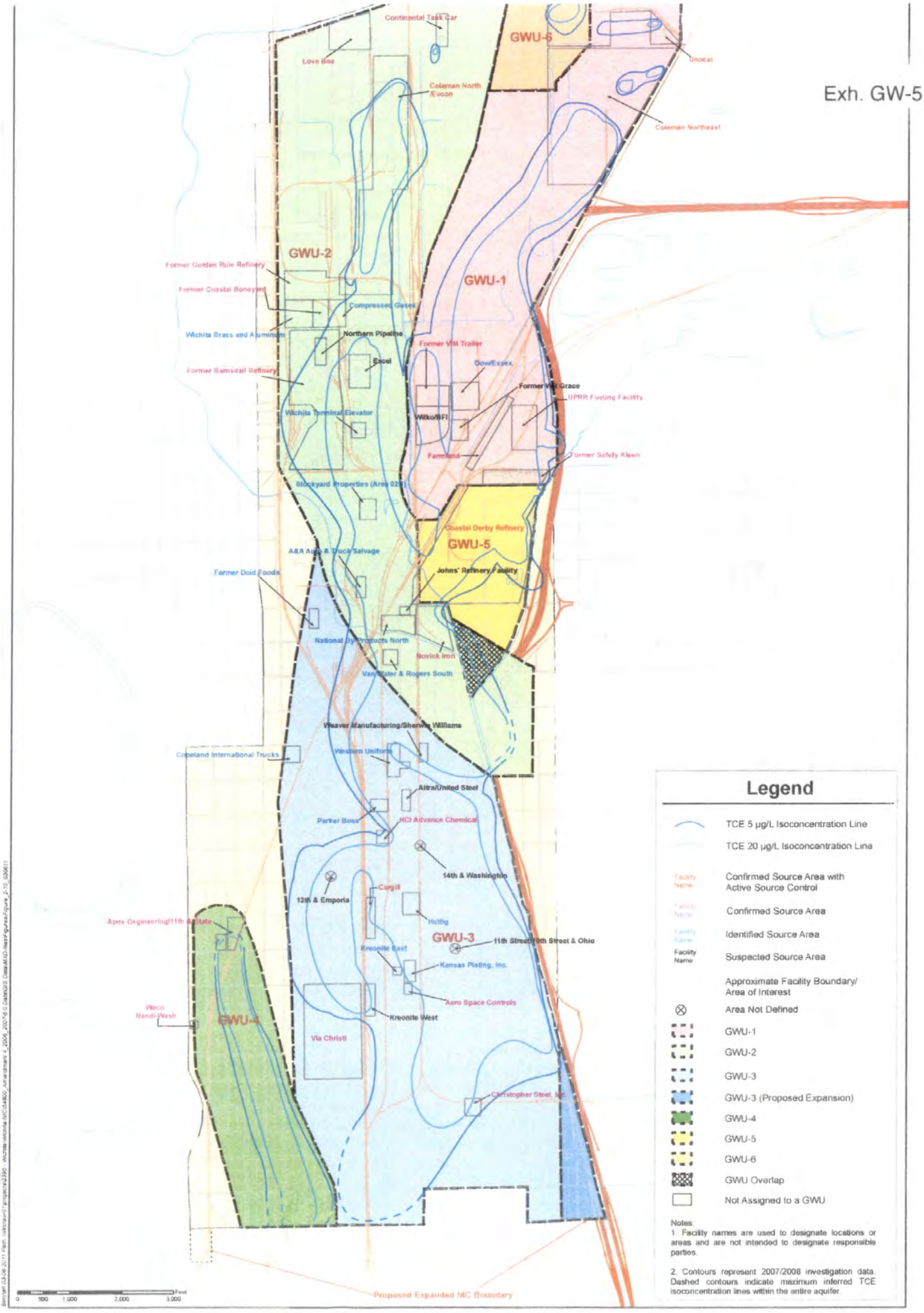
Figure 26
Proposed Groundwater Units and TCE Plume in Deep Aquifer
North Industrial Corridor (NIC)
Wichita, Kansas

Exh. GW-5


Continental Tank Car
GWU-6
Love Box
Unocal
Coleman North
/Evcon
Coleman Northeast
GWU-2
GWU-1
Former Golden Rule Refinery
Former Coastal Boneyard
Compressed Gases
Wichita Brass and Aluminum
Northern Pipeline
Former VIM Trailer
Excel
Dow/Essex
Former Ramsdall Refinery
Former W.R. Grace
UPRR Fueling Facility
Wichita Terminal Elevator
Wilko/BFI
Farmland
Former Safety Kleen
Stockyard Properties (Area 02B)
Coastal Derby Refinery
GWU-5
A&A Auto & Truck Salvage
Johns' Refinery Facility
Former Dold Foods
National By-Products North
Novick Iron
Van Water & Rogers South
Weaver Manufacturing/Sherwin Williams
Copeland International Trucks
Western Uniform
Altra/United Steel
Parker Boss
HCI Advance Chemical
14th & Washington
13th & Emporia
Cargill
Hutlig
Apex Engineering/11th & State
GWU-3
11th Street/10th Street & Ohio
Kreonite East
Kansas Plating, Inc.
Aero Space Controls
Waco
Handi-Wash
GWU-4
Kreonite West
Via Christi
Christopher Steel, Inc.
Proposed Expanded MC Boundary
0 500 1,000 2,000 3,000 Feet
Legend
TCE 5 µg/L Isoconcentration Line
TCE 20 µg/L Isoconcentration Line
Facility Name
Confirmed Source Area with Active Source Control
Facility Name
Confirmed Source Area
Facility Name
Identified Source Area
Facility Name
Suspected Source Area
Approximate Facility Boundary/ Area of Interest
Area Not Defined
GWU-1
GWU-2
GWU-3
GWU-3 (Proposed Expansion)
GWU-4
GWU-5
GWU-6
GWU Overlap
Not Assigned to a GWU
Notes:
1. Facility names are used to designate locations or areas and are not intended to designate responsible parties.
2. Contours represent 2007/2008 investigation data. Dashed contours indicate maximum inferred TCE isoconcentration lines within the entire aquifer.

Exh. GW-6
Group Exhibit

Appendix F
NIC FS Model Report
Attachment F3 – Water Level Trends and Particle Tracking Figures

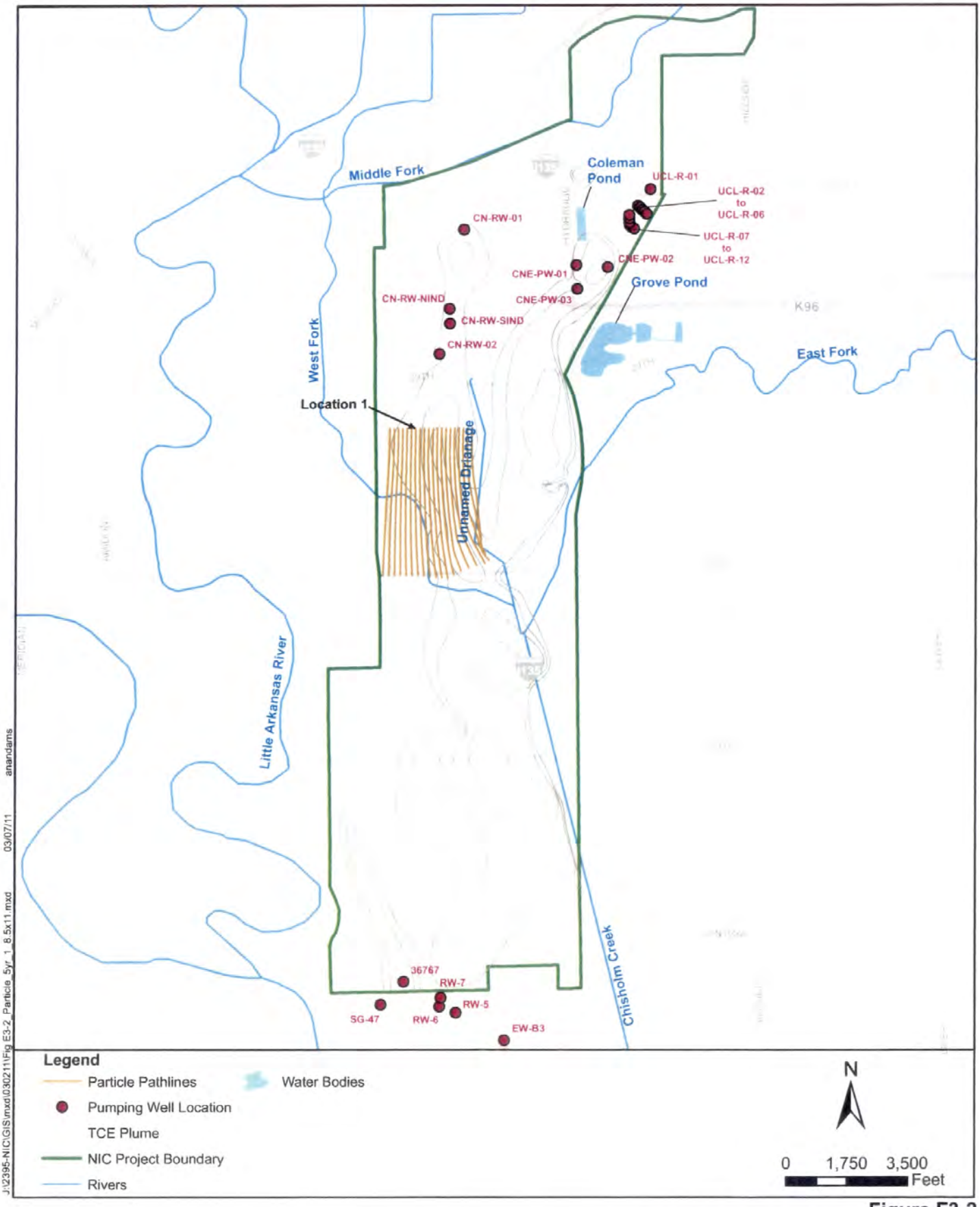


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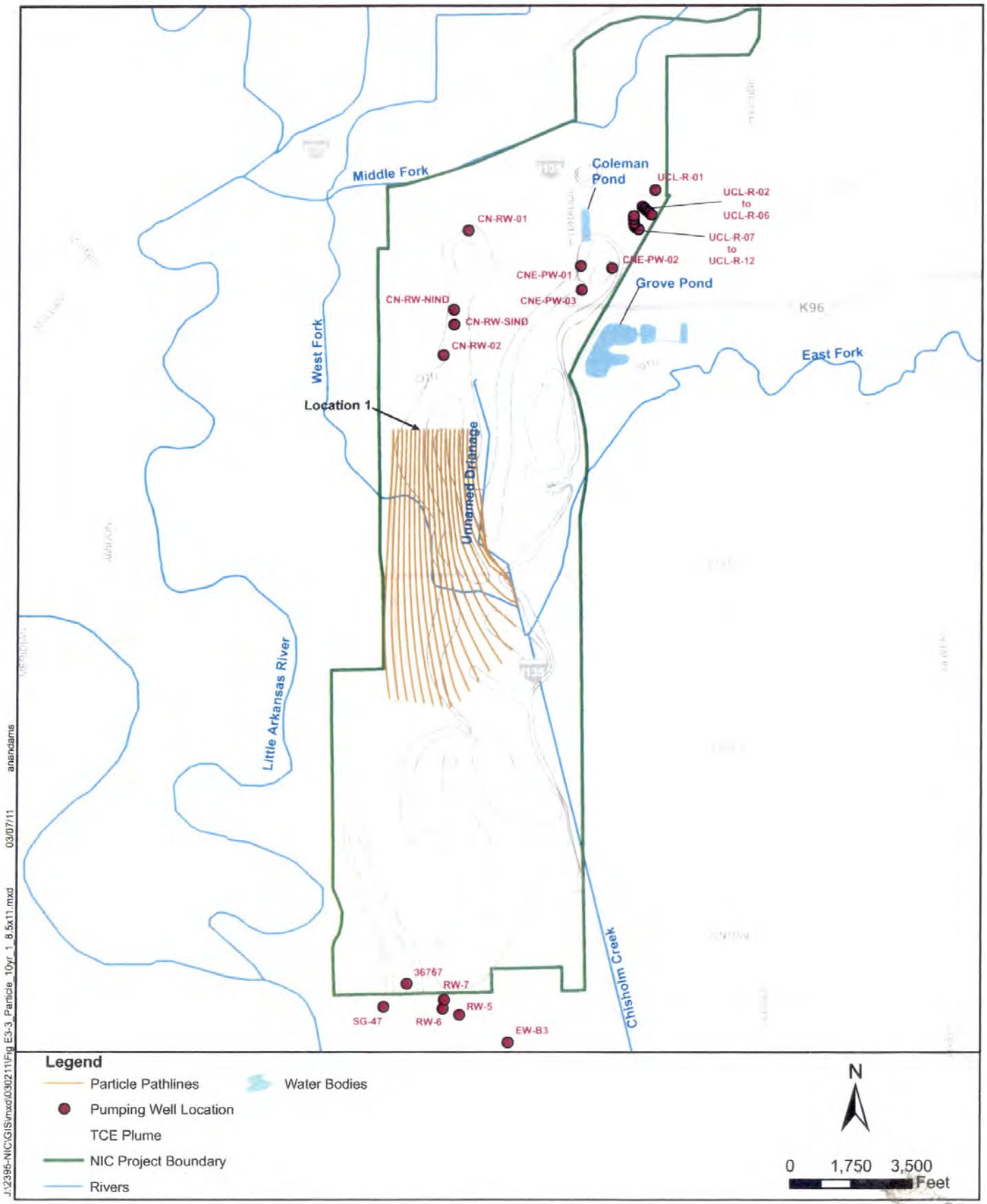
Figure F3-2
Particles Originating at Location 1
Simulated Particle Tracking Pathlines at the End of 5 Years
North Industrial Corridor (NIC)
Wichita, Kansas



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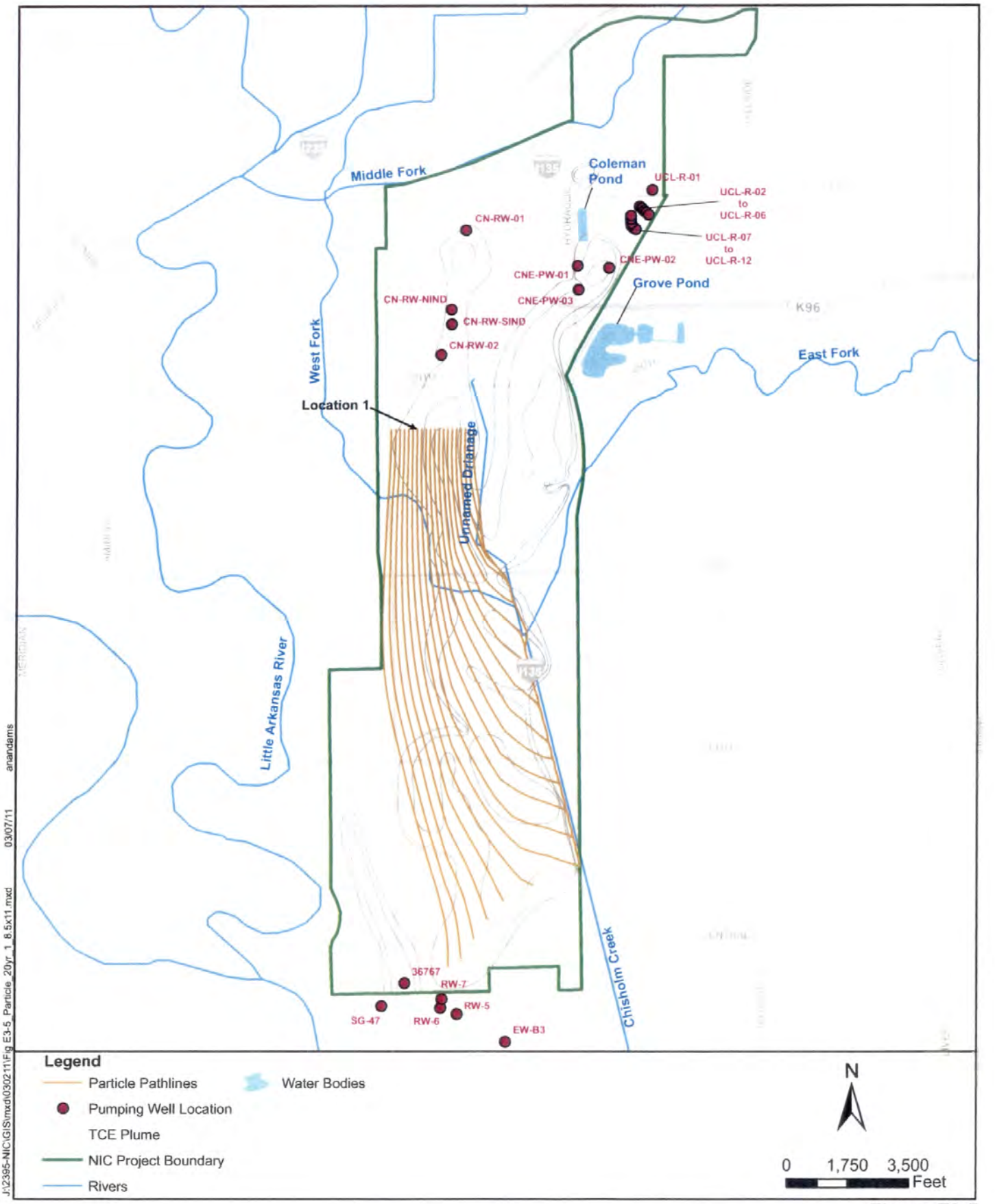
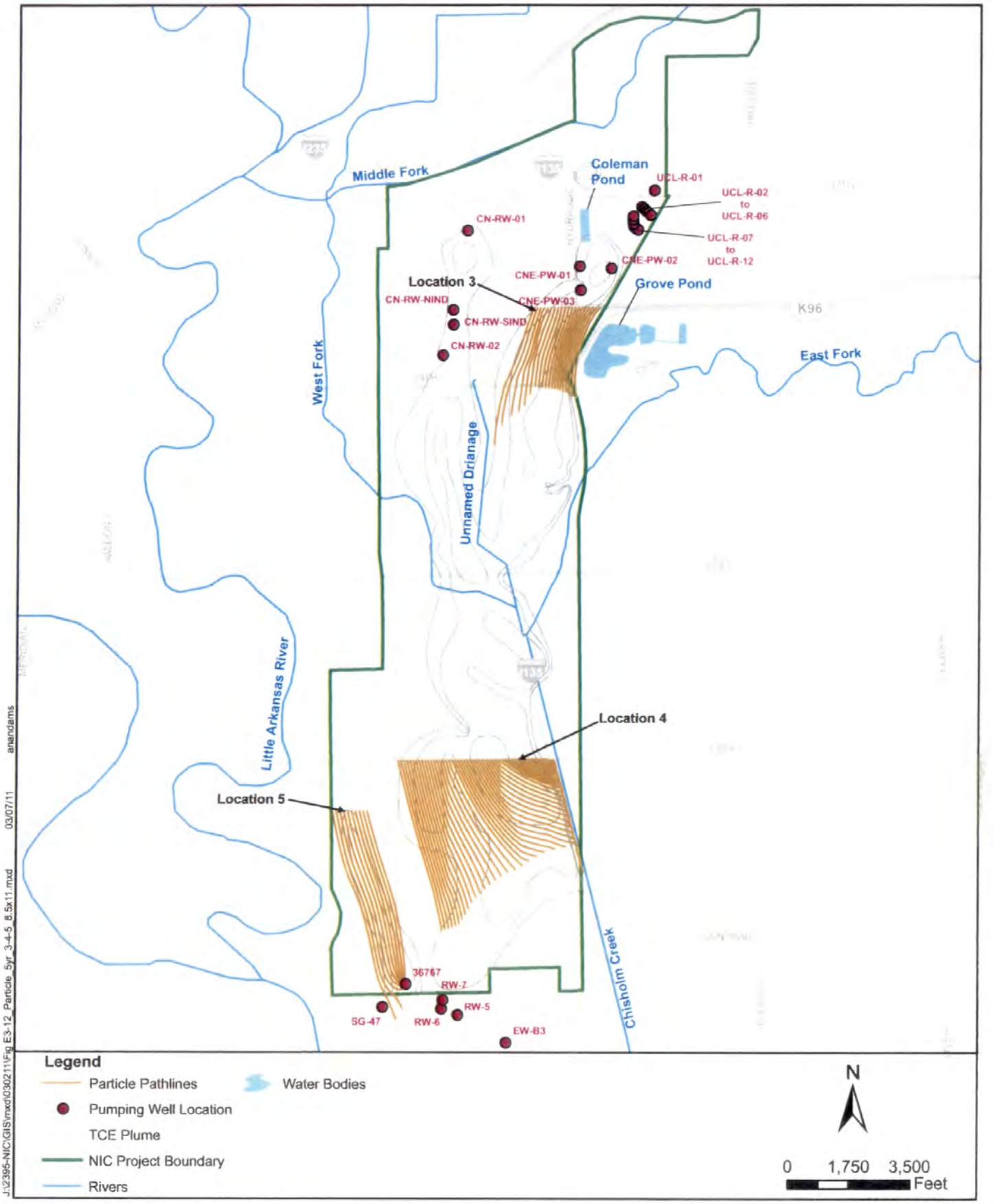
CDM

Figure F3-3
Particles Originating at Location 1
Simulated Particle Tracking Pathlines at the End of 10 Years
North Industrial Corridor (NIC)
Wichita, Kansas



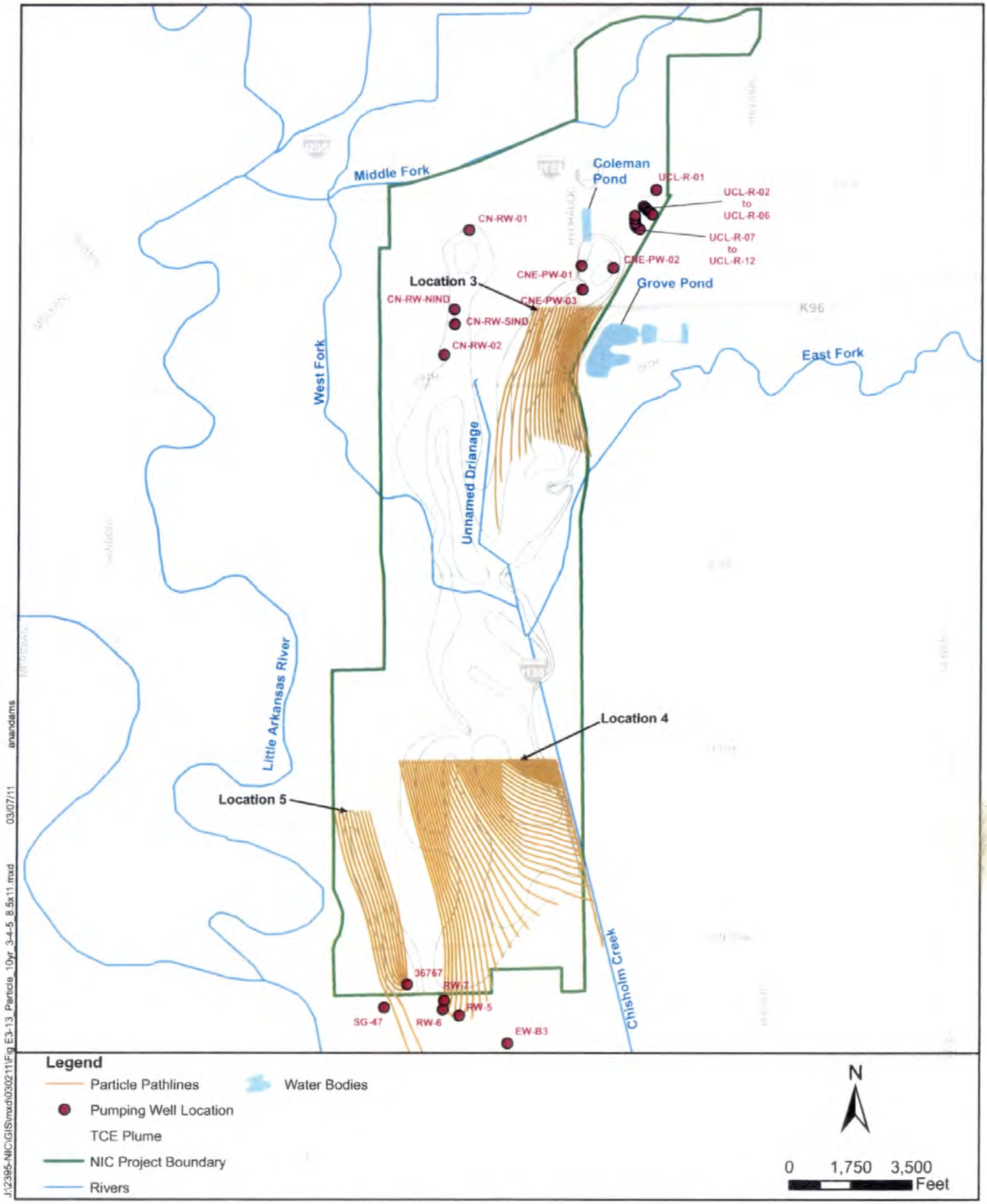
CDM

Figure F3-5
Particles Originating at Location 1
Simulated Particle Tracking Pathlines at the End of 20 Years
North Industrial Corridor (NIC)
Wichita, Kansas



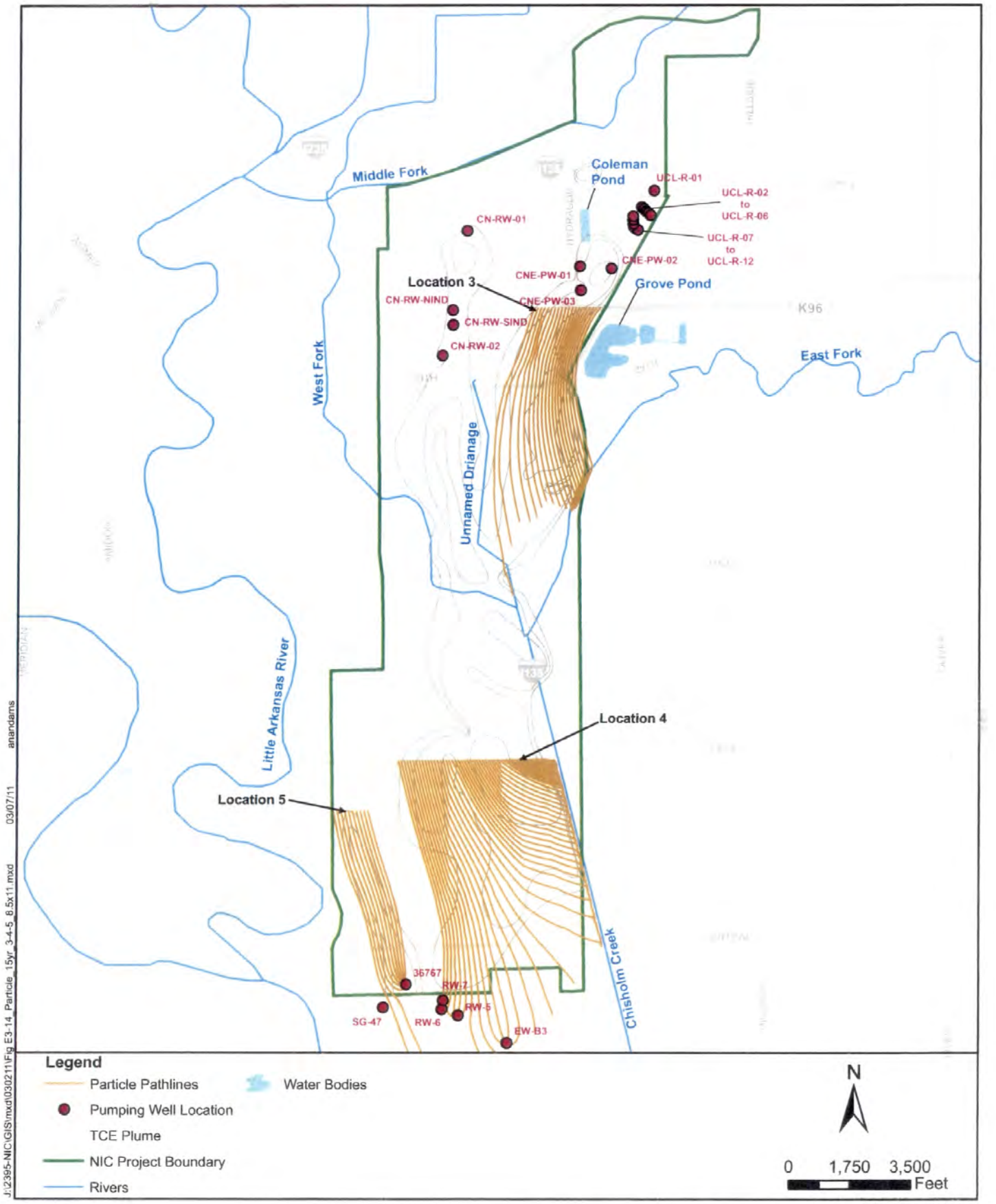
CDM

Figure F3-12
Particles Originating at Locations 3, 4 and 5
Simulated Particle Tracking Pathlines at the End of 5 Years
North Industrial Corridor (NIC)
Wichita, Kansas



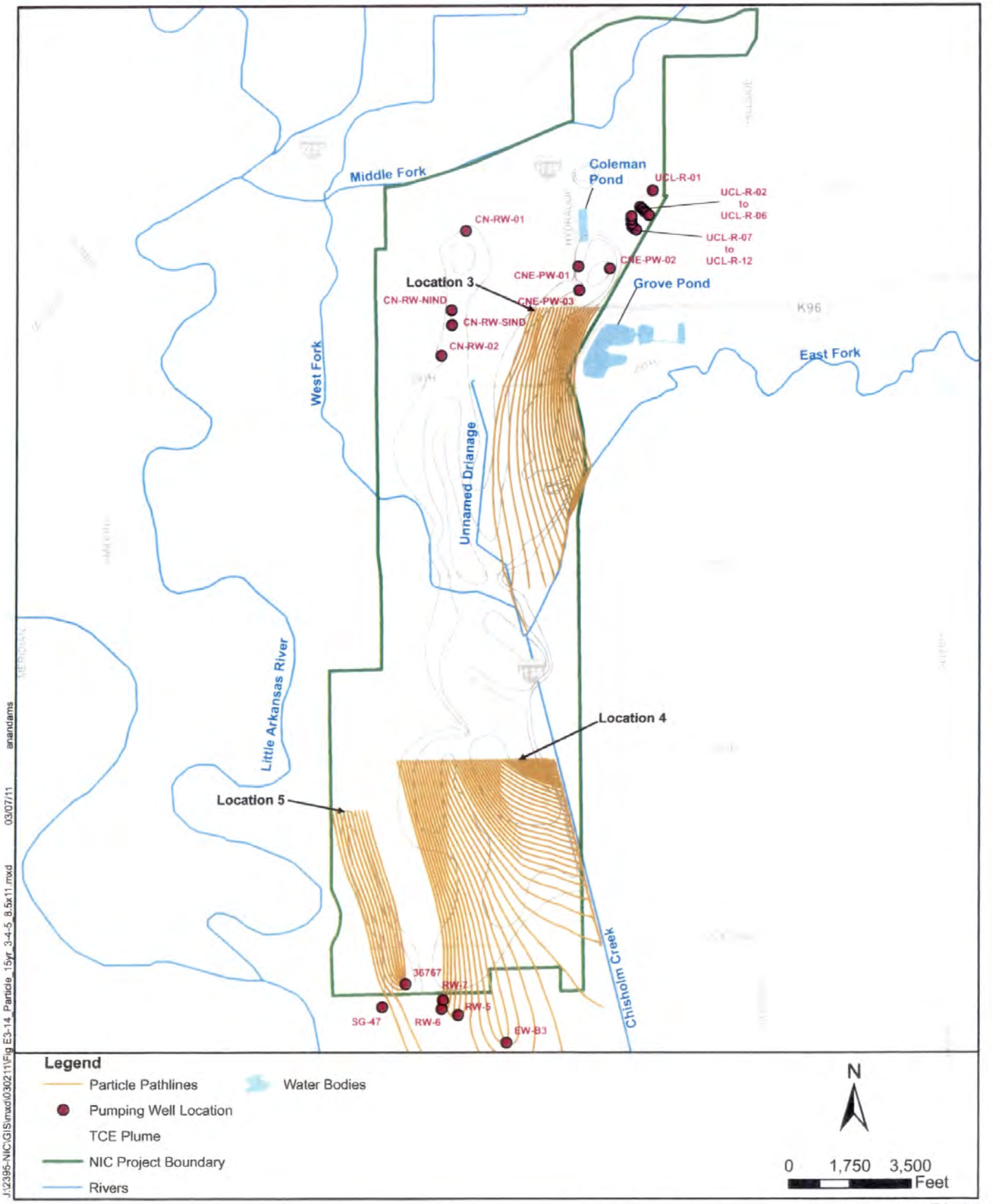
CDM

Figure F3-13
Particles Originating at Locations 3, 4 and 5
Simulated Particle Tracking Pathlines at the End of 10 Years
North Industrial Corridor (NIC)
Wichita, Kansas



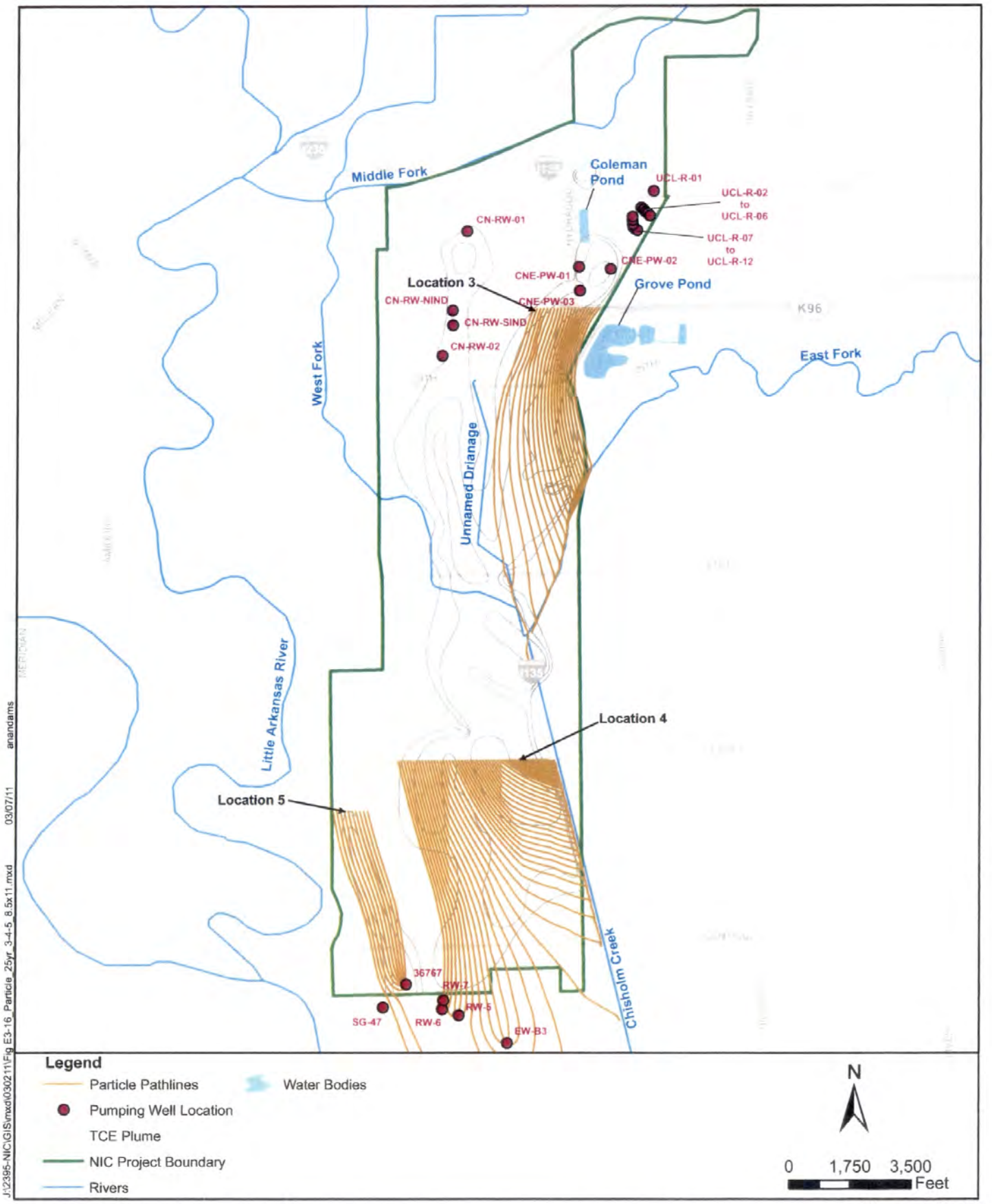
CDM

Figure F3-14
Particles Originating at Locations 3, 4 and 5
Simulated Particle Tracking Pathlines at the End of 15 Years
North Industrial Corridor (NIC)
Wichita, Kansas



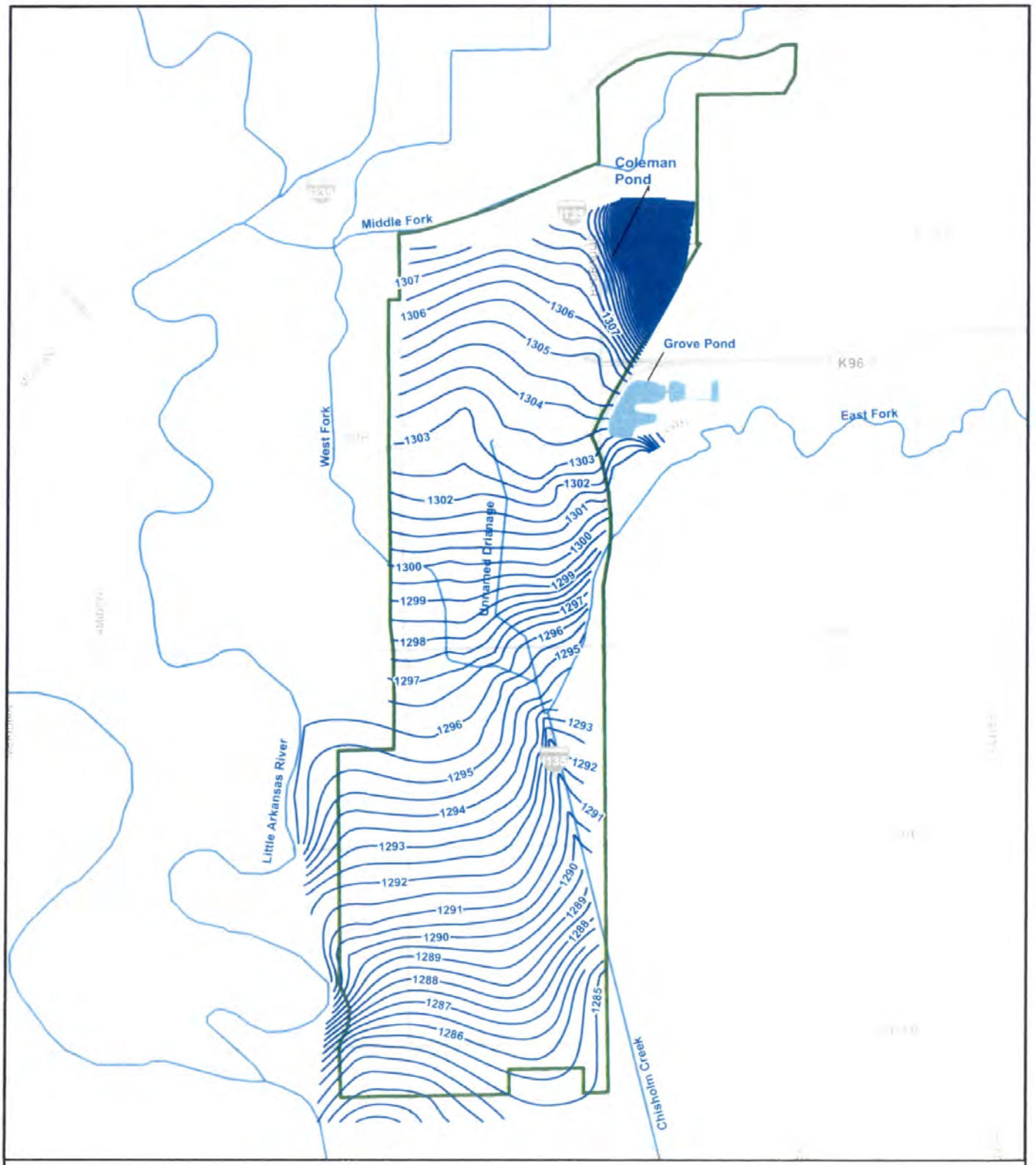
CDM

Figure F3-15
Particles Originating at Locations 3, 4 and 5
Simulated Particle Tracking Pathlines at the End of 20 Years
North Industrial Corridor (NIC)
Wichita, Kansas



CDM

Figure F3-16
Particles Originating at Locations 3, 4 and 5
Simulated Particle Tracking Pathlines at the End of 25 Years
North Industrial Corridor (NIC)
Wichita, Kansas



Legend

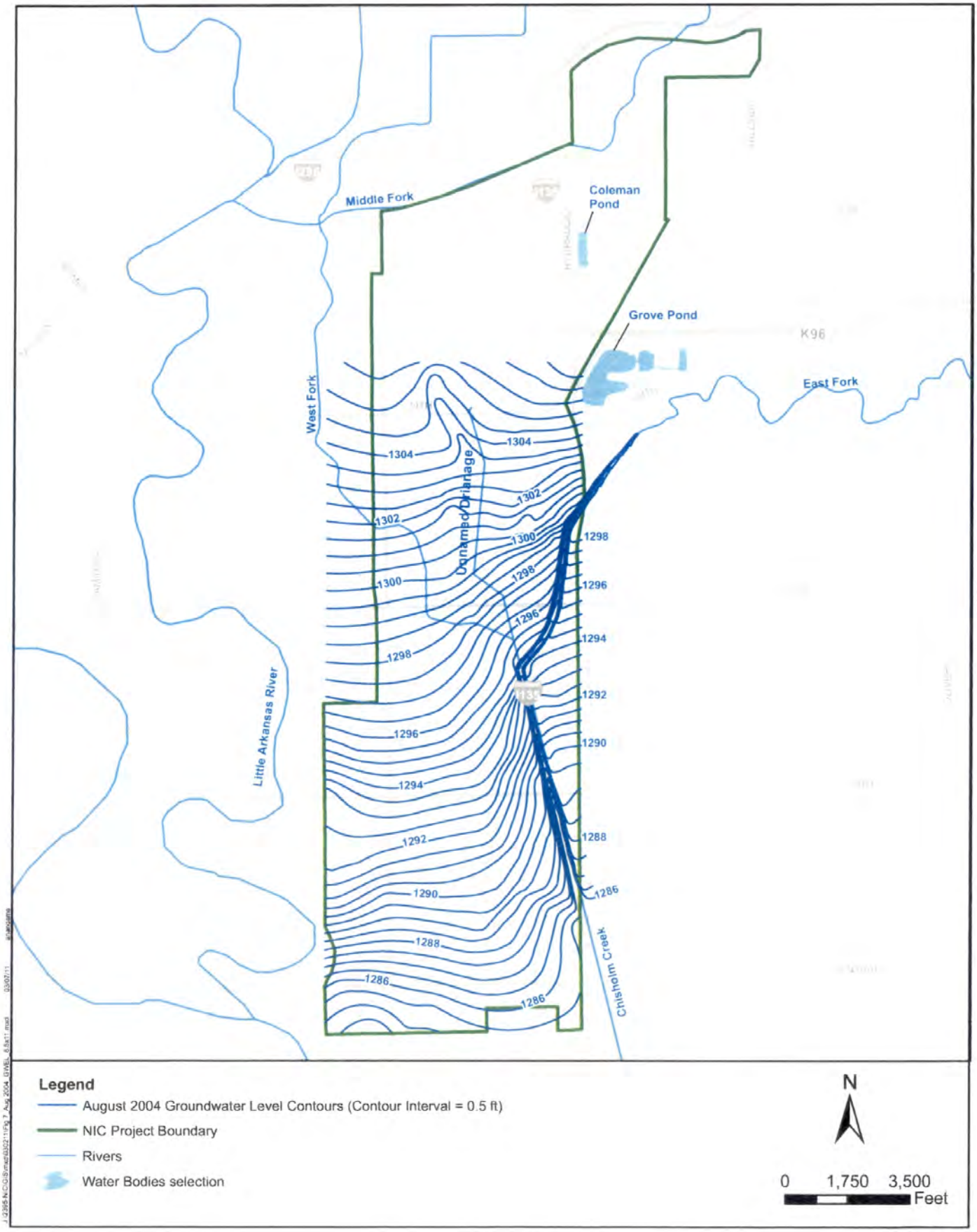
- August 2001 Groundwater Level Contours (Contour Interval = 0.5 ft)
- NIC Project Boundary
- Rivers
- Water Bodies

N

0 1,750 3,500 Feet

CDM

Figure 6
Potentiometric Surface Map for August 2001
North Industrial Corridor (NIC)
Wichita, Kansas



CDM

Figure 7
Potentiometric Surface Map for August 2004
North Industrial Corridor (NIC)
Wichita, Kansas

Exh. GW-7
Group Exhibit

(Excerpts)

REPORT ON SAMPLING INVESTIGATION
JOHNS' REFINERY COMPANY
(a.k.a. Super Refined Oil Co.)
WICHITA, KANSAS
June 13, 1984

SUPERFUND SITE: #P6

U.S. Environmental Protection Agency
Region VII
Environmental Services Division

Date: December 21, 1984

by

Paul E. Doherty
Environmental Engineer
Emergency Planning and Response Branch

SUPERFUND
JAN 7 1984
SITE LOG

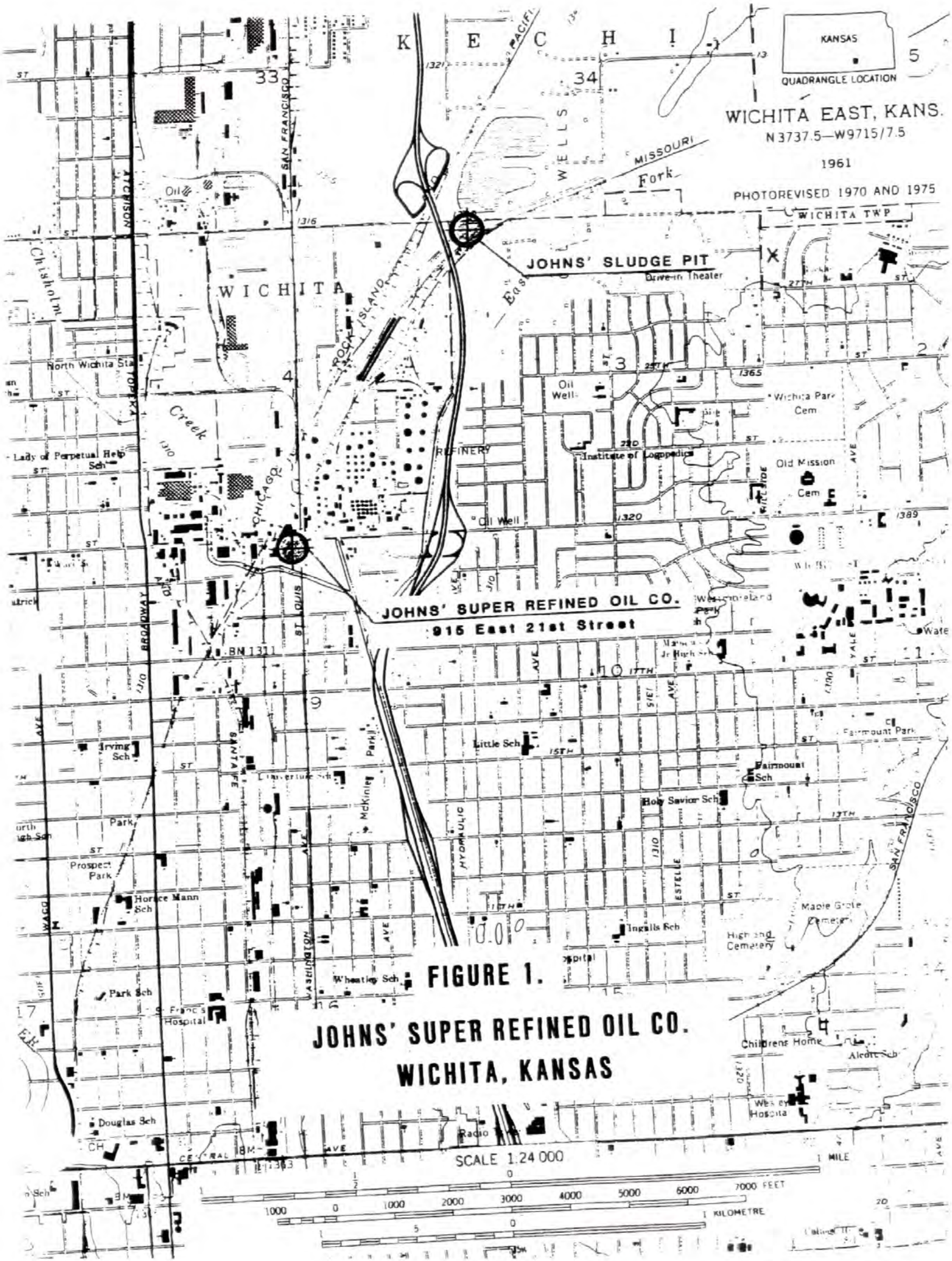
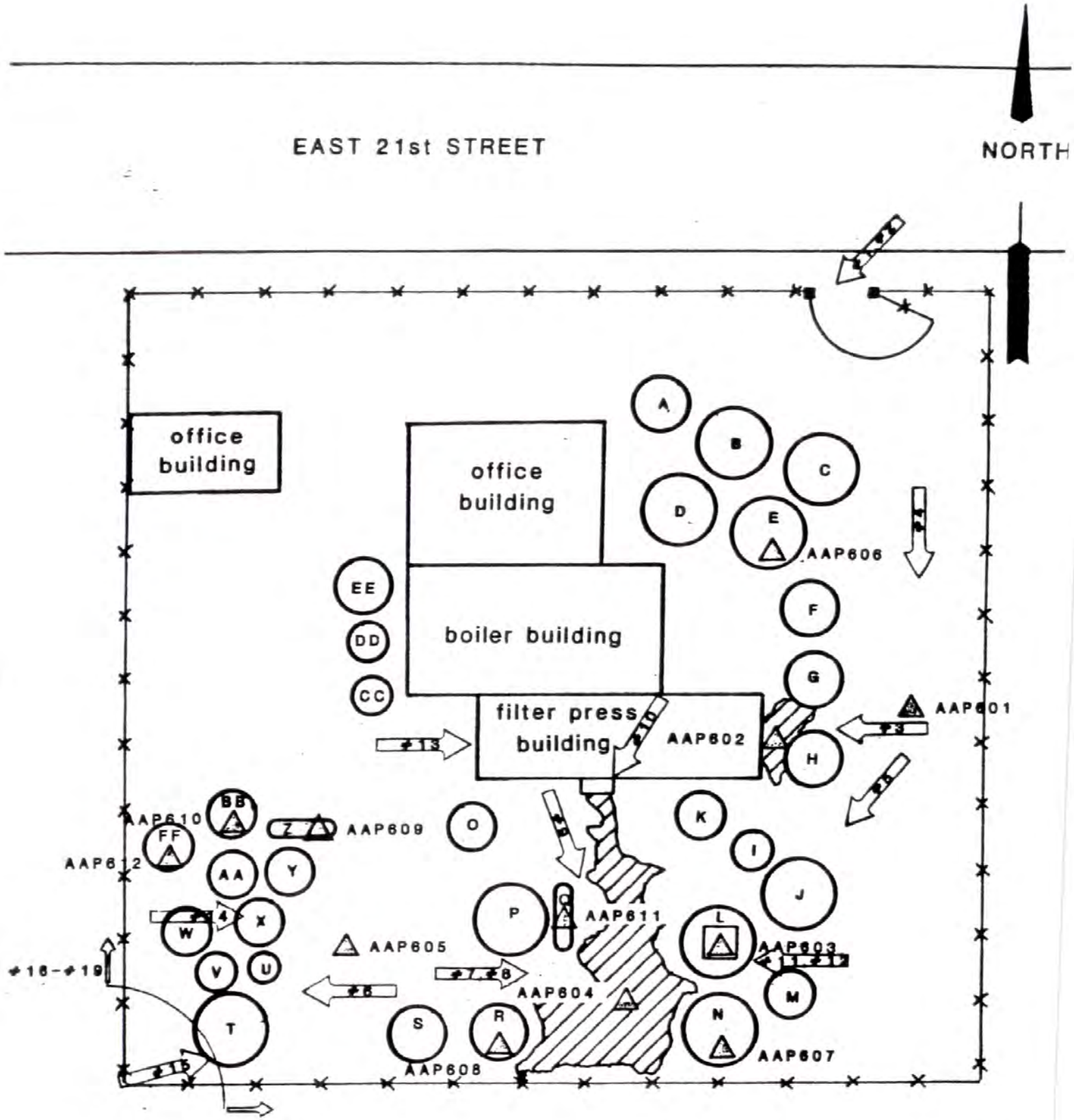


FIGURE 1.

JOHNS' SUPER REFINED OIL CO.

WICHITA, KANSAS



△ -Sample Locations

Site Photos

FIGURE 2. SITE SKETCH
JOHNS' REFINERY S
915 EAST 21st STRE
WICHITA, KANSAS

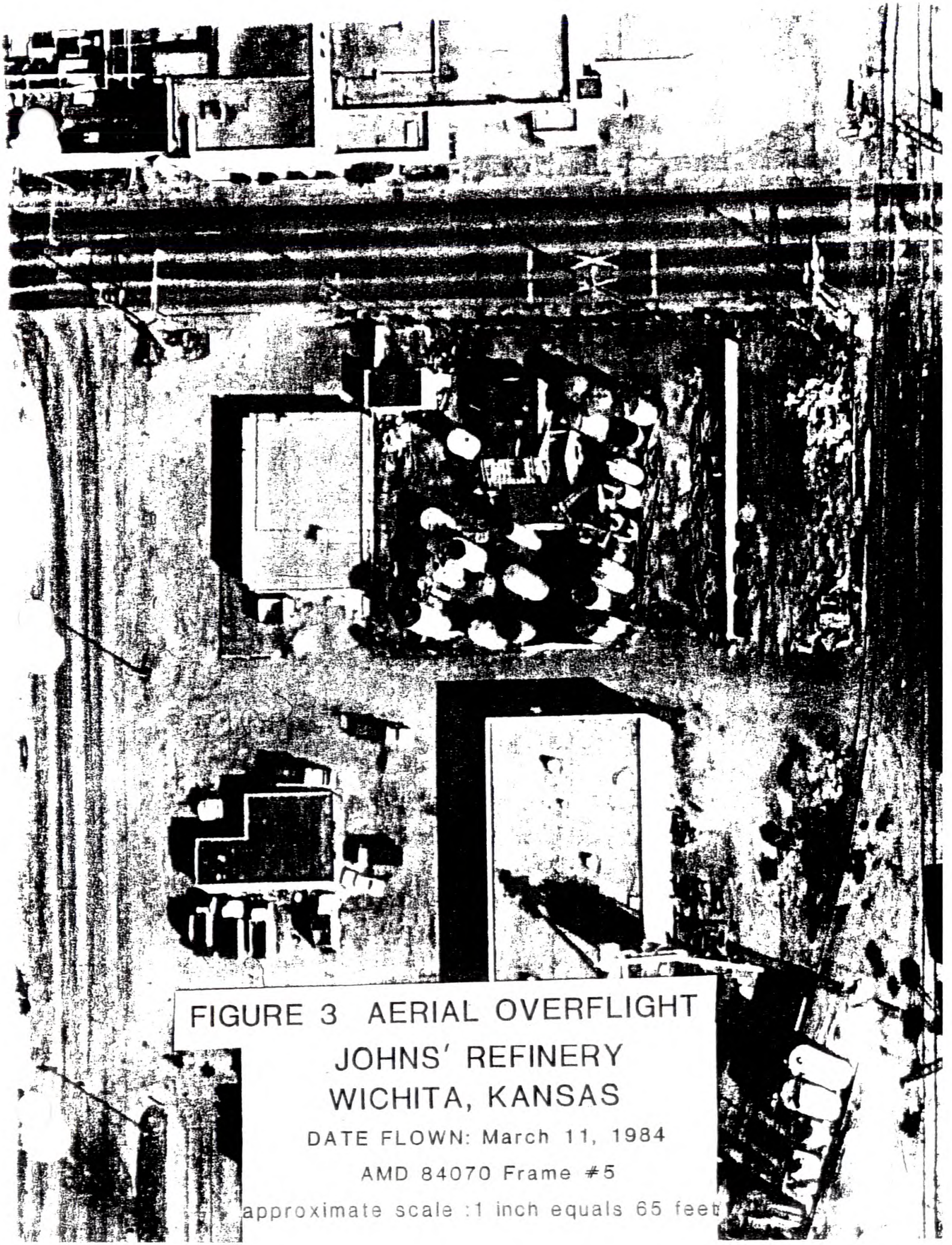


FIGURE 3 AERIAL OVERFLIGHT

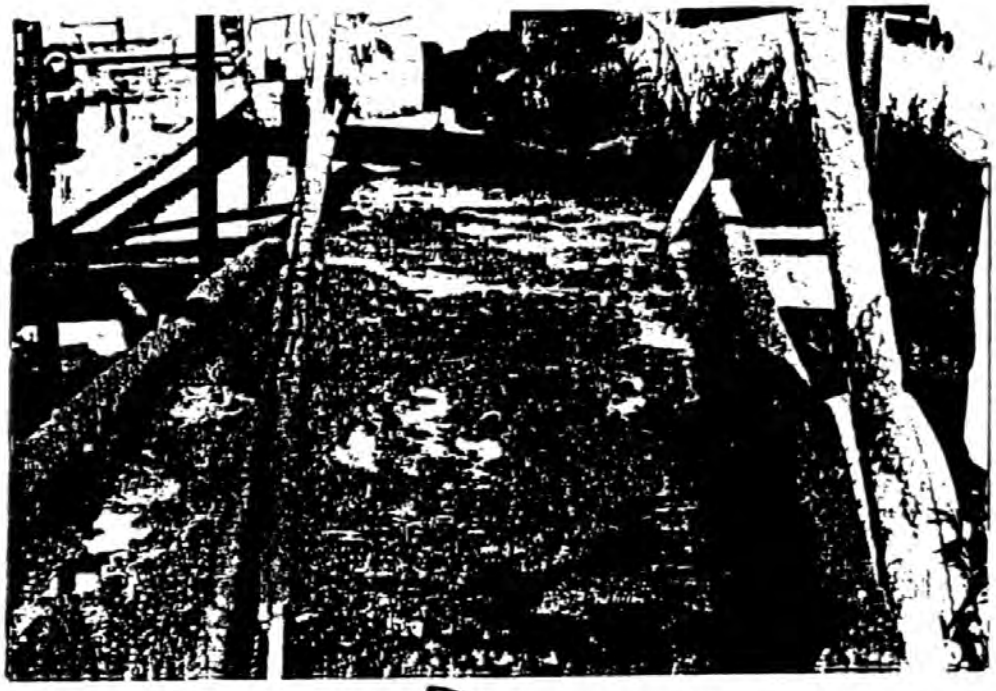
JOHNS' REFINERY

WICHITA, KANSAS

DATE FLOWN: March 11, 1984

AMD 84070 Frame #5

approximate scale :1 inch equals 65 feet



Photographer: PAUL DOHERTY

Witness: JIM JACKSON

Date: 6/13/89

Time:

Direction: WEST

PHOTO # 11 Subject: SLUDGE HOPPER LOCATED UNDER TANK L. LOCATION OF SAMPLE # AAP603

Facility: JONES OIL REFINERY (WICHITA) KS

Photographer: PAUL DOHERTY

Witness: JIM. JACKSON

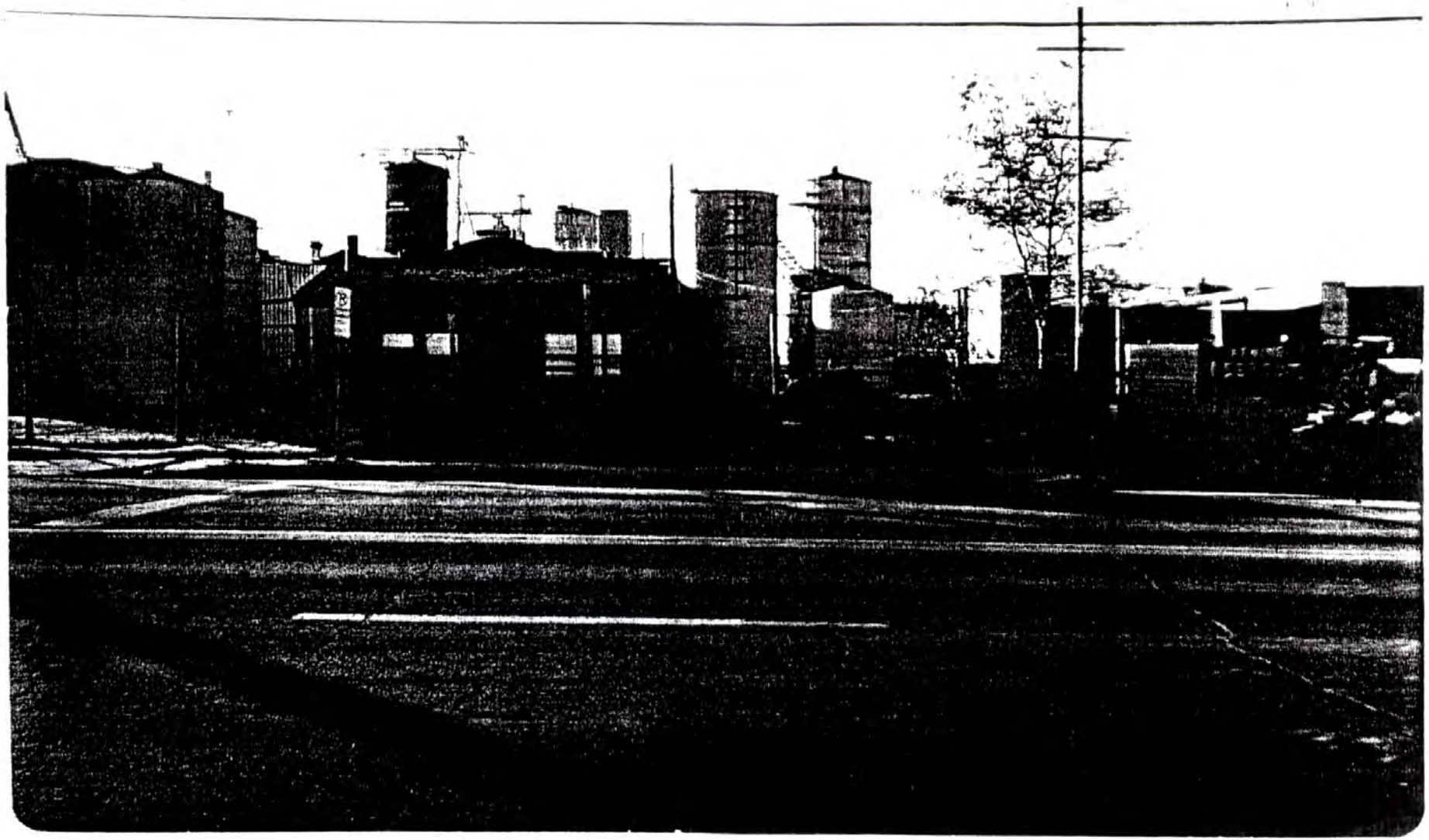
Date: 6/13/89

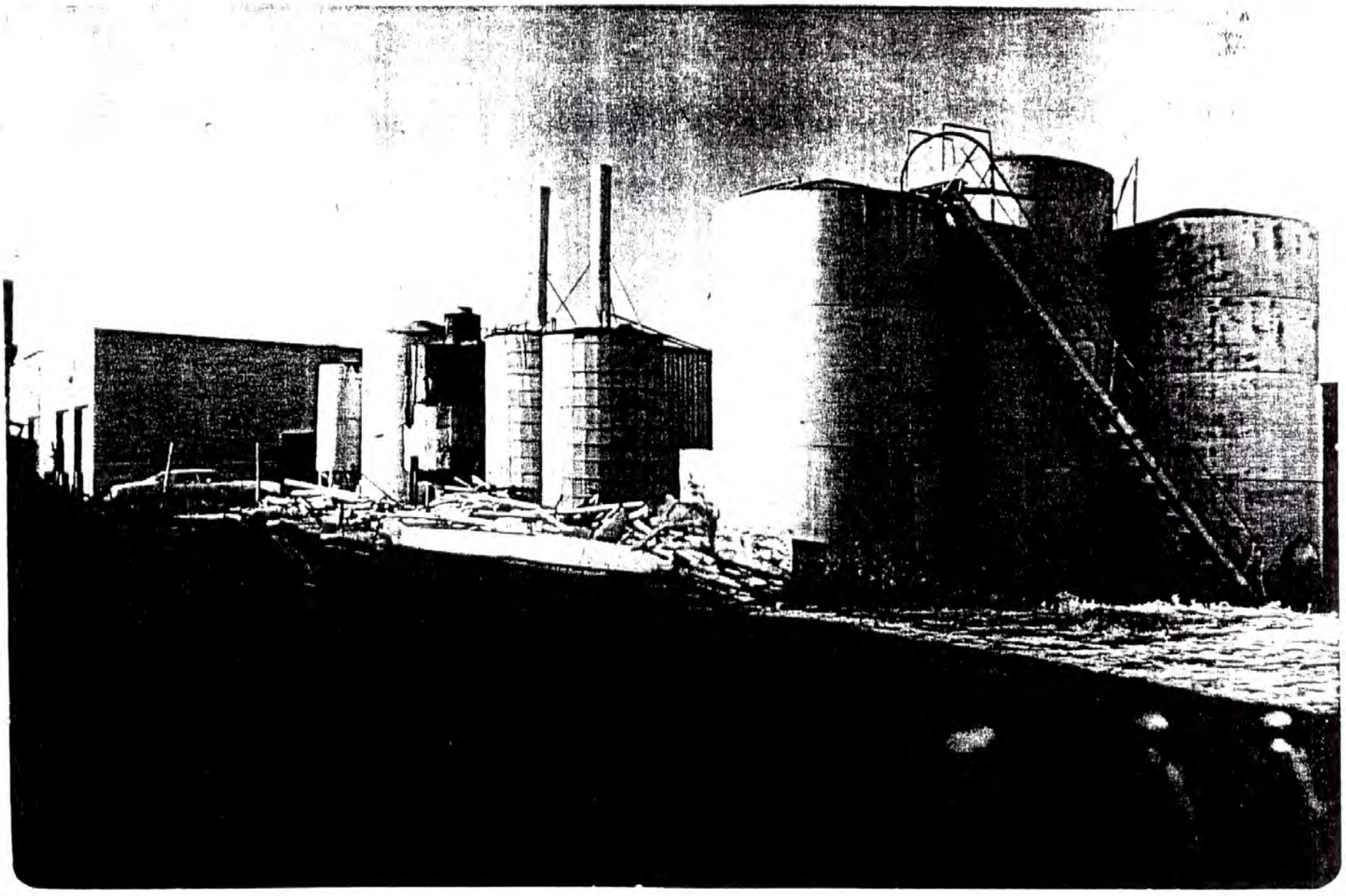
Time:

Direction: NORTH

PHOTO # 12 Subject: CLOSE-UP OF SLUDGE IN HOPPER UNDER TANK L LOCATION OF SAMPLE # AAP603

Facility: JONES' OIL REFINERY, WICHITA, KS





EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	000010189

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [X] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [X] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

GAL ~~TONS~~ >20,000

CUBIC YARDS >700

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [X] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [X] G. FLAMMABLE
- [X] 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	5000	GALLONS	ESTIMATE
OLW	OILY WASTE	15000	GALLONS	ESTIMATE
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES	5,000	GALLONS	ESTIMATE
MES	HEAVY METALS	>700	CY	CONTAMINATED SOIL (EST)

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
SLU	PCB	1336-36-3	OPEN TANKS	348	PPM
OLW	PCB	1336-36-3	OPEN TANKS	742	PPM
OLW	NAPTHALENE	91-20-3	OPEN TANK	820	PPM
OLW	BENZENE	71-43-2	OPEN TANK	25	PPM
BAS	SODIUM HYDROXIDE	1310-73-2	OPEN TANK	>13	PH
MES	LEAD		CONTAMINATED SOIL	3180	PPM

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)

SAMPLE ANALYSIS
SEE INVESTIGATION REPORT

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE: KS | 02 SITE NUMBER: 0000010189

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NON DOCUMENTED TO DATE. POSSIBLE CONTAMINATION PROBLEM IF SPILL POOL DRAINING TO SUMP REACHES GROUNDWATER

01 ☒ B. SURFACE WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

UNLIKELY UNLESS SUMP PIT DRAINS TO SEWER DISCHARGING TO SURFACE WATER

01 ☒ C. CONTAMINATION OF AIR
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

POSSIBLY TOXIC FUMES WOULD BE GENERATED IN EVENT OF FIRE

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

OPEN TANKS AND STANDING ~~[illegible]~~ POOLS OF WASTE OIL AND DISTILLATION FRACTION PRESENT FIRE AND EXPLOSION HAZARD

01 ☒ E. DIRECT CONTACT
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

ALTHOUGH PREVIOUSLY FENCED THE LOT IS NO LONGER SECURE. SITE SECURITY IS NOT CONSIDERED ADEQUATE TO PREVENT DIRECT CONTACT

01 ☒ F. CONTAMINATION OF SOIL
02 ☒ OBSERVED (DATE: 6/15/84)
03 AREA POTENTIALLY AFFECTED: 1 (Acres)
04 NARRATIVE DESCRIPTION

PCB IN SOIL = 95 PPM

LEAD IN SOIL = 3180 PPM

01 ☐ G. DRINKING WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

UNLIKELY

01 ☐ H. WORKER EXPOSURE/INJURY
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NON DOCUMENTED

01 ☐ I. POPULATION EXPOSURE/INJURY
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NON DOCUMENTED

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE: KS | 02 SITE NUMBER: 0000101139

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NOT SIGNIFICANT DUE TO LOCATION

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

NOT SIGNIFICANT DUE TO LOCATION

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

UNLIKELY

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE: 6/13/84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

STANDING POOL OF OILY LIQUID DRAINING TO SUMP (PCB = 205 PPM)

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: 6/13/84) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

STANDING POOL OF OILY LIQUID WAS OBSERVED DRAINING TO SUMP. SUMP OUTLET WAS UNKNOWN MAY DUMP TO SEWER

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NOT DOCUMENTED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: LOCATED IN ~~URBAN~~ INDUSTRIAL AREA OF URBAN LOCALITY

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

SEE SITE INSPECTION REPORT EPA/R DECEMBER 84 FOR NARRATIVE

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	000010189

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				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE	DEFUNCT	OPERATION		

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND	>20,000	GALLONS
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER SPILL (Specify)	>2000	GALLONS

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☒ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER _____ (Specify)

05 OTHER
- ☒ A. BUILDINGS ON SITE

3 (ATTACHED)

06 AREA OF SITE

1 (Acres)

07 COMMENTS

SEE EPA/R SITE INSPECTION REPORT DEC '84

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.

OPEN TANK OF PCB AND CAUSTIC WASTE OIL
STANDING POOL OF PCB LIQUID
CONTAMINATED SOIL

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS SITE WAS FORMERLY FENCED AND LOCKED BUT FENCE SECTION WAS REMOVED

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

SEE EPA/R INSPECTION REPORT DEC '84

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE: KS 02 SITE NUMBER: 000010189

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. > 3 (mi)

B. > 3 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☒ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER ?

03 DISTANCE TO NEAREST DRINKING WATER WELL > 3 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
20-50 (ft)	SW	(ft)	(gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

SEE REPORT ON GROUNDWATER INVESTIGATION, EPA R 6/27/84

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☐ NO	COMMENTS	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
ARKANSAS RIVER	☐	1.5 (mi)
LITTLE ARKANSAS	☐	1.0 (mi)
CHISHOLM CREEK	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 2500 EST	B. 9500 EST	C. 22,000 EST
NO. OF PERSONS	NO. OF PERSONS	NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 1/8 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: >7000

04 DISTANCE TO NEAREST OFF-SITE BUILDING: 1/10 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

SITE LOCATED IN INDUSTRIAL AREA OF URBAN WICHITA POPULATION ESTIMATES BASED ON USGS MAP AND DENSITY ESTIMATES FOR CITY OF WICHITA (280,000 / 905 H)

DATE : MARCH 12, 2014

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Exhibit GW-9

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*

January 25, 1989

Mr. Bernard Novick
Novick Iron & Metal
1007 E. 21st Street
Wichita, Kansas 67214

Dear Mr. Novick:

I recently received a telephone call from Mr. Joe Frick, Wichita Welding, regarding your inquiry about joining the 29th & Meade group, handling your cleanup as part of the overall 29th & Meade cleanup. I certainly would caution you against this approach as it would be vastly more expensive. Beyond the cost, the two problems are entirely different and unrelated. Yours is primarily a surface soils heavy metals problem whereas 29th & Meade is a TCE groundwater problem.

You had asked about consultants. Any of the following are local, can do the job, and all have or are currently working with KDHE on various cleanup projects.

1. Groundwater Technologies Inc.
   Phone: 262-4407

2. HWS Technologies Inc.
   Phone: 264-4328 Dave Jervitt

3. Terracon Consultants SC Inc.
   Phone: 262-0171

838-1071

Please contact me at 316-651-5503 by January 31, 1989 if you believe the schedule set by my December 23, 1988 letter is not one with which you can comply. We want a compliance date which is realistic and can be complied with. We will then expect the compliance date to be honored.

Sincerely yours,

Ralph E. O'Connor

Ralph E. O'Connor
District Geologist
Bureau of Environmental Remediation

REO:ss

pc: Larry Knoche
Dale Stuckey
File