

**Excavation Report  
For  
Presto Convenience Store #25  
602 W. 9<sup>th</sup> Street  
Lawrence, KS**

*KDHE Project Code: U4-023-13799*

*KDHE Facility ID: 28740*

*Section 31, Township 12 South, Range 20 East  
NW NW SW NW; SW SW NW NW; SE SW NW NW*

*Section 36, Township 12 South, Range 19 East  
NE NE SE NE*

*August 4, 2006*

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**EXCAVATION REPORT TABLES**  
**PROJECT: PRESTO CONVIENCE, L.L.C. KDHE ID: U4-023-13799**

**TABLE 1.1 - SUMMARY OF WORK COMPLETED**

TANKS REMOVED	CONTAMINATED SOIL REMOVED (cubic yards)	SOIL TAKEN TO LANDFARM (cubic yards)	SOIL TAKEN TO LANDFILL (tons)	CLEAN SOILS REMOVED (cubic yards)	CLEAN BACKFILL (cubic yards)	EXCAVATED AREA DIMENSIONS (feet)
4	3,996.44	0	3,996.44	0	1347.02 (gravel)	80 x 53 x 16

**TABLE 1.2A - SOIL CHARACTERIZATION**

LABORATORY ANALYSES (measured in mg/kg or ppm)														
LABORATORY METHODS			(BTEX, MTBE, DCA, NAPHTHALENE, EDB: SW846-8260)								EPA 6010B	OA1 - SW846-8015	OA2 - SW846-8015	
SAMPLE ID	SAMPLE DEPTH	SAMPLE DATE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	METHYL TERT BUTYL ETHER (MTBE)	1,2 DICHLORO-ETHANE (DCA)	NAPHTHALENE	LEAD	TPH GAS RANGE ORGANICS	TPH DIESEL RANGE ORGANICS	FUEL TYPE	
SS1	11.6'	5/1/06	NA	NA	NA	NA	NA	NA	NA	NA	820 [10]	154 [20]	GR	
T3-S2	14'	5/9/06	ND [0.05]	ND [0.05]	ND [0.05]	0.86 [0.05]	ND [0.05]	ND [0.05]	0.50 [0.05]	NA	115 [10]	ND [20]	NA	
UST Excavation		5/10/06	0.66 [0.05]	11.4 [0.05]	3.93 [0.05]	23.0 [0.05]	ND [0.05]	ND [0.05]	4.96 [0.05]	ND [5.00]	317 [10]	76 [20]	GR	
UST EXC S-3	17'	5/11/06	ND [0.05]	10.9 [0.05]	4.64 [0.05]	20.8 [0.05]	ND [0.05]	ND [0.05]	3.63 [0.05]	9.99 [5.00]	1,070 [10]	99 [20]	GR	
UST EXC S-4	15'	5/11/06	ND [0.05]	1.20 [0.05]	1.56 [0.05]	6.60 [0.05]	ND [0.05]	ND [0.05]	1.66 [0.05]	11.4 [5.00]	562 [10]	34 [20]	GR	
TIER 2 RBSL	Residential		9.8 n	930 n	650 s	700 s	2,400 n	4.7 c	100 n	0.09 c	220	2,000 n		
	Non Residential		17 c	1,000 s	650 s	700 s	15,000 n	7.3 c	320 n	0.2 c	450	20,000 n		
	RES STGW		0.08	40	55	700 s	0.09	0.04	39	0.0006	39	3000		
	NONR STGW		0.08	40	55	700 s	0.09	0.04	140	0.0006	150	15,000		

**Sample Location Descriptions:**

SS1 Collected from the original trench that was dug along the east side of the UST basin in city easement at 11.6 feet bgs.

T3-S2 Collected from the trench along the law office at 14 feet bgs.

UST Excavation Collected from UST excavation central part of basin.

UST EXC S-3 Collected from the southwestern part of the UST excavation at 17 feet bgs.

UST EXC S-4 Collected from the southcentral part of the UST excavation at 15 feet bgs.

NOTE: All soil samples were collected for the landfill solid waste disposal authorization (SWDA). At the direction of KDHE, no confirmation samples were collected.

**TABLE 1.2 ABBREVIATIONS AND REFERENCES**

NA: Not analyzed.

ND: Not detected above the method detection limit in parenthesis.

RBSL: Risk Based Screening Levels, from Appendix A of the KDHE RSK Manual.

GR: Gasoline Range

mg/kg or ppm: milligrams per kilogram or parts per million

ug/l or ppb: micrograms per liter or parts per billion

RES STGW: Residential Scenario for Soil to Groundwater.

NONR STGW: Non-Residential Scenario for Soil to Groundwater.

n: non-carcinogenic risk, HI=1

c: carcinogenic risk, risk=1X10<sup>-5</sup>

s: soil saturation

NOTE: Bold concentration exceed the Tier 2 RBSL.

NOTE: Calculations for clean backfill volume are included in the appendices.

Reference: Analytical data sheets for all samples are included in the appendices.

**EXCAVATION REPORT TABLES**  
**PROJECT: PRESTO CONVIENCE, L.L.C. KDHE ID: U4-023-13799**

**TABLE 1.2B - GROUNDWATER ANALYTICAL RESULTS**

LABORATORY ANALYSES (measured in ug/l or ppb)											
LABORATORY METHODS		BTEX, MTBE, DCA, NAPHTHALENE: SW846-8260							OA1 - SW846-8015	OA2 - SW846-8015	
SAMPLE ID	SAMPLE DATE	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES	METHYL TERT BUTYL ETHER (MTBE)	1,2-DICHLORO-ETHANE (DCA)	NAPHTHALENE	TPH GAS RANGE ORGANICS	TPH DIESEL RANGE ORGANICS	FUEL TYPE
T3-S1	5/9/06	10,100 [250]	34,900 [250]	3,610 [250]	15,400 [250]	ND [250]	ND [250]	1,010 [250]	4,430 [5000]	NA	NA
WW-1	6/5/06	20,200 [250]	38,800 [250]	3,640 [250]	14,900 [250]	1,230 [250]	ND [250]	339 [250]	NA	NA	NA
WW-2	6/5/06	18,200 [250]	37,500 [250]	3,720 [250]	15,700 [250]	1,100 [250]	ND [250]	511 [250]	NA	NA	NA
TIER 2 RBSL	RES	5 m	1,000 m	700 m	10,000 m	20 h	5 m	100 n	500	500	
	NONR	5 m	1,000 m	700 m	10,000 m	20 h	5 m	350 n	500	720	

**TABLE 1.2C - TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) ANALYSIS**

			LABORATORY ANALYSES (measured in mg/L or ppm)		
SAMPLE ID	SAMPLE DEPTH	SAMPLE DATE	TCLP VOLATILES: BENZENE (EPA 1311/8260)	TCLP LEAD (SW 846-1311)	FLASHPOINT - OPEN, SOLIDS (SW 846-1010)
SS1	11.6'	5/1/06	0.519 [0.025]	ND [0.08]	>200
C1	3-12'	5/4/06	ND [0.025]	ND [0.08]	>200
UST Excavation	NA	5/10/06	NA	NA	>200

**TABLE 1.2D - PRODUCT IDENTIFICATION SAMPLES**

SAMPLE ID	SAMPLE DEPTH	SAMPLE DATE	PRODUCT ID: TPH OA2 - MO DNR
Recovery 1	NA	5/3/06	GR 100%*
Unleaded T	NA	5/3/06	GR 100%
Premium T	NA	5/3/06	GR 100%

**TABLE 1.2 ABBREVIATIONS AND REFERENCES**

NA: Not analyzed.

ND: Not detected above the method detection limit in parenthesis.

RES STGW: Residential Scenario for Soil to Groundwater.

NONR STGW: Non-Residential Scenario for Soil to Groundwater.

RBSL: Risk Based Screening Levels, from Appendix A of the KDHE RSK Manual.

NOTE: Bold concentration exceed the Tier 2 RBSL.

NOTE: Sample T3-S1 was collected from the trench at 842 Louisiana.

NOTE: Samples WW-1 and WW-2 were collected from the trench at 838 Louisiana.

NOTE: Samples were analyzed for ten additional volatile compounds which were below detection limits.

Reference: Analytical data sheets for all samples are included in Appendix 3.

n: non-carcinogenic risk, HI=1

c: carcinogenic risk, risk=1X10-5

s: soil saturation

mg/kg or ppm: milligrams per kilogram or parts per million

ug/l or ppb: micrograms per liter or parts per billion

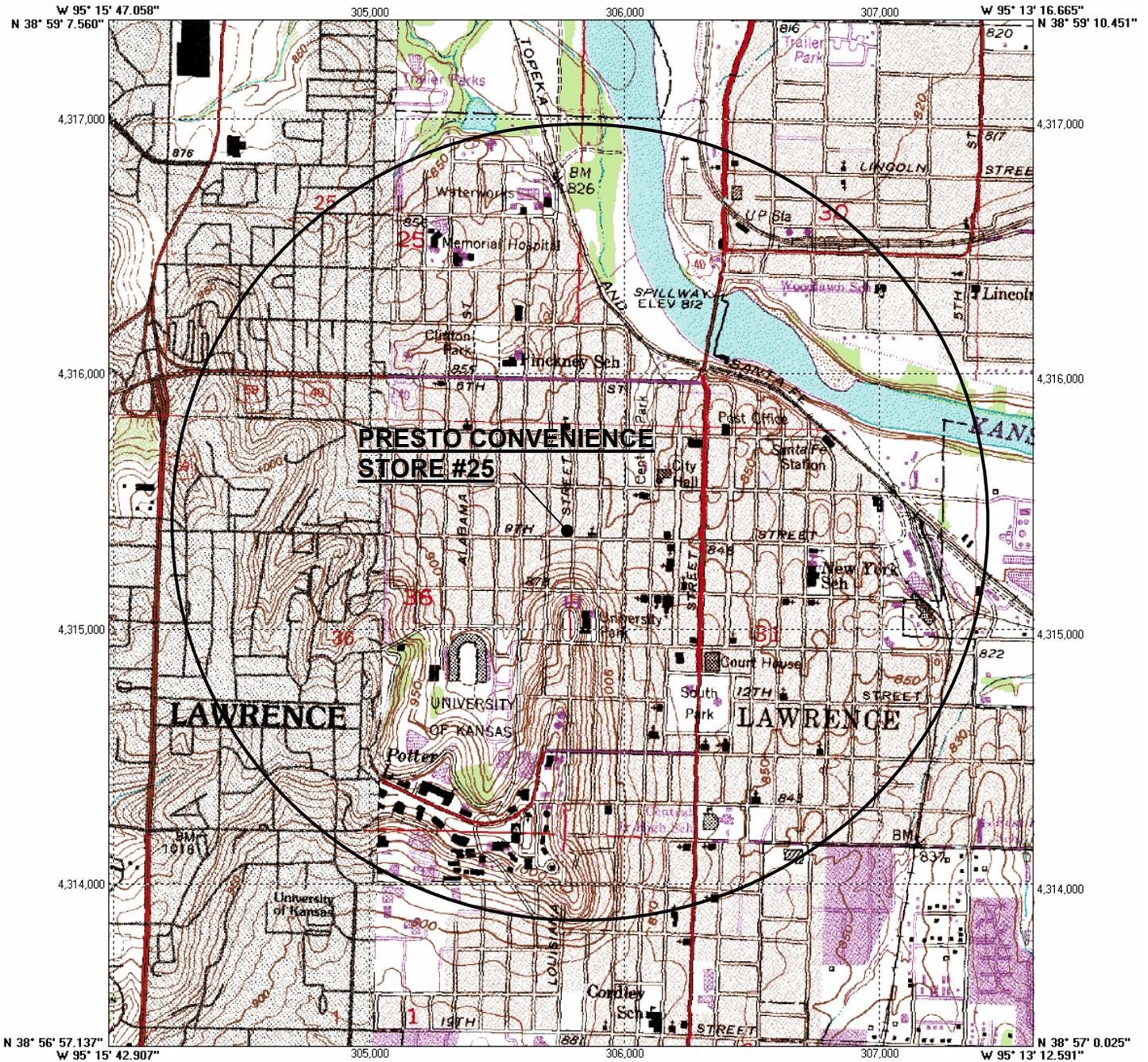
GR: Gasoline Range

GR\*: Sample fits Unleaded product more closely than Premium.

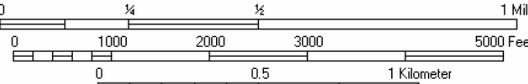
**TABLE 1.3 - SOIL FIELD SCREENING RESULTS (not applicable)**

**TABLE 1.4 - VOLITILIZATION ENHANCERS (not applicable)**

Figure 1 Map



1927 North American Datum; 1,000-meter UTM grid zone 15  
 Generated by BigTopo (www.igage.com)  
 Map compiled from USGS Quads: Lawrence West, KS Lawrence East, KS

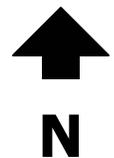


Presto Convenience Store #25

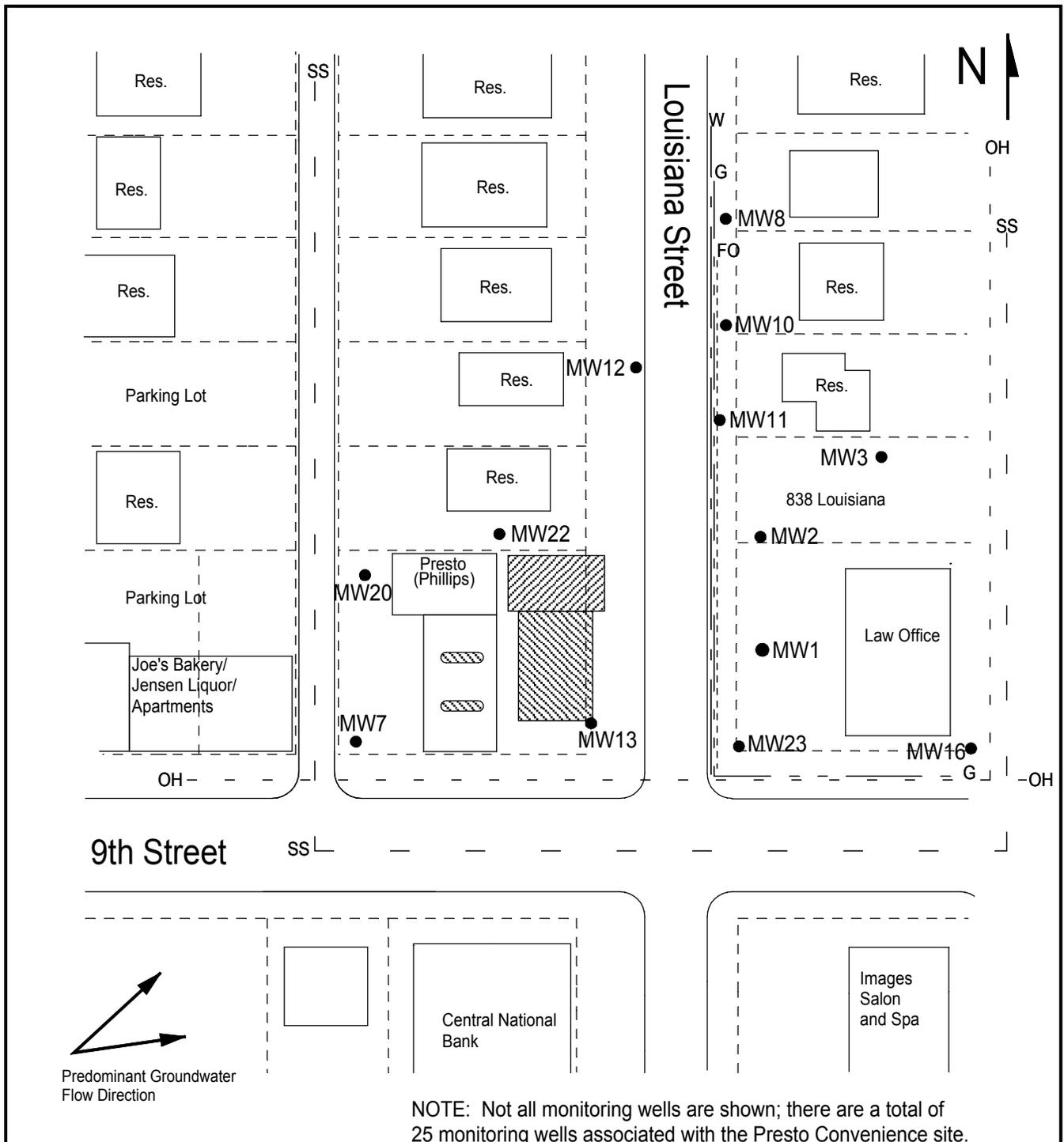
**FIGURE 1 – TOPOGRAPHIC MAP**

**PROJECT:** Presto Convenience Store #25  
 602 W 9<sup>th</sup> Street  
 Lawrence, KS  
 KDHE ID: U4-023-13799

**SOURCE:** Lawrence West, KS Quadrangle;  
 Lawrence East, KS Quadrangle  
 Sec. 31, Township 12S, Range 20E  
 NW NW SW NW, SW SW NW NW &  
 SE SW NW NW  
 Sec. 36, Township 12S, Range 19E  
 NE NE SE NE



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 ENVIRONMENTAL CONSULTANTS



NOTE: Not all monitoring wells are shown; there are a total of 25 monitoring wells associated with the Presto Convenience site.

### FIGURE 2.3 - AREA BASE MAP

#### **PROJECT:**

Presto Convenience Store #25  
 602 W 9th Street  
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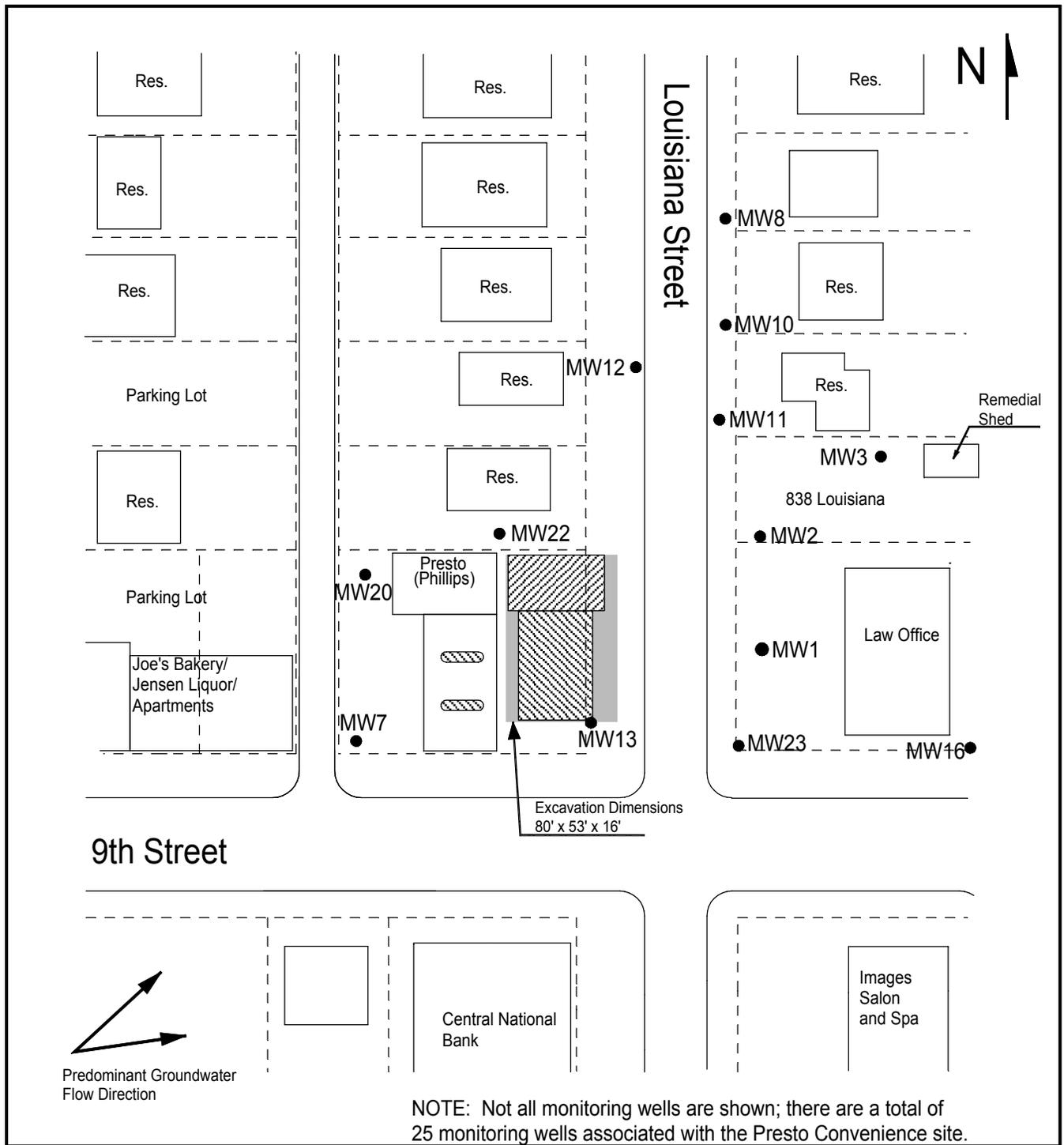


DATE: 5/1/06

#### **LEGEND**

- Approximate Size & Location of Active UST Basin & Pump Islands
- Approximate Location of Former UST Basin
- Monitoring Well (5/8-16/06)
- W — — — — — Water (3 - 4 ft BGS)
- G — — — — — Gas (1.5 - 2 ft BGS)
- FO - - - - - Fiber Optic (Min. 30" BGS)
- SS — — — — — Storm Sewer (2 - 6 ft BGS)
- OH - - - - - Overhead Lines

NOTE: Utility depths and locations are approximate.



**FIGURE 2.4 - EXCAVATION MAP**

**PROJECT:**

Presto Convenience Store #25  
 602 W 9th Street  
 Lawrence, KS  
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**LEGEND**

- Approximate Size & Location of Active UST Basin & Pump Islands
- Approximate Location of Former UST Basin
- Monitoring Well (5/8-16/06)
- Extent of UST Excavation (5/1-29/06)



DATE: 5/1/06

**Presto Convenience Store #25**  
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**Site Photographs (August 1, 2006)**

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**Photograph 1**



**Photograph 2**

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**Photograph 1:** View of entire Presto facility, facing west.

**Photograph 2:** View of entire Presto facility, facing north-northwest.

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Site Photographs Prior to Excavation (May 1, 2006)

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Photograph 3



Photograph 4

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**Photograph 3:** Approximate location of former UST basin, facing east.

**Photograph 4:** Approximate location of former UST basin, facing southwest.

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### Excavation Photographs

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**Photograph 5 (May 8, 2006)**



**Photograph 6 (May 9, 2006, ~3:00pm)**

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**Photograph 5:** View of removed UST, facing west-northwest.  
**Photograph 6:** Location of original UST basin, facing north-northwest.

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Excavation Photographs (May 16, 2006, ~1:30pm)

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Photograph 7



Photograph 8

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**Photograph 7:** Extent of excavation, facing northwest.

**Photograph 8:** View of gravel fill material and clay layer, facing southwest

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**Excavation Photographs (May 16, 2006)**

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**Photograph 9**



**Photograph 10**

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**Photograph 9:** Extent of excavation, facing north-northeast.

**Photograph 10:** View of excavation prior to installation of new tank, facing north.

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### Excavation Photographs

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**Photograph 11**



**Photograph 12**

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**Photograph 11:** Installation of new tank, facing west.  
**Photograph 12:** Installation of new tank, facing north.

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### Excavation Photographs

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**Photograph 13**



**Photograph 14**

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**Photograph 13:** View of excavated area and pump islands, facing northwest.  
**Photograph 14:** View of SVE piping in excavated area, facing west.

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Post-Excavation Photographs (August 1, 2006)

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Photograph 15



Photograph 16

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**Photograph 15:** View of tank basin after excavation activities, facing northeast.  
**Photograph 16:** View of tank basin after excavation activities, facing west.