TRICORE ENVIRONMENTAL, LLC

April 14, 2009

VIA USPS PRIORITY MAIL
WITH DELIVERY CONFIRMATION

Mr. Brian Bauer
Illinois Environmental Protection Agency
Bureau of Land #24
Leaking Underground Storage Tank Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

RE: LPC No. 0971855024 – Lake County
Wauconda/Shivam Energy, Inc.
399 West Liberty Street
IEMA Incident No. 903199
LUST TECHNICAL FILE

Dear Mr. Bauer:

TriCore Environmental, LLC, on behalf of Shivam Energy, Inc., is providing an original and one copy of an Illinois Environmental Protection Agency Leaking Underground Storage Tank Program Stage 2 and 3 Site Investigation Plan and Budget for the Illinois Emergency Management Agency incident number referenced above. Please note that the Eligibility and Deductible Determination letter has not been received from the Office of the State Fire Marshal (OSFM). Once the letter is received from the OSFM, a copy of the letter will be provided.

If you should have any questions concerning this submittal or require additional information, please contact either of the undersigned at (630) 520-9973.

Sincerely,

Marcos I. Czakó
Project Manager

Shawn Rodeck, P.E.
President

cc: Mr. Rajani Patel, Shivam Energy, Inc., 399 W. Liberty St., Wauconda, Illinois 60084
Ms. Jackie D. Soccorso, Village of Wauconda, 109 W. Bangs St., Wauconda, Illinois 60084
Ms. Gwen Carey, 363 Bangs St., Wauconda, Illinois 60084

Attachment

1800 WEST HAWTHORNE LANE, SUITE P • WEST CHICAGO, IL • 60185
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
LEAKING UNDERGROUND STORAGE TANK SECTION
SITE INVESTIGATION PLAN

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084
IEMA Incident No. 903199
LPC No. 0971855024

Prepared for:

Mr. Rajani Patel
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084

Prepared by:

TriCore Environmental, LLC
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West Chicago, Illinois 60185
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April 14, 2009

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Illinois Environmental Protection Agency
Leaking Underground Storage Tank Program
Site Investigation Plan

A. Site Identification

IEMA Incident # (6- or 8-digit): 903199 IEPA LPC# (10-digit): 0971855024

Site Name: Shivam Energy, Inc.

Site Address (not a P.O. Box): 399 West Liberty Street

City: Wauconda County: Lake ZIP Code: 60084

Leaking UST Technical File

B. Site Information

1. **Will the owner or operator seek payment from the Underground Storage Tank Fund?** ☒ Yes ☐ No
2. **If yes, is the budget attached?** ☒ Yes ☐ No

C. Site Investigation

Provide the following:

1. **Stage of investigation**
   a. Stage 2 ☒
   b. Stage 3 ☒
2. **Summary of Stage 1 ☒ or 2 ☐ site investigation activities;**

On December 27, 2008, TriCore Environmental, LLC (TriCore) received a call from Ms. Gwen Carey, owner of the residential property located directly north of the site along Bangs Street. Ms. Carey indicated that her son, Mr. Scott Carey, who owns the house directly north of her, had gasoline vapors present in his basement.

On December 29, 2008, TriCore met Ms. Carey at her house and then proceeded to her son's house. Upon arrival to Mr. Carey's house, the basement was inspected. No gasoline vapors were observed within Mr. Carey's basement; however, the basement was damp and humid. Water staining was also present on the concrete floor of the basement, indicating that the basement was not sealed to the outside. Ms. Carey indicated that she did not have any gasoline vapors present in her house. Please note that this was due to an operating vacuum blower located on site that is directly connected by subsurface piping to the backfill material surrounding the cleanout for the sanitary sewer line that services her house. The sanitary sewer line cleanout is located east of her house, in her front yard. The vacuum blower contains a dilution valve that was partially open to the ambient air. The vacuum blower was installed in 1991 as part of the corrective action activities associated with Illinois Emergency Management Agency (IEMA) incident number 892744, as well as IEMA incident number 903199. The blower has operated periodically

from 1991 through March 9, 2006 and continuously since March 9, 2006. Mr. Carey's home is not connected to the vacuum blower.

After meeting with Ms. Carey, TriCore inspected the sump wells (S-1 through S-3) associated with the underground storage tank (UST) system and several of the monitoring wells near the UST system (RW-1 (04'), MP-3, MW-2, MW-6, MW-12S, MW-13, MW-26, and MW-27) by lowering a bailer into each of the wells. The locations of the wells are illustrated on Figure 1. A sheen of weathered free product was present in MW-27. No free product was present in any of the other wells that were inspected.

The sanitary sewer line servicing Ms. Carey's house runs through the backfill material surrounding her basement. The sanitary sewer line runs southeast from Ms. Carey's house and connects to the main that runs along Bangs Street. The sanitary sewer line servicing Mr. Carey's house was constructed similarly to Ms. Carey's. Since the dilution valve on the vacuum blower was partially open, on December 30, 2008, TriCore returned to the site and closed the dilution valve on the vacuum blower so that a greater vacuum would be applied to the backfill material surrounding the sanitary sewer line servicing Ms. Carey's house.

On December 31, 2008, TriCore returned to the site to regauge the wells and meet with Mr. Brian Bauer, Project Manager with the Illinois Environmental Protection Agency (IEPA) Leaking Underground Storage Tank Section, and Ms. Jackie D. Soccorso, Director of Environmental Quality with the Village of Wauconda. Upon arrival at the site, TriCore gauged S-1 through S-3, MW-2, MW-26, and MW-27 with an electronic oil/water interface meter equipped with an audible signal. The meter was washed using a distilled water and Simple Green® solution wash between each use. A combination of new and weathered free product was present in S-1 through S-3 and MW-27. No free product was present in MW-2 or MW-26.

TriCore, Mr. Bauer, and Ms. Soccorso then met with Ms. Carey and inspected her basement. A photoionization detector (PID) equipped with a 10.6 electron-volt (eV) lamp was used to screen a floor drain in her basement. A concentration of 0.0 parts per million (ppm) was measured. Mr. Carey's basement was then inspected. The PID was also used to screen a floor drain in his basement and a concentration of 0.0 ppm was measured. No gasoline vapors were present in either home.

On December 31, 2008, North Branch Environmental (North Branch) of Roselle, Illinois removed a total of 15 gallons of free product and 2,485 gallons of groundwater from S-1 through S-3 and MW-27 utilizing a vacuum truck. The free product and groundwater that were removed were transported off-site by North Branch for treatment and disposal at their facility. Gauging results and the free product and groundwater recovery volumes are summarized in Tables 1 and 2. A copy of the waste manifest for the free product and groundwater that were recovered on December 31, 2008 is provided in Appendix A.

On January 5 and 6, 2009, TriCore sampled all of the existing monitoring wells except for MW-2, MW-4, MW-9S, MW-24, MW-25, MW-27, RW-1 ('04), and MP-2 through MP-4 to assess the concentrations of the constituents of concern (COCs) in the groundwater. Monitoring wells MW-2, MW-4, and MW-9S could not be sampled due to obstructions within the wells. Monitoring wells MW-24 and MW-25 were not accessible

due to piles of snow and ice that were covering the wells. Monitoring well MW-27 was not sampled due to the presence of free product in the well. Monitoring wells RW-1 ('04) and MP-2 through MP-4 were not sampled since they are located adjacent to MP-1. The locations of the wells are illustrated on Figure 1.

Prior to sampling the wells, the depth to free product and/or depth to groundwater was measured in each well using an electronic oil/water interface meter equipped with an audible signal. The meter was washed using a distilled water and Simple Green® solution wash between each use. If free product was present in the well, it was removed using a dedicated disposable high-density polyethylene (HDPE) bailer. If no free product was present in the well, it was developed by removing approximately three to five well volumes using a dedicated, disposable HDPE bailer. The free product and purge water generated during the sampling activities were contained on site in 55-gallon drums. After the wells were allowed to recharge, groundwater samples were collected from each well using the dedicated, disposable HDPE bailer. Please note that if free product was present in a well, it was not sampled at this time. The samples were collected without headspace in laboratory-provided 40-milliliter (mL) glass vials containing hydrochloric acid as a preservative, labeled accordingly, packed in a cooler containing ice, and shipped under standard chain-of-custody protocol to Pace Analytical Services, Inc. (Pace) in Green Bay, Wisconsin for laboratory analysis. The groundwater samples were submitted for benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) analysis using United States Environmental Protection Agency (USEPA) Method 8021.

Analytical laboratory results revealed benzene concentrations above the Tier 1 groundwater remediation objectives (GROs) in MW-15, MW-16, MW-26, MP-1, and RW-1. Analytical laboratory results are summarized in Table 1 and illustrated on Figure 2. The groundwater flow direction is illustrated on Figure 3. Copies of the analytical laboratory reports and certification are provided in Appendix B.

On February 2, 2009, TriCore oversaw the installation of 10 soil borings (SB-41 through SB-50) to a maximum depth of 16 feet below land surface (bls). The soil borings were installed to assess the concentrations of the COCs in the soil surrounding the UST system. Prior to performing the soil borings Lucky Locators, Inc. of Arlington Heights, Illinois was contracted to markout the on-site subsurface utilities. The locations of the soil borings and subsurface utilities are illustrated on Figure 1. The soil borings were then completed using the following drilling and sampling procedures.

Each boring was drilled and sampled to a maximum depth of 5 feet bls using a stainless steel hand auger to collect soil samples in 1.0-foot depth intervals. A hand auger was utilized to minimize the risk of damage to subsurface structures and utilities. The reduced risk of striking utility lines increased the safety factor for the drillers and the other on-site personnel.

The borings were then completed with a truck-mounted Geoprobe® using direct-push technology to advance the borings. Continuous soil samples were collected at 2.0-foot intervals to the termination depth of each soil boring. The soil samples were collected within a disposable macro-core liner which was placed within a 2.125-inch inside

diameter by 4.0-foot long macro-core sampler. To prevent cross contamination between soil borings and sampling intervals, all drilling and sampling equipment was decontaminated prior to each use using a distilled water and Liquinox® solution wash, followed by a distilled water rinse.

As soil samples were collected, the geology of the subsurface soil was described. Upon retrieval, a portion of each soil sample was immediately divided for field screening and laboratory analysis. Samples designated for field screening were placed in airtight plastic bags, allowed to volatilize and equilibrate, and then screened for the presence of volatile organic compounds using a PID equipped with a 10.6 eV lamp. The PID was field calibrated using isobutylene gas prior to use. From the other portion of each sample, two 5-gram samples were collected and placed in laboratory-provided 40-mL glass vials containing methanol as a preservative, and one 4-ounce (oz) sample was collected and placed in a laboratory-provided 4-oz plastic container. The samples were then labeled accordingly and packed in a cooler containing ice. The soil sample collected above the field-interpreted water table exhibiting the highest PID measurement from each five-foot interval was shipped under standard chain-of-custody protocol to Pace for BTEX and MTBE analysis using USEPA Method 8021. Please note that when the soil samples arrived at the laboratory, no methanol was present in the soil sample collected from SB-50 from 4 to 5 feet bls; therefore, this sample was not analyzed by the laboratory.

Analytical laboratory results revealed the following concentrations of the COCs above the Tier 1 soil remediation objectives (SROs): 1) benzene in SB-41 through SB-44 and SB-47 through SB-49; 2) toluene, ethylbenzene, and MTBE in SB-41, SB-44, and SB-49; and 3) total xylenes in SB-41, SB-43, SB-44, and SB-49. Analytical laboratory results are summarized in Table 3 and illustrated on Figure 4. Copies of the analytical laboratory reports and certification are provided in Appendix C. Soil boring logs are provided in Appendix D.

From January 5 through April 1, 2009, TriCore periodically gauged S-1 through S-3, MW-27, and RW-2. Free product was present in S-1 through S-3 and MW-27 during these dates. On January 9 and 27, March 9 and 13, and April 1, 2009, TriCore contracted North Branch to perform free product recovery events at the site. During these events, North Branch recovered a total of 59 gallons of free product and 11,841 gallons of groundwater from S-1 through S-3 and MW-27. On February 26, 2009, TriCore recovered approximately 0.01 gallons of free product and 3.99 gallons of groundwater from S-1 through S-3 and MW-27 using disposable, dedicated high density polyethylene (HDPE) bailers. The free product and groundwater recovered on this date were contained on site in a 55-gallon drum. Copies of the waste manifests are provided in Appendix A. Additional details regarding the free product recovery activities are provided in the Free Product Removal Report dated April 6, 2009.

3. Characterization of site and surrounding area:

a. Current and projected post-remediation uses;

The property is currently an active gasoline retail station. At the time this report was written, the owner plans to continue to operate the property as a gasoline retail station.

b. Physical setting:

i. Environmental conditions;

On December 27, 1989, a release was reported to the Illinois Emergency Services and Disaster Agency (IESDA), now the IEMA, and incident number 892744 was assigned to the property. According to the IESDA incident report, a hole was discovered in one of the USTs and approximately 1,000 to 1,200-gallons of gasoline was released.

On October 30, 1990, a release was reported to the IESDA and incident number 903199 was assigned to the property. According to information provided in the reports previously submitted to the IEPA for this incident number, the release was reported as a result of the removal of two 6,000-gallon USTs. The amount released is unknown. Copies of the IESDA incident reports for incident numbers 892744 and 903199 provided in Appendix E.

From November 21, 1990 through February 2, 2009, soil and groundwater investigation activities have been performed at the site in relation to IEMA incident numbers 892744 and 903199. According to the analytical laboratory results from these investigation activities, concentrations of the COCs above the Tier 1 SROs are currently present on-site, while concentrations of the COCs above the Tier 1 GROs are currently present on- and off-site. The estimated area above the Tier 1 SROs is illustrated on Figure 4. The estimated area above the Tier 1 GROs is illustrated on Figure 3.

ii. Geologic, hydrogeologic, and hydrologic conditions; and

Based on the information collected during the soil investigation activities performed at the site, the geology of the subsurface soil consists of interbedded clay, silt, and sand with traces of gravel within each lithology. Saturated soil conditions during the drilling activities were observed as shallow as 4 feet bls in RW-1 ('04) and SB-27/MW-27 and as deep as 25 feet bls in B-1, B-2, and MW-19.

Based on the gauging results from the groundwater sampling activities performed on January 5 and 6, 2009, depth to groundwater in the monitoring wells ranged from 0.30 feet below the top-of-casing (toc) in MW-14 to 9.84 feet below toc in MW-2. The gauging data from this event revealed that the general groundwater flow direction is to the north and the hydraulic gradient is 0.0157.

On September 24, 1997, Bradburne, Briller, and Johnson, LLC (BB&J) performed rising head slug tests on MW-4, MW-6, MW-14, and MW-16. The results of the tests revealed hydraulic conductivity values ranging from of 6.61×10^{-3} centimeters per second (cm/sec) in MW-6 to 2.25×10^{-5} cm/sec in MW-16. Using the hydraulic conductivity, along with the soil porosity determined by laboratory analysis and the hydraulic gradient, the seepage velocity was estimated. The seepage velocity was estimated to be 2.784×10^{-4} cm/sec.

A map showing the direction of groundwater flow is illustrated on Figure 3. Soil boring logs and monitoring well construction diagrams are provided in Appendix D. Copies of the in situ hydraulic conductivity, hydraulic gradient, and groundwater flow velocity calculations are provided in Appendix F.

According to Illinois State Geological Survey (ISGS) Circular No. 460, Summary of the Geology of the Chicago Area, the lithology beneath the site is part of the Fox Lake Moraine of the Valparaiso Morainic System. The Fox Lake Moraine consists of silty, sandy, or gravelly till with local areas of silty clayey till, many lenses of poorly sorted gravel, and abundant small kames.

According to the ISGS Circular 532, Potential for Contamination of Shallow Aquifers in Illinois, the site and surrounding area consists of uniform, relatively impermeable silty or clayey till at least 50 feet thick with no evidence of interbedded sand and gravel.

According to the ISGS Illinois Map 14, Bedrock Geology of Illinois, bedrock found in the area of the site is of the Silurian System, including the Wilhelmi Formation, the Elwood Dolomite, the Kankakee Dolomite, the Joliet Dolomite, the Sugar Run Dolomite, and/or the Racine Dolomite.

iii. Geographic and topographic conditions;

The site is currently an operating gasoline retail station located at the northwest corner of the intersection of West Liberty Street and Bangs Street in Wauconda, Lake County, Illinois. The site is located in the southwest quarter of the southeast quarter of Section 26, Township 44 North, Range 9 East, as shown on the United States Geological Survey Wauconda 7.5-minute series topographic quadrangle (Figure 5). The site is relatively flat; however, the topography dips to the north immediately north of the site.

The surrounding land use consists of residential and commercial properties. North of the site are residential homes. East of the site, across Bangs Street, is First Step Footcare. South of the site, across West Liberty Street, is a flower shop, TG Signs & Graphics, and a restaurant. West of the site, across Osage Street, is Aunt Betty's Pancake House (formerly a Phillips 66 gasoline station) and the Wauconda Shopping Mall. The surrounding properties are illustrated on Figure 5.

4. Results of Stage 1 or 2 site investigation:

a. Map(s) showing locations of all borings and groundwater monitoring wells completed to date and groundwater flow direction;

A map showing the locations of all of the soil borings and groundwater monitoring wells completed to date is illustrated on Figures 1 through 4. A map showing the groundwater flow direction based on the gauging data collected during the groundwater sampling activities performed on January 5 and 6, 2009 is illustrated on Figure 3.

b. Map(s) showing locations of all samples collected;

A map showing the locations of all the soil samples collected is illustrated on Figure 4. A map showing the location of all of the groundwater samples collected is illustrated on Figure 2.

c. Map(s) showing extents of soil and groundwater contamination that exceeds the most stringent Tier 1 remediation objectives;

A map showing the current extent of soil contamination exceeding the most stringent Tier 1 SROs is illustrated on Figure 4. Please note that this area may change depending upon the results of the proposed site investigation activities.

A map showing the current extent of groundwater contamination exceeding the most stringent Tier 1 GROs is illustrated on Figure 2.

d. Cross-section(s) showing the geology and the horizontal and vertical extents of soil and groundwater contamination that exceeds the most stringent Tier 1 remediation objectives;

A geologic cross section has not been generated at this time. After the horizontal and vertical extents of the soil contamination have been determined, a geologic cross-section(s) will be prepared and provided in a Site Investigation Completion Report (SICR).

e. Analytical results, chain of custody forms, and laboratory certifications;

Analytical laboratory reports, chain of custody forms, and laboratory certifications for the soil samples collected on February 2, 2009 are provided in Appendix C. Analytical laboratory reports, chain of custody forms, and laboratory certifications for the groundwater samples collected on January 6, 2009 are provided in Appendix B.

f. Table(s) comparing analytical results to the most stringent Tier 1 remediation objectives (include sample depth, date collected, and detection limits);

A table comparing the analytical laboratory results to the Tier 1 SROs is summarized in Table 3. A table comparing the analytical laboratory results to the Tier 1 GROs is summarized in Table 1.

g. Potable water supply well survey (unless provided in previous plan):

i. Map(s) to scale showing:

a) Locations of community water supply wells and other potable wells and the setback zone for each well;

According to the information provided by the IEPA Source Water Assessment Program (SWAP) database and the ISGS online database, the closest potable water supply well is located approximately 365 feet north of the site in Osage Park. The well is an active community water supply well for the Village of Wauconda and has a minimum setback zone of 200 feet. According to the ISGS driller's log, the well was installed in 1957 and has a depth of 325 feet. Additionally, according to the IEPA SWAP Fact Sheet for the Village of

Wauconda, the well is installed within bedrock that is overlain by relatively impermeable silty or clayey till.

On May 6, 2004, TriCore performed an area reconnaissance to locate the community water supply well. The well is located in the northwest corner of Osage Park. The location of the well is illustrated on Figures 1 through 5. Copies of the water supply well information obtained from the IEPA SWAP database and the ISGS online database are provided in Appendix G.

b) Location and extent of regulated recharge areas and wellhead protection area;

According to the IEPA SWAP online database, the community water supply well located north of the site in Osage Park has a wellhead protection area of 1,000 feet; therefore, the site is located within a wellhead protection area of a potable water supply well. No regulated recharge areas are located within 2,500 feet of the site. A map showing the location of the site in relation to the wellhead protection area is provided in Appendix G.

c) Extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives; and

The extent of the groundwater contamination exceeding the most stringent Tier 1 GROs is illustrated on Figure 2.

d) Modeled extent of groundwater contamination exceeding the most stringent Tier 1 remediation objectives (if performed as part of site investigation);

The modeled extent of groundwater contamination exceeding the most stringent Tier 1 GROs has not been determined at this time. This information will be provided in a SICR.

ii. Table(s) listing the setback zones for each community water supply well and other potable water supply wells;

As mentioned above in Section C. 4. g. i. a., the Village of Wauconda community water supply well located north of the site in Osage Park has a minimum setback zone of 200 feet.

iii. A narrative identifying each entity contacted to identify potable water supply wells, the name and title of each person contacted, and any field observations associated with any wells identified; and

The following personnel or websites were consulted regarding the locations of potable water supply wells within 2,500 feet of the site.

1. IEPA SWAP database
2. Janet Christer, Freedom of Information Act Coordinator, Bureau of Water, IEPA
3. ISGS online database

As mentioned above in Section C. 4. g. i. a., on May 6, 2004, TriCore verified the location of the Village of Wauconda community water supply well located 365 feet north of the site in Osage Park.

iv. A certification from a Licensed Professional Engineer or Licensed Professional Geologist that the survey was conducted in accordance with the requirements and that documentation submitted includes information obtained as a result of the survey;

A certification from a Licensed Professional Engineer is provided below in Section D.

h. Soil boring logs and monitoring well construction diagrams;

Copies of the soil boring logs and monitoring well construction diagrams are provided in Appendix D.

i. Proposal for determining the following parameters;

i. Hydraulic conductivity (K);

As mentioned above in Section C. 3. b. ii., on September 24, 1997, BB&J performed rising head slug tests on MW-4, MW-6, MW-14, and MW-16. The results of the tests revealed hydraulic conductivity values ranging from of 6.61×10^{-3} centimeters per second (cm/sec) in MW-6 to 2.25×10^{-5} cm/sec in MW-16. Copies of the slug tests analyses are provided in Appendix F.

ii. Soil bulk density (ρ_b);

On June 1, 2006, TriCore completed two soil borings (SB-31 and SB-32) to a maximum depth of 16 feet bls. The locations of SB-31 and SB-32 are illustrated on Figure 1. From SB-32, one soil sample was collected from a depth of 9.5 to 11 feet bls and submitted for geotechnical analyses including soil bulk density using American Society for Testing and Materials (ASTM) methods. Analytical laboratory results revealed a dry bulk density of 108.6 pounds per cubic foot (pcf) and a wet bulk density of 127.2 pcf. Analytical laboratory results are summarized in Table 4.

iii. Soil particle density (ρ_s);

Soil particle density (ρ_s) is defined as the mass (m) of a given volume (V) of solids in a soil sample. Similarly, the density of a substance ($\rho_{substance}$) is defined as the mass of a given volume of substance. Specific gravity (SG) is defined as the ratio of the density of a substance to the density of water (ρ_{H2O}). By multiplying the specific gravity by the density of water, the density of a substance can be determined. Therefore, if the specific gravity of a sample is known, the soil particle density could be calculated.

$\rho_s = m/V$, similarly $\rho = m/V$

$SG = \rho_{substance}/\rho_{H2O}$

therefore,

$\rho_{substance} = SG \times \rho_{H2O}$

Analytical laboratory results from the soil sample collected from SB-32 revealed a specific gravity of 2.65; therefore the soil particle density is calculated to be 2.65 grams per cubic centimeter. The analytical laboratory result is summarized in Table 4.

iv. Moisture content (w); and

Analytical laboratory results from the soil sample collected from SB-32 revealed a moisture content of 34.4 percent. The analytical laboratory result is summarized in Table 4.

v. Organic carbon content (f_{oc}); and

On December 11, 2007, TriCore completed one soil boring (SB-38) to a maximum depth of four feet bls. The location of SB-38 is illustrated on Figure 1. Two soil samples were collected from the boring and submitted for fraction of organic carbon (f_{oc}) content analysis using ASTM method D2974. Analytical laboratory results revealed an f_{oc} content of 3.27 percent for the soil sample collected at a depth of 2 to 3 feet bls, and an f_{oc} content of 0.777 percent for the soil sample collected at a depth of 3 to 4 feet bls. Analytical laboratory results are summarized in Table 4.

j. Budget forms of actual costs (documenting actual work performed during the previous stage).

Budget forms of the actual costs for the Stage 1 site investigation activities performed from December 31, 2008 through February 2, 2009 are provided in Appendix H. Please note that costs associated with the groundwater sampling activities performed on January 5 and 6, 2009 are not included in the budget since these costs are associated with IEMA incident number 892744.

5. Stage 2 or 3 sampling plan:

a. Description of and justification for additional activities proposed as part of the plan;

Costs associated with the site investigation activities proposed below are included in the Site Investigation Budget provided in Appendix I. An Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form is provided in Appendix J. A copy of the Office of the State Fire Marshal Eligibility and Deductible Determination letter is provided in Appendix K.

Soil Investigation Activities – Delineation

To define the horizontal extent of the concentrations of the COCs in the soil, TriCore is proposing the installation of seven soil borings (SB-58 through SB-64) to a maximum depth of 20 feet bls. The proposed locations of the soil borings are illustrated on Figure 1. Prior to completing SB-58 through SB-64, a permit will need to be obtained from the Illinois Department of Transportation (IDOT) for the installation of SB-62 in the right-of-way of West Liberty Street. Additionally, a

permit will need to be obtained from the Village of Wauconda for the installation of SB-64 in the right-of-way of Osage Street.

The borings will be drilled and sampled using the methods and materials described above in Section C. 2. The soil sample from each boring collected above the field interpreted water table exhibiting the highest PID measurement will be submitted under standard chain-of-custody protocol to an Illinois Environmental Laboratory Accreditation Program (IL ELAP) approved laboratory for BTEX and MTBE analysis using USEPA methods. All soil cuttings generated during the installation of the soil borings will be contained on site in 55-gallon drums for disposal.

Soil Investigation Activities – Additional Delineation

If analytical laboratory results from proposed soil borings SB-59 through SB-61 reveal concentrations of the COCs above the Tier 1 SROs, TriCore is proposing the installation of two on-site soil borings (SB-65 and SB-66) and one off-site soil boring (SB-67) to a maximum depth of 20 feet bls. The proposed locations of the soil borings are illustrated on Figure 1. Prior to completing SB-65 through SB-67, a permit will need to be obtained from the Village of Wauconda for the installation of SB-67 in the right-of-way of Bangs Street.

The soil borings will be completed and sampled using the methods and materials described above in Section C. 2. The soil sample collected above the field interpreted water table exhibiting the highest PID measurement will be submitted under standard chain-of-custody protocol to an IL ELAP approved laboratory for BTEX and MTBE analysis using USEPA methods. All soil cuttings generated during the installation of the soil borings will be contained on site in 55-gallon drums for disposal.

Groundwater Investigation Activities

Analytical laboratory results from the groundwater samples collected on January 6, 2009 revealed concentrations of the COCs above the Tier 1 GROs delineated off-site to the north, east, and south, and on-site to the west. Since concentrations of the COCs are delineated, no additional groundwater sampling activities are being proposed in association with the site investigation activities for IEMA incident number 903199. Analytical laboratory results from the groundwater samples collected on January 6, 2009 are summarized in Table 1 and illustrated on Figure 2.

b. A map depicting locations of proposed borings and groundwater monitoring wells; and

A map showing the locations of the proposed soil borings is illustrated on Figure 1.

c. Depth of borings/wells and construction details of proposed borings and wells; and

Each soil boring will be installed to an approximate depth of 20 feet bls. After soil samples are collected, the borings will be backfilled with bentonite and hydrated. The ground surface will be restored using material similar to the surrounding ground surface.

6. Site maps meeting the requirements of 35 III. Adm. Code 734.440.

Site maps meeting the requirements of 35 Illinois Administrative Code 734.440 are provided in the figures section of this report.

D. Signatures

All plans, budgets, and reports must be signed by the owner or operator and list the owner's or operator's full name, address, and telephone number.

UST Owner or Operator

Name: Shivam Energy, Inc.

Contact: Rajani Patel

Address: 399 West Liberty Street

City: Wauconda

State: IL

Zip Code: 60084

Phone: (847) 722-6618

Signature: Rajani Patel

Date: 03/29/09

Consultant

Company: TriCore Environmental, LLC

Contact: Marcos Czako

Address: 1800 West Hawthorne Ln., Suite P

City: West Chicago

State: IL

Zip Code: 60185

Phone: (630) 520-9973

Signature: Marcos Czako

Date: 04/08/09

I certify under penalty of law that all activities that are the subject of this report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in this report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

Licensed Professional Engineer or Geologist

Name: Shawn Rodeck

Company: TriCore Environmental, LLC

Address: 1800 West Hawthorne Lane, Suite P

City: West Chicago

State: IL

Zip Code: 60185

Phone: (630) 520-9973

Ill. Registration No.: 062-052879

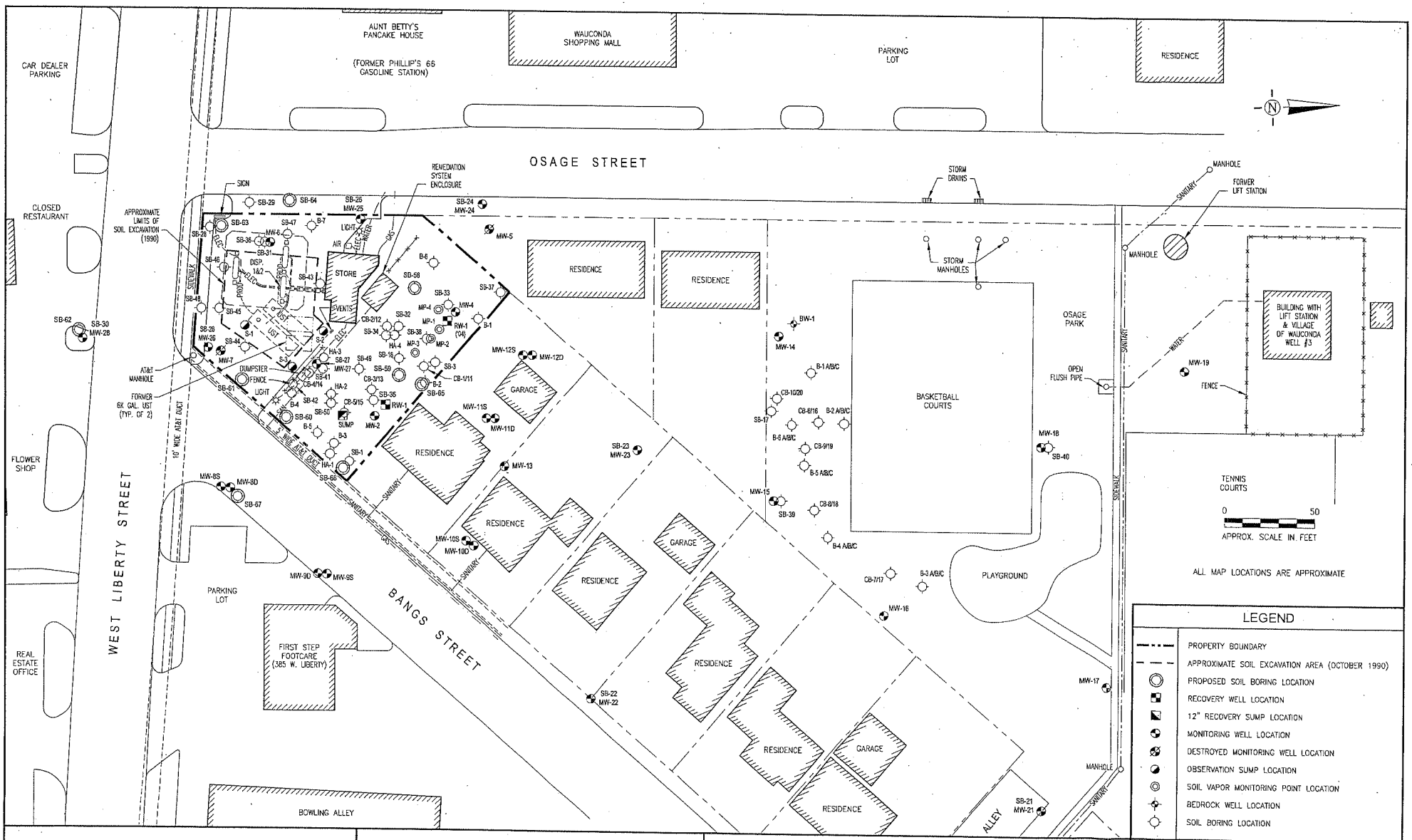
License Expiration Date: 11/30/2009

Signature: Shawn Rodeck

Date: 04/08/2009

L.P.E. or L.P.G. Seal

FIGURES



TriCore Environmental, LLC
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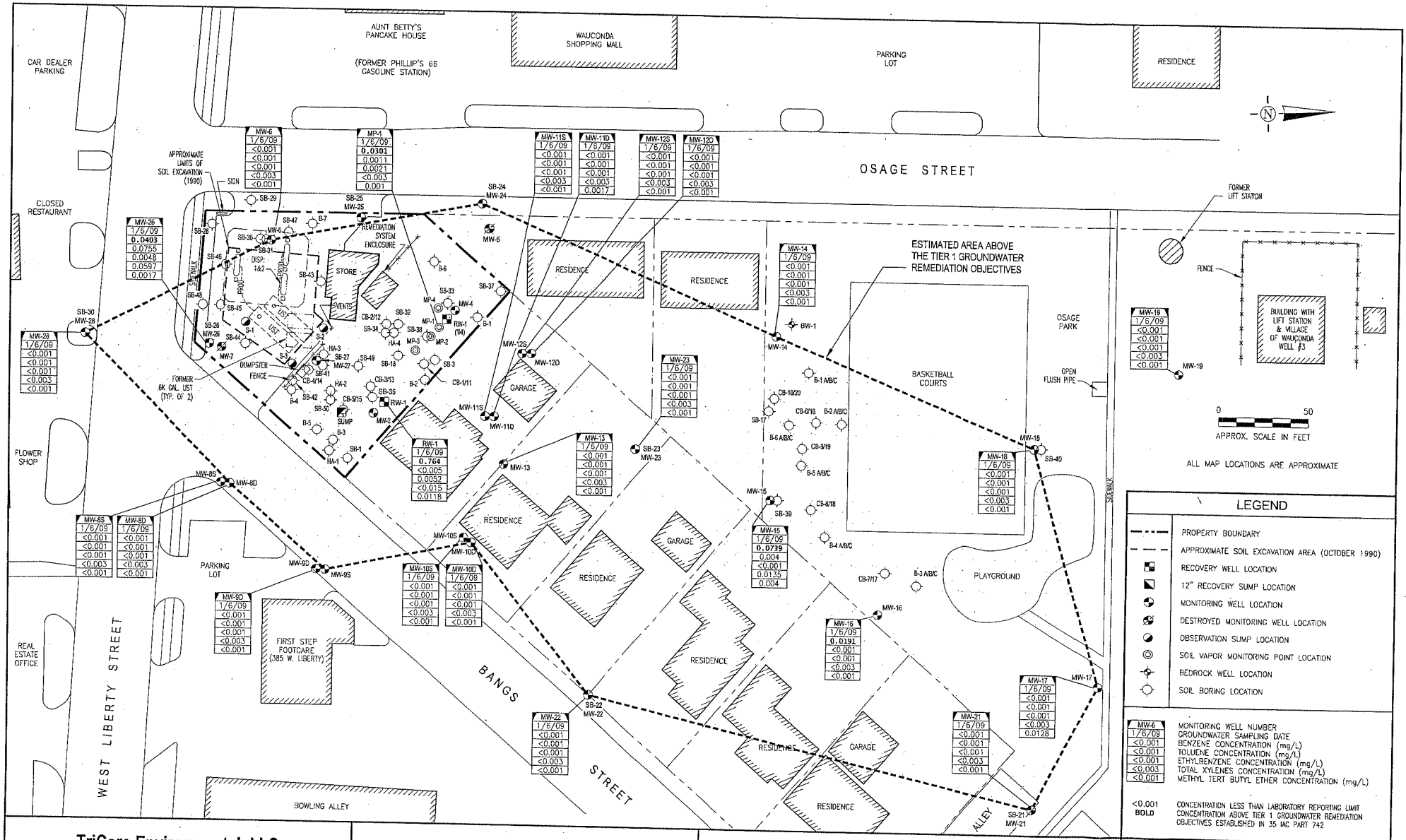
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084

SITE MAP
SHIVAM ENERGY, INC.
399 WEST LIBERTY STREET
WAUCONDA, LAKE COUNTY, ILLINOIS 60084

DRAWN BY:	MWS
APPROVED BY:	SAR
SCALE:	1" = 50'
DATE:	3/29/09
DRAWING FILE:	0401PMW2

FIGURE
1



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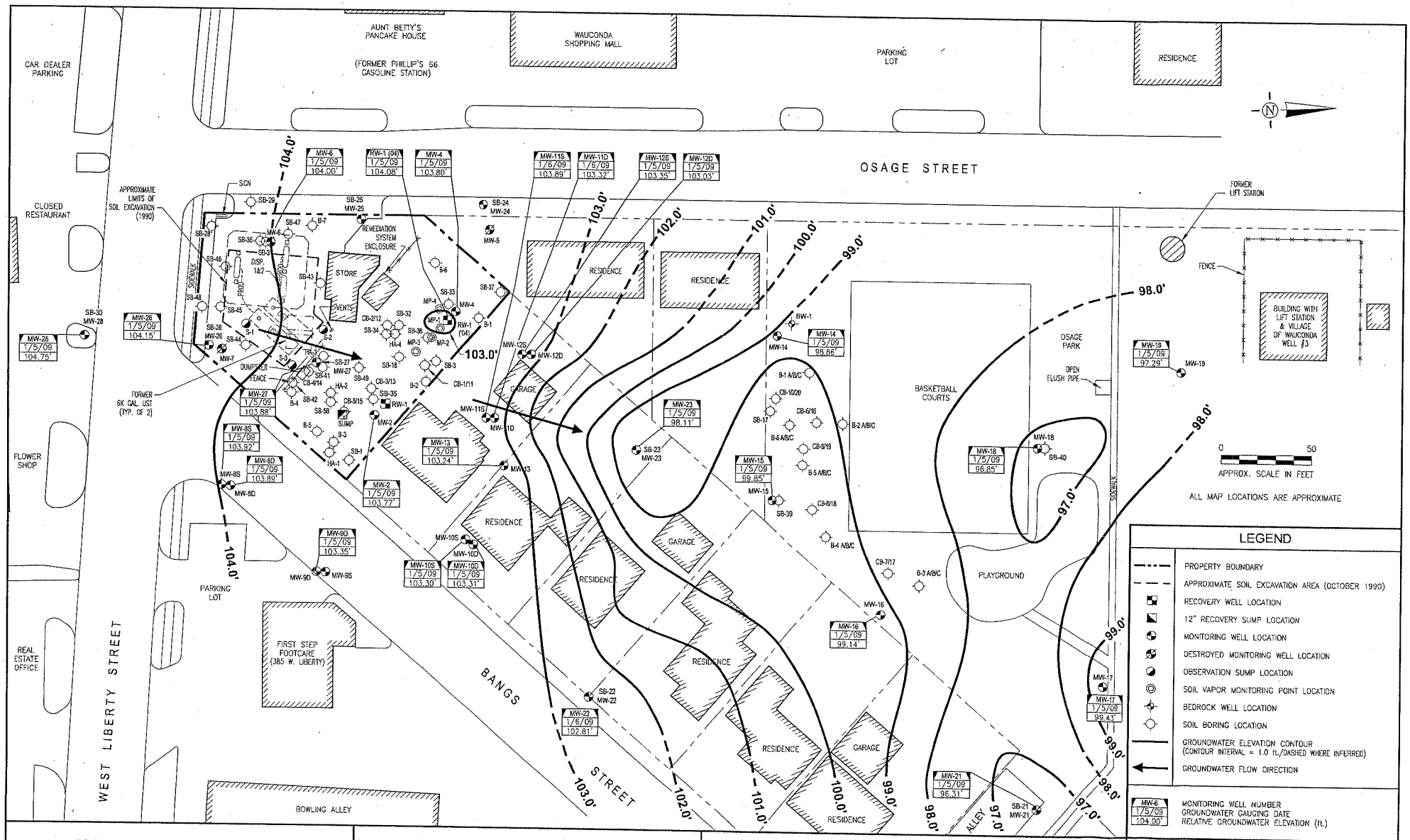
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084

GROUNDWATER ANALYTICAL RESULTS MAP
SHIVAM ENERGY, INC.
399 WEST LIBERTY STREET
WAUCONDA, LAKE COUNTY, ILLINOIS 60084

DRAWN BY:	MWS
APPROVED BY:	SAR
SCALE:	1" = 50'
DATE:	3/29/09
DRAWING FILE:	0401GA3

FIGURE
2



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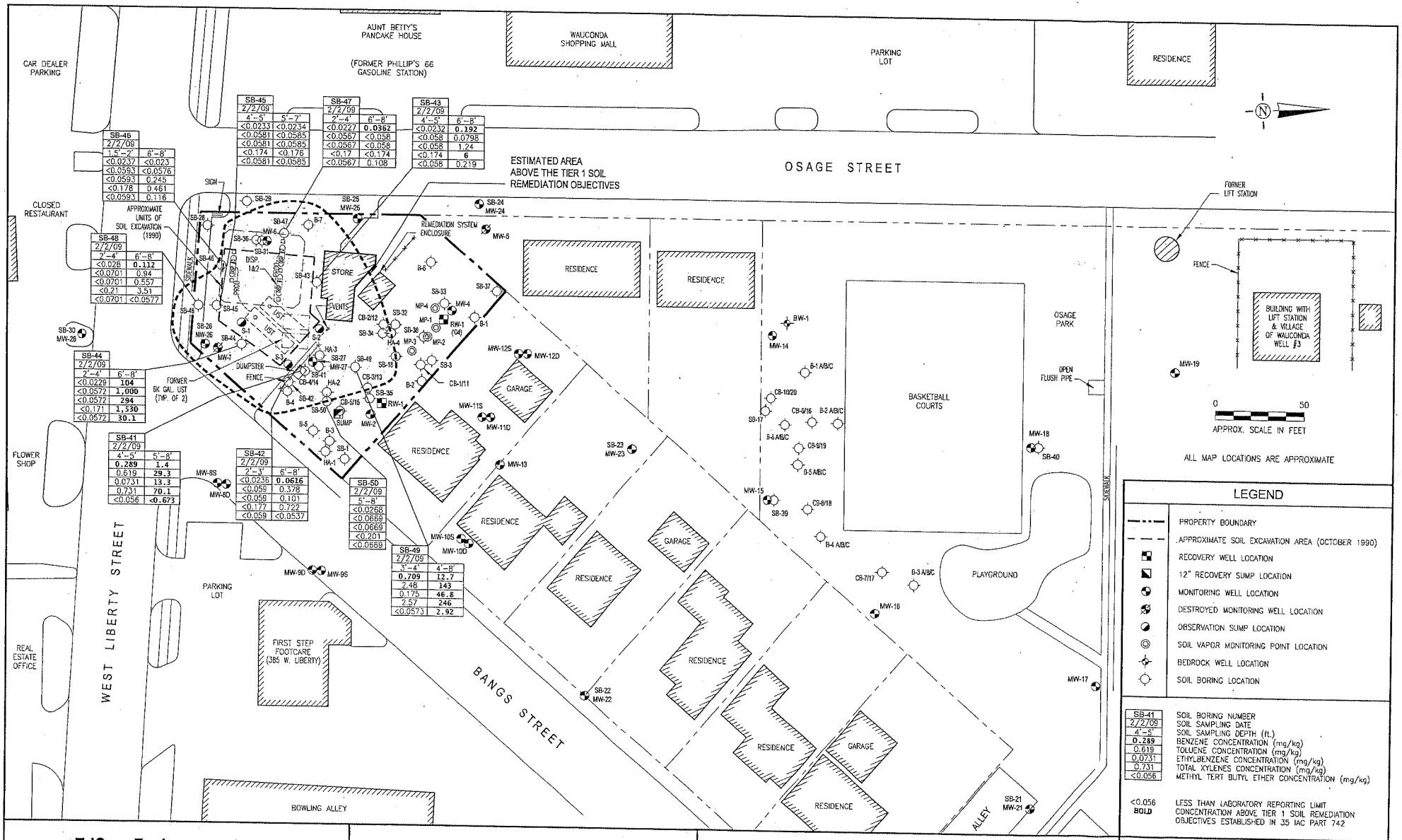
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084

GROUNDWATER FLOW DIRECTION MAP
SHIVAM ENERGY, INC.
399 WEST LIBERTY STREET
WAUCONDA, LAKE COUNTY, ILLINOIS 60084

DRAWN BY:	MWS
APPROVED BY:	SAR
SCALE:	1" = 50'
DATE:	4/11/09
DRAWING FILE:	0401GE1

FIGURE
3



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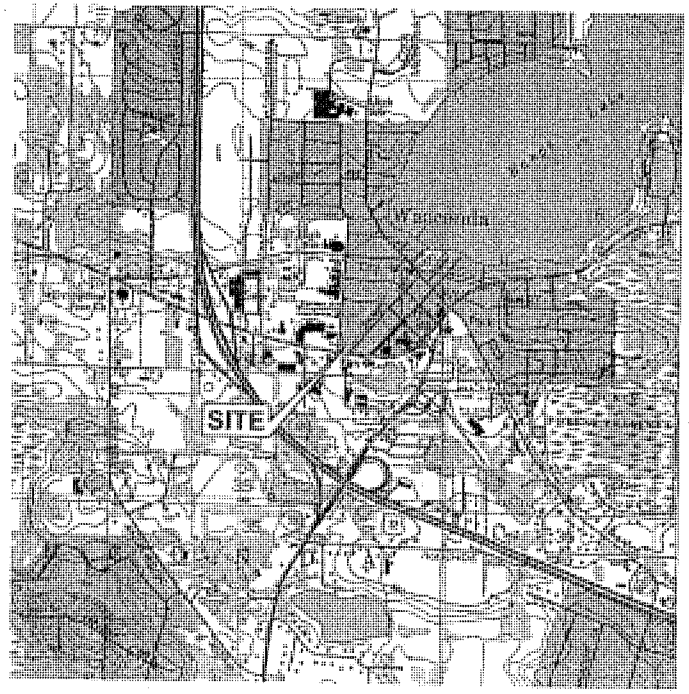
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084

SOIL ANALYTICAL RESULTS MAP
SHIVAM ENERGY, INC.
399 WEST LIBERTY STREET
WAUCONDA, LAKE COUNTY, ILLINOIS 60084

DRAWN BY:	MWS
APPROVED BY:	SAR
SCALE:	1" = 50'
DATE:	3/29/09
DRAWING FILE:	0401SA2

FIGURE
4



U.S.G.S. TOPOGRAPHIC MAP

1 1/2 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

SCALE 1:24000

WAUCONDA & BARRINGTON QUADRANGLES
LAKE COUNTY, ILLINOIS
7.5 MINUTE SERIES (TOPOGRAPHIC)

QUADRANGLE LOCATION

AERIAL PHOTO OF SURROUNDING AREA

0 120 240

APPROXIMATE SCALE IN FEET

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Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084

SITE LOCATION MAP
SHIVAM ENERGY, INC.
399 WEST LIBERTY STREET
WAUCONDA, LAKE COUNTY, ILLINOIS 60084

DRAWN BY:	MWS
APPROVED BY:	MC
SCALE:	AS NOTED
DATE:	3/29/09
DRAWING FILE:	0401SL1B

FIGURE
5

TABLES

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-2	29-Nov-90		10.00	10.30	0.30						
MW-2	27-Jan-92		FP								
MW-2	19-Feb-92		FP								
MW-2	24-Aug-92		FP								
MW-2	19-Jan-93		FP								
MW-2	17-Jun-93	101.06		10.71		90.35	**0.23**	**3.2**	0.65	**15**	
MW-2	11-Nov-93	101.06		10.96		90.10	**0.134**	0.01	0.052	1.43	
MW-2	27-Jun-94	101.06	10.95	10.96	0.01	90.11					
MW-2	16-Feb-95	101.06		10.36		90.70	**0.178**	0.0313	0.447	0.3	
MW-2	28-Jul-95	101.06		10.13		90.93	**0.257**	0.117	0.139	0.808	
MW-2	22-Mar-96	101.06		11.14		89.92	**0.1**	0.154	0.331	3.93	
MW-2	17-Jun-96	101.06		9.33		91.73	0.0029	0.0041	0.0107	0.355	
MW-2	25-Sep-96	101.06		10.68		90.38	0.0154	0.0167	0.0546	0.584	
MW-2	24-Apr-97	101.06		9.89		91.17	**1.11**	3.1	**0.71**	5.76	
MW-2	17-Jun-97	101.06		9.88		91.18	**2.57**	**3.85**	0.487	5.53	
MW-2	27-Aug-97	101.06		10.48		90.58	**0.116**	0.519	0.534	7.45	
MW-2	5-Nov-97	113.61		10.75		102.86	**0.076**	0.02	0.31	2.4	
MW-2	27-Feb-98	113.61		10.23		103.38	**0.17**	0.029	0.074	0.73	
MW-2	10-Jun-98	113.61		10.08		103.53	**0.0079**	0.0011	0.0075	0.15	
MW-2	8-Oct-98	113.61		10.31		103.30	**0.013**	0.019	0.18	1.38	
MW-2	31-Mar-99	113.61		10.12		103.49	**0.64**	0.024	0.087	**250/<5**	
MW-2	9-Jun-99	113.61		10.00		103.61	**0.77**	0.22	0.075	0.62	
MW-2	2-Sep-99	113.61		10.60		103.01	**0.086**	0.0076	0.029	0.066	
MW-2	28-Oct-99	113.61		10.52		103.09	**0.16**	0.0025	0.016	0.041	
MW-2	23-Feb-00	113.61		10.32		103.29	**0.55**	0.019	0.27	0.861	
MW-2	24-May-00	113.61		9.77		103.84	**0.09**	0.11	0.11	1.37	
MW-2	15-Aug-00	113.61		10.21		103.40	**0.36**	0.13	0.054	0.41	
MW-2	9-Nov-00	113.61		10.03		103.58	**0.14**	0.099	0.12	0.96	
MW-2	11-Oct-01	113.61		10.24		103.37	**0.027**	0.036	0.02	0.142	
MW-2	14-Mar-02	113.61		9.85		103.76	**0.083**	0.012	0.13	0.72	
MW-2	6-Jun-02	113.61		9.62		103.99	**0.1**	0.052	0.32	3.08	
MW-2	30-Aug-02	113.61		10.16		103.45	**0.017**	0.0058	0.073	0.448	
MW-2	6-Dec-02	113.61		10.62		102.99	**0.012**	<0.001	0.003	0.0031/<0.001	
MW-2	6-May-04	113.61		10.34		103.27	**0.031**	0.0014	0.0046	0.003	<0.01
MW-2	21-Apr-05	113.61		10.17		103.44	**0.035**	<0.001	0.0022	0.029	0.024
MW-2	31-Dec-08	113.61		9.58		104.03					
MW-2	5-Jan-09	113.61		9.84		103.77					
MW-2	6-Jan-09	113.61					Obstruction in well, not able to collect samples				
MW-4	28-Nov-90						**3.5**	0.33	0.27	1.1	
MW-4	27-Jan-92						3.1	0.065	0.072	4.147	
MW-4	24-Aug-92						**0.14**	0.024	0.19	0.49	
MW-4	19-Jan-93						**0.26**	0.006	BDL	0.021	
MW-4	17-Jun-93	98.97		8.22		90.75	**0.015**	<0.001	<0.001	0.005	
MW-4	11-Nov-93	98.97		8.58		90.39	<0.001	<0.001	<0.001	<0.001	
MW-4	27-Jun-94	98.97		8.65		90.32	**0.154**	0.0243	0.0081	0.0098	
MW-4	16-Feb-95	98.97		8.24		90.73	**0.253**	0.113	0.0845	0.202	
MW-4	28-Jul-95	98.97		8.06		90.91	**0.179**	0.0115	0.175	0.261	
MW-4	22-Mar-96	98.97		8.75		90.22	**0.363**	0.346	0.178	0.456	
MW-4	17-Jun-96	98.97		5.79		93.18	<0.002	<0.002	<0.002	<0.005	
MW-4	25-Sep-96	98.97		8.44		90.53	0.0032	<0.002	0.0052	0.0052	
MW-4	24-Apr-97	98.97		7.84		91.13	**0.444**	0.0255	0.0945	0.11	
MW-4	17-Jun-97	98.97		6.87		92.10	**0.386**	0.0359	0.125	0.273	
MW-4	27-Aug-97	98.97		8.23		90.74	**0.0568**	0.0321	0.128	0.322	
MW-4	5-Nov-97	111.44		8.54		102.90	**0.037**	0.0035	0.043	0.11	
MW-4	27-Feb-98	111.44		7.98		103.46	**0.13**	<0.005	<0.005	0.04	
MW-4	10-Jun-98	111.44		7.94		103.50	**0.029**	0.019	0.022	0.052	
MW-4	8-Oct-98	111.44		8.52		102.92	**0.018**	0.0024	0.033	0.1/<0.001	
MW-4	31-Mar-99	111.44		8.07		103.37	<0.001	<0.001	<0.001	<0.003	
MW-4	9-Jun-99	111.44		8.07		103.37	**0.36**	0.028	0.28	0.8228	
MW-4	2-Sep-99	111.44		9.50		101.94	**0.18**	0.017	0.28	1.1/<0.005	
MW-4	28-Oct-99	111.44		8.44		103.00	**0.073**	0.0046	0.095	0.360/<0.004	
MW-4	23-Feb-00	111.44		8.17		103.27	**0.57**	<0.005	0.042	0.061/<0.005	
MW-4	24-May-00	111.44		7.69		103.75	**0.095**	0.0057	0.01	0.0089/<0.001	
MW-4	15-Aug-00	111.44		8.10		103.34	**0.36**	0.022	0.13	0.140/<0.0025	
MW-4	9-Nov-00	111.44		7.97		103.47	**0.16**	<0.025	0.13	0.064/<0.005	
MW-4	11-Oct-01	111.44		8.11		103.33	**0.039**	0.005	0.03	0.013/<0.001	
MW-4	14-Mar-02	111.44		7.68		103.76	**0.13**	0.0049	<0.001	<0.003	

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-4	6-Jun-02	111.44		7.35		104.09	**0.013**	<0.001	0.0058	0.0025/<0.001	
MW-4	30-Aug-02	111.44		8.05		103.39	**0.14**	0.013	0.035	0.031/<0.001	
MW-4	6-Dec-02	111.44		8.53		102.91	**0.17**	0.004	0.0016	0.016/<0.001	
MW-4	6-May-04	111.44		8.25		103.19	Obstruction in well, not able to collect samples				
MW-4	21-Apr-05	111.44		8.07		103.37	**0.14**	0.003	<0.001	0.0035	0.0011
MW-4	5-Jan-09	111.44		7.64		103.80					
MW-4	6-Jan-09	111.44					Obstruction in well, not able to collect samples				
MW-5	28-Nov-90						<0.005	<0.005	<0.005	<0.01	
MW-5	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-5	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-5	19-Jan-93						BDL	BDL	BDL	BDL	
MW-5	17-Jun-93	95.44		4.71		90.73	<0.001	<0.001	<0.001	<0.001	
MW-5	11-Nov-93	95.44		5.09		90.35	<0.001	<0.001	<0.001	<0.001	
MW-5	27-Jun-94	95.44		5.31		90.13	<0.001	<0.001	<0.001	<0.003	
MW-5	16-Feb-95	95.44		4.81		90.63	<0.002	<0.002	<0.002	<0.005	
MW-5	28-Jul-95	95.44		4.99		90.45	<0.0073	<0.002	<0.002	<0.005	
MW-5	22-Mar-96	95.44		5.28		90.16	<0.002	<0.002	<0.002	<0.005	
MW-5	17-Jun-96	95.44		4.24		91.20	<0.002	<0.002	<0.002	<0.005	
MW-5	25-Sep-96	95.44		5.07		90.37	<0.002	<0.002	<0.002	<0.005	
MW-5	24-Apr-97	95.44		4.40		91.04	<0.002	<0.002	<0.002	<0.005	
MW-5	17-Jun-97	95.44		4.34		91.10	<0.002	<0.002	<0.002	<0.003	
MW-5	27-Aug-97	95.44		4.84		90.60	<0.002	<0.002	<0.002	<0.003	
MW-5	5-Nov-97	108.15		5.21		102.94	<0.001	<0.001	<0.01	<0.003	
MW-5	27-Feb-98	108.15		4.58		103.57	<0.001	<0.001	<0.001	<0.003	
MW-5	10-Jun-98	108.15		4.53		103.62	<0.001	<0.001	<0.001	<0.003	
MW-5	8-Oct-98	108.15		4.78		103.37	<0.001	<0.001	<0.001	<0.003	
MW-5	31-Mar-99	108.15		4.76		103.39	0.053	0.07	0.11	0.38	
MW-5	9-Jun-99	108.15		4.65		103.50	<0.001	<0.001	<0.001	<0.003	
MW-5	2-Sep-99	108.15		5.34		102.81	<0.001	<0.001	<0.001	<0.002	
MW-5	28-Oct-99	108.15		5.19		102.96	<0.001	<0.001	<0.001	<0.003	
MW-5	23-Feb-00	108.15		4.92		103.23					
MW-5	24-May-00	108.15		4.34		103.81	<0.001	<0.001	<0.001	<0.003	
MW-5	15-Aug-00	108.15		4.81		103.34	<0.001	<0.001	<0.001	<0.003	
MW-5	9-Nov-00	108.15		4.75		103.40	<0.001	<0.001	<0.001	<0.003	
MW-5	11-Oct-01	108.15		4.80		103.35	<0.001	<0.001	<0.001	<0.003	
MW-5	14-Mar-02	108.15		4.41		103.74	<0.001	<0.001	<0.001	<0.003	
MW-5	6-Jun-02	108.15		4.63		103.52	<0.001	<0.001	<0.001	<0.003	
MW-5	30-Aug-02	108.15		4.75		103.40	<0.001	<0.001	<0.001	<0.003	
MW-5	6-Dec-02	108.15		5.24		102.91	<0.001	<0.001	<0.001	<0.003	
MW-5	6-May-04						Well destroyed				
MW-6	28-Nov-90						<0.005	<0.005	<0.005	<0.01	
MW-6	27-Jan-92										
MW-6	24-Aug-92										
MW-6	19-Jan-93						BDL	BDL	BDL	BDL	
MW-6	17-Jun-93	98.46		7.07		91.39	<0.001	<0.001	<0.001	<0.001	
MW-6	11-Nov-93	98.46		7.63		90.83	<0.001	<0.001	<0.001	<0.001	
MW-6	27-Jun-94	98.46		7.57		90.89	<0.001	<0.001	<0.001	<0.003	
MW-6	16-Feb-95	98.46		7.41		91.05	<0.002	<0.002	<0.002	<0.005	
MW-6	28-Jul-95	98.46		7.11		91.35	0.0045	<0.002	<0.002	<0.005	
MW-6	22-Mar-96	98.46		7.89		90.57	<0.002	<0.002	<0.002	<0.005	
MW-6	17-Jun-96	98.46		6.11		92.35	<0.002	<0.002	<0.002	<0.005	
MW-6	25-Sep-96	98.46		7.59		90.87	<0.002	<0.002	<0.002	<0.005	
MW-6	24-Apr-97	98.46		6.87		91.59	<0.002	<0.002	<0.002	<0.005	
MW-6	17-Jun-97	98.46		6.81		91.65	<0.002	<0.002	<0.002	<0.005	
MW-6	27-Aug-97	98.46		7.34		91.12	<0.002	<0.002	<0.002	<0.005	
MW-6	5-Nov-97	111.06		7.74		103.32	<0.001	<0.001	<0.002	<0.003	
MW-6	27-Feb-98	111.06		7.03		104.03	<0.001	<0.001	<0.001	<0.003	
MW-6	10-Jun-98	111.06		6.97		104.09	<0.001	<0.001	<0.001	<0.003	
MW-6	8-Oct-98	111.06		7.28		103.78	<0.001	<0.001	<0.001	<0.003	
MW-6	31-Mar-99	111.06		7.14		103.92	<0.001	<0.001	<0.001	<0.003	
MW-6	9-Jun-99	111.06		6.95		104.11	<0.001	<0.001	<0.001	<0.003	
MW-6	2-Sep-99	111.06		7.71		103.35	<0.001	<0.001	<0.001	<0.002	
MW-6	28-Oct-99	111.06		7.64		103.42	<0.001	<0.001	<0.001	<0.002	
MW-6	23-Feb-00	111.06		7.42		103.64	<0.001	<0.001	<0.001	<0.003	
MW-6	24-May-00	111.06		6.68		104.38	<0.001	<0.001	<0.001	<0.003	
MW-6	15-Aug-00	111.06		7.25		103.81	**0.58**	**3.1**	0.55	2.49	
MW-6	9-Nov-00	111.06		7.11		103.95	**0.069**	1	0.35	2.3	

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-6	11-Oct-01	111.06	sheen	7.39		103.67					
MW-6	14-Mar-02	111.06	sheen	6.93		104.13	0.0029	0.002	0.015	0.032	
MW-6	6-Jun-02	111.06	sheen	6.70		104.36	0.0017	0.0016	0.012	0.0256	
MW-6	30-Aug-02	111.06	sheen	7.27		103.79	0.0015	0.0011	0.1	0.0245	
MW-6	6-Dec-02	111.06	sheen	7.83		103.23	<0.001	<0.001	0.0041	0.0099	
MW-6	6-May-04	111.06	sheen	7.45		103.61	<0.001	<0.001	0.001	<0.003	<0.001
MW-6	21-Apr-05	111.06		7.26		103.80					
MW-6	22-Apr-05						<0.001	<0.001	<0.001	<0.003	<0.001
MW-6	29-Dec-08	111.06		6.67		104.39					
MW-6	5-Jan-09	111.06		7.06		104.00					
MW-6	6-Jan-09	111.06					<0.001	<0.001	<0.001	<0.003	<0.001
MW-7	29-Nov-90		7.39	7.69	0.30						
MW-7	21-Apr-05						Well destroyed				
MW-8S	1-Apr-91	86.88		6.61		80.27	<0.005	<0.005	<0.005	<0.01	
MW-8S	27-Jan-92						<0.002	<0.003	<0.002	<0.01	
MW-8S	24-Aug-92						<0.002	<0.003	<0.002	<0.007	
MW-8S	19-Jan-93										
MW-8S	17-Jun-93	98.29		7.56		90.73	<0.001	<0.001	<0.001	<0.001	
MW-8S	11-Nov-93	98.29		7.58		90.71	<0.001	<0.001	<0.001	<0.001	
MW-8S	27-Jun-94	98.29		7.46		90.83	<0.001	<0.001	<0.001	<0.003	
MW-8S	16-Feb-95	98.29		7.43		90.86	<0.002	<0.002	<0.002	<0.005	
MW-8S	28-Jul-95	98.29		7.14		91.15	<0.0034	<0.002	<0.002	<0.005	
MW-8S	22-Mar-96	98.29		7.73		90.56	<0.002	<0.002	<0.002	<0.005	
MW-8S	17-Jun-96	98.29		6.46		91.83	<0.002	<0.002	<0.002	<0.005	
MW-8S	25-Sep-96	98.29		7.49		90.80	<0.002	<0.002	<0.002	<0.005	
MW-8S	24-Apr-97	98.29		6.94		91.35	<0.002	<0.002	<0.002	<0.005	
MW-8S	17-Jun-97	98.29		6.86		91.43	<0.002	<0.002	<0.002	<0.005	
MW-8S	27-Aug-97	98.29		7.26		91.03	<0.002	<0.002	<0.002	<0.005	
MW-8S	5-Nov-97	110.89		7.62		103.27	<0.001	<0.001	<0.001	<0.003	
MW-8S	27-Feb-98	110.89		7.50		103.39	<0.001	<0.001	<0.001	<0.003	
MW-8S	10-Jun-98	110.89		6.95		103.94	<0.001	<0.001	<0.001	<0.001	
MW-8S	8-Oct-98	110.89		7.19		103.70	<0.001	<0.001	<0.001	<0.003	
MW-8S	31-Mar-99	110.89		7.12		103.77	<0.001	<0.001	<0.001	<0.003	
MW-8S	9-Jun-99	110.89		7.00		103.89	<0.001	<0.001	<0.001	<0.003	
MW-8S	2-Sep-99	110.89		7.61		103.28	<0.001	<0.001	<0.001	<0.002	
MW-8S	28-Oct-99	110.89		7.56		103.33	<0.001	<0.001	<0.001	<0.002	
MW-8S	23-Feb-00	110.89		7.48		103.41	<0.001	0.0024	<0.001	<0.0041	
MW-8S	24-May-00	110.89		6.77		104.12	<0.001	<0.001	<0.001	<0.003	
MW-8S	15-Aug-00	110.89		7.62		103.27	<0.001	<0.001	<0.001	<0.003	
MW-8S	9-Nov-00	110.89		7.20		103.69	<0.001	<0.001	<0.001	<0.003	
MW-8S	11-Oct-01	110.89		7.26		103.63	<0.001	<0.001	<0.001	<0.003	
MW-8S	14-Mar-02	110.89		6.91		103.98	<0.001	<0.001	<0.001	<0.003	
MW-8S	6-Jun-02	110.89		6.71		104.18	<0.001	<0.001	<0.001	<0.003	
MW-8S	30-Aug-02	110.89		7.18		103.71	<0.001	<0.001	<0.001	<0.003	
MW-8S	6-Dec-02	110.89		7.64		103.25	<0.001	<0.001	<0.001	<0.003	
MW-8S	6-May-04	110.89		7.39		103.50	<0.001	<0.001	<0.001	<0.003	<0.001
MW-8S	21-Apr-05	110.89		7.22		103.67					
MW-8S	22-Apr-05						<0.001	<0.001	<0.001	<0.003	<0.001
MW-8S	5-Jan-09	110.89		6.97		103.92					
MW-8S	6-Jan-09	110.89		7.00		103.89	<0.001	<0.001	<0.001	<0.003	<0.001
MW-8D	1-Apr-91	86.96		6.77		80.19	<0.005	<0.005	<0.005	<0.01	
MW-8D	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-8D	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-8D	19-Jan-93										
MW-8D	17-Jun-93										
MW-8D	11-Nov-93	98.31		7.50		90.81	<0.001	<0.001	<0.001	<0.001	
MW-8D	27-Jun-94	98.31		7.94		90.37	<0.001	<0.001	<0.001	<0.003	
MW-8D	16-Feb-95	98.31		7.80		90.51	<0.002	0.0039	<0.002	<0.005	
MW-8D	28-Jul-95	98.31		7.65		90.66	0.0023	<0.002	<0.002	0.0054	
MW-8D	22-Mar-96	98.31		8.06		90.25	<0.002	<0.002	<0.002	<0.005	
MW-8D	17-Jun-96	98.31		6.81		91.50	<0.002	<0.002	<0.002	<0.005	
MW-8D	25-Sep-96	98.31		7.55		90.76	<0.002	<0.002	<0.002	<0.005	
MW-8D	24-Apr-97	98.31		7.33		90.98	<0.002	<0.002	<0.002	<0.005	
MW-8D	17-Jun-97	98.31		7.32		90.99	<0.002	<0.002	<0.002	<0.005	
MW-8D	27-Aug-97	98.31		7.85		90.46	<0.002	<0.002	<0.002	<0.005	
MW-8D	5-Nov-97	111.03		8.06		102.97	<0.001	<0.001	<0.001	<0.003	
MW-8D	27-Feb-98	111.03		7.00		104.03	<0.001	<0.001	<0.001	<0.003	

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-8D	10-Jun-98	111.03		7.36		103.67	<0.001	<0.001	<0.001	<0.003	
MW-8D	8-Oct-98	111.03		7.67		103.36	<0.001	<0.001	<0.001	<0.003	
MW-8D	31-Mar-99	111.03		7.40		103.63	<0.001	<0.001	<0.001	<0.003	
MW-8D	9-Jun-99	111.03		7.10		103.93	<0.001	<0.001	<0.001	<0.003	
MW-8D	2-Sep-99	111.03		8.02		103.01	<0.001	<0.001	<0.001	<0.002	
MW-8D	28-Oct-99	111.03		7.95		103.08	<0.001	<0.001	<0.001	<0.002	
MW-8D	23-Feb-00	111.03		7.92		103.11	<0.001	<0.001	<0.001	<0.003	
MW-8D	24-May-00	111.03		7.01		104.02	<0.001	<0.001	<0.001	<0.003	
MW-8D	15-Aug-00	111.03		7.62		103.41	<0.001	<0.001	<0.001	<0.003	
MW-8D	9-Nov-00	111.03		7.72		103.31	<0.001	<0.005	<0.001	<0.003	
MW-8D	11-Oct-01	111.03		7.67		103.36	<0.001	<0.001	<0.001	<0.003	
MW-8D	14-Mar-02	111.03		7.28		103.75	<0.001	<0.001	<0.001	<0.003	
MW-8D	6-Jun-02	111.03		7.04		103.99	<0.001	<0.001	<0.001	<0.003	
MW-8D	30-Aug-02	111.03		7.51		103.52	<0.001	<0.001	<0.001	<0.003	
MW-8D	6-Dec-02	111.03		8.00		103.03	<0.001	<0.001	<0.001	<0.003	
MW-8D	6-May-04	111.03		7.70		103.33	<0.001	<0.001	<0.001	<0.003	<0.001
MW-8D	21-Apr-05	111.03		7.53		103.50					
MW-8D	22-Apr-05						<0.001	<0.001	<0.001	<0.003	<0.001
MW-8D	5-Jan-09	111.03		7.14		103.89					
MW-8D	6-Jan-09	111.03					<0.001	<0.001	<0.001	<0.003	<0.001
MW-9S	1-Apr-91	86.00		6.12		79.88	<0.005	<0.005	<0.005	<0.01	
MW-9S	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-9S	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-9S	19-Jan-93						BDL	BDL	BDL	BDL	
MW-9S	17-Jun-93	97.42		6.79		90.63	<0.001	<0.001	<0.001	<0.001	
MW-9S	11-Nov-93	97.42		7.04		90.38	<0.001	<0.001	<0.001	<0.001	
MW-9S	27-Jun-94	97.42		7.03		90.39	<0.001	<0.001	<0.001	<0.003	
MW-9S	16-Feb-95	97.42		7.04		90.38	<0.002	<0.002	<0.002	<0.005	
MW-9S	28-Jul-95	97.42		6.82		90.60	<0.002	<0.002	<0.002	<0.005	
MW-9S	22-Mar-96	97.42		7.32		90.10	<0.002	<0.002	<0.002	<0.005	
MW-9S	17-Jun-96	97.42		6.35		91.07	<0.002	<0.002	<0.002	<0.005	
MW-9S	25-Sep-96	97.42		7.10		90.32	<0.002	<0.002	<0.002	<0.005	
MW-9S	24-Apr-97	97.42		6.72		90.70	<0.002	<0.002	<0.002	<0.005	
MW-9S	17-Jun-97	97.42		6.74		90.68	<0.002	<0.002	<0.002	<0.005	
MW-9S	27-Aug-97	97.42		6.90		90.52	<0.002	<0.002	<0.001	<0.005	
MW-9S	5-Nov-97	110.16		7.21		102.95	<0.001	<0.001	<0.001	<0.003	
MW-9S	27-Feb-98	110.16		6.86		103.30	<0.001	<0.001	<0.001	<0.003	
MW-9S	10-Jun-98	110.16		6.67		103.49	<0.001	<0.001	<0.001	<0.003	
MW-9S	8-Oct-98	110.16		6.83		103.33	<0.001	<0.001	<0.001	<0.003	
MW-9S	31-Mar-99	110.16		6.90		103.26	<0.001	<0.001	<0.001	<0.003	
MW-9S	9-Jun-99	110.16		6.76		103.40	<0.001	<0.001	<0.001	<0.003	
MW-9S	2-Sep-99	110.16		7.26		102.90	<0.001	<0.001	<0.001	<0.003	
MW-9S	28-Oct-99	110.16		7.20		102.96	<0.001	<0.001	<0.001	<0.003	
MW-9S	23-Feb-00	110.16		7.90		102.26	<0.001	<0.001	<0.001	<0.003	
MW-9S	24-May-00	110.16		6.64		103.52	<0.001	<0.001	<0.001	<0.003	
MW-9S	15-Aug-00	110.16		6.93		103.23	<0.001	<0.001	<0.001	<0.003	
MW-9S	9-Nov-00	110.16		6.75		103.41	<0.001	<0.005	<0.001	<0.003	
MW-9S	11-Oct-01	110.16		6.96		103.20	<0.001	<0.001	<0.001	<0.003	
MW-9S	14-Mar-02	110.16		6.73		103.43	<0.001	<0.001	<0.001	<0.003	
MW-9S	6-Jun-02	110.96		6.52		104.44	<0.001	<0.001	<0.001	<0.003	
MW-9S	30-Aug-02	110.96		6.92		104.04	<0.001	<0.001	<0.001	<0.003	
MW-9S	6-Dec-02	110.96		7.27		103.69	<0.001	<0.001	<0.001	<0.003	
MW-9S	6-May-04	110.96		7.12		103.84	<0.001	<0.001	<0.001	<0.003	<0.001
MW-9S	21-Apr-05	110.96		6.95		104.01					
MW-9S	22-Apr-05						<0.001	<0.001	<0.001	<0.003	<0.001
MW-9S	6-Jan-09						Obstruction in well, not able to gauge or collect samples				
MW-9D	1-Apr-91	86.06		6.26		79.80	<0.005	<0.005	<0.005	<0.01	
MW-9D	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-9D	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-9D	19-Jan-93										
MW-9D	17-Jun-93										
MW-9D	11-Nov-93	97.48		7.13		90.35	<0.001	<0.001	<0.001	<0.001	
MW-9D	27-Jun-94	97.48		7.13		90.35	<0.001	<0.001	<0.001	<0.003	
MW-9D	16-Feb-95	97.48		7.15		90.33	<0.002	<0.002	<0.002	<0.005	
MW-9D	28-Jul-95	97.48		6.92		90.56	<0.002	<0.002	<0.002	<0.005	
MW-9D	22-Mar-96	97.48		7.42		90.06	<0.002	<0.002	<0.002	<0.005	
MW-9D	17-Jun-96	97.48		6.44		91.04	<0.002	<0.002	<0.002	<0.005	

TABLE 1

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Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-9D	25-Sep-96	97.48		7.19		90.29	<0.002	<0.002	<0.002	<0.005	
MW-9D	24-Apr-97	97.48		6.84		90.64	<0.002	<0.002	<0.002	<0.005	
MW-9D	17-Jun-97	97.48		6.79		90.69	<0.002	<0.002	<0.002	<0.005	
MW-9D	27-Aug-97	97.48		7.02		90.46	<0.002	<0.002	<0.002	<0.005	
MW-9D	5-Nov-97	110.26		7.32		102.94	<0.001	<0.001	<0.001	<0.003	
MW-9D	27-Feb-98	110.26		6.74		103.52	<0.001	<0.001	<0.001	<0.003	
MW-9D	10-Jun-98	110.26		6.79		103.47	<0.001	<0.001	<0.001	<0.003	
MW-9D	8-Oct-98	110.26		6.93		103.33	<0.001	<0.001	<0.001	<0.003	
MW-9D	31-Mar-99	110.26		7.01		103.25	<0.001	<0.001	<0.001	<0.003	
MW-9D	9-Jun-99	110.26		6.87		103.39	<0.001	<0.001	<0.001	<0.003	
MW-9D	2-Sep-99	110.26		7.41		102.85	<0.001	<0.001	<0.001	<0.003	
MW-9D	28-Oct-99	110.26		7.31		102.95	<0.001	<0.001	<0.001	<0.003	
MW-9D	23-Feb-00	110.26		7.10		103.16	<0.001	<0.001	<0.001	<0.003	
MW-9D	24-May-00	110.26		6.74		103.52	<0.001	<0.001	<0.001	<0.003	
MW-9D	15-Aug-00	110.26		7.07		103.19	<0.001	<0.001	<0.001	<0.003	
MW-9D	9-Nov-00	110.26		6.90		103.36	<0.001	<0.001	<0.001	<0.003	
MW-9D	11-Oct-01	110.26		7.05		103.21	<0.001	<0.001	<0.001	<0.003	
MW-9D	14-Mar-02	110.26		6.83		103.43	<0.001	<0.001	<0.001	<0.003	
MW-9D	6-Jun-02	110.26		6.62		103.64	<0.001	<0.001	<0.001	<0.003	
MW-9D	30-Aug-02	110.26		7.04		103.22	<0.001	<0.001	<0.001	<0.003	
MW-9D	6-Dec-02	110.26		7.38		102.88	<0.001	<0.001	<0.001	<0.003	
MW-9D	6-May-04	110.26		7.21		103.05	<0.001	<0.001	<0.001	<0.003	<0.001
MW-9D	21-Apr-05	110.26		7.04		103.22					
MW-9D	22-Apr-05						<0.001	<0.001	<0.001	<0.003	<0.001
MW-9D	5-Jan-09	110.26		6.91		103.35					
MW-9D	6-Jan-09	110.26					<0.001	<0.001	<0.001	<0.003	<0.001
MW-10S	1-Apr-91	85.93		5.28		80.65	<0.005	<0.005	<0.005	<0.010	
MW-10S	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-10S	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-10S	19-Jan-93						BDL	BDL	BDL	BDL	
MW-10S	17-Jun-93	96.38		5.91		90.47	<0.001	<0.001	<0.001	<0.001	
MW-10S	11-Nov-93	96.38		6.12		90.26	<0.001	<0.001	<0.001	<0.001	
MW-10S	27-Jun-94	96.38		6.11		90.27	<0.001	<0.001	<0.001	<0.003	
MW-10S	16-Feb-95	96.38		6.08		90.30	<0.002	<0.002	<0.002	<0.005	
MW-10S	28-Jul-95	96.38		5.84		90.54	<0.002	<0.002	<0.002	<0.005	
MW-10S	22-Mar-96	96.38		6.33		90.05	<0.002	<0.002	<0.002	<0.005	
MW-10S	17-Jun-96	96.38		5.26		91.12	<0.002	<0.002	<0.002	<0.005	
MW-10S	25-Sep-96	96.38		6.09		90.29	<0.002	<0.002	<0.002	<0.005	
MW-10S	24-Apr-97	96.38		5.73		90.65	<0.002	<0.002	<0.002	<0.005	
MW-10S	17-Jun-97	96.38		5.64		90.74	<0.002	<0.002	<0.002	<0.005	
MW-10S	27-Aug-97	96.38		5.90		90.48	0.0126	<0.002	<0.002	<0.005	
MW-10S	5-Nov-97	108.99		6.19		102.80	<0.001	<0.001	<0.001	<0.003	
MW-10S	27-Feb-98	108.99		5.77		103.22	<0.001	<0.001	<0.001	<0.003	
MW-10S	10-Jun-98	108.99		5.66		103.33	<0.001	<0.001	<0.001	<0.003	
MW-10S	8-Oct-98	108.99		5.83		103.16	<0.001	<0.001	<0.001	<0.003	
MW-10S	31-Mar-99	108.99		5.95		103.04	<0.001	<0.001	<0.001	<0.003	
MW-10S	9-Jun-99	108.99		5.76		103.23	<0.001	<0.001	<0.001	<0.003	
MW-10S	2-Sep-99	108.99		6.21		102.78	<0.001	<0.001	<0.001	<0.003	
MW-10S	28-Oct-99	108.99		6.30		102.69	<0.001	<0.001	<0.001	<0.003	
MW-10S	23-Feb-00	108.99		6.06		102.93	<0.001	<0.001	<0.001	<0.003	
MW-10S	24-May-00	108.99		5.68		103.31	<0.001	<0.001	<0.001	<0.003	
MW-10S	15-Aug-00	108.99		5.94		103.05	<0.001	<0.001	<0.001	<0.003	
MW-10S	9-Nov-00	108.99		5.90		103.09	<0.001	<0.005	<0.001	<0.003	
MW-10S	11-Oct-01	108.99		5.94		103.05	<0.001	<0.001	<0.001	<0.003	
MW-10S	14-Mar-02	108.99		5.79		103.20	<0.001	<0.001	<0.001	<0.003	
MW-10S	6-Jun-02	108.99		5.55		103.44	<0.001	<0.001	<0.001	<0.003	
MW-10S	30-Aug-02	108.99		5.91		103.08	<0.001	<0.001	<0.001	<0.003	
MW-10S	6-Dec-02	108.99		6.24		102.75	<0.001	<0.001	<0.001	<0.003	
MW-10S	6-May-04	108.99		6.15		102.84	<0.001	<0.001	<0.001	<0.003	<0.001
MW-10S	21-Apr-05	108.99		5.97		103.02					
MW-10S	22-Apr-05						<0.001	<0.001	<0.001	<0.003	<0.001
MW-10S	5-Jan-09	108.99		5.69		103.30					
MW-10S	6-Jan-09	108.99					<0.001	<0.001	<0.001	<0.003	<0.001
MW-10D	1-Apr-91	85.06		5.62		79.44	<0.005	<0.005	<0.005	<0.010	
MW-10D	27-Jan-92						0.005	<0.002	<0.002	<0.005	
MW-10D	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-10D	19-Jan-93										

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-10D	17-Jun-93										
MW-10D	11-Nov-93	96.31		6.21		90.10	<0.001	<0.001	<0.001	<0.001	
MW-10D	27-Jun-94	96.31		6.23		90.08	<0.001	<0.001	<0.001	<0.003	
MW-10D	16-Feb-95	96.31		6.15		90.16	<0.002	<0.002	<0.002	<0.005	
MW-10D	28-Jul-95	96.31		5.90		90.41	<0.002	<0.002	<0.002	<0.005	
MW-10D	22-Mar-96	96.31		6.42		89.89	<0.002	<0.002	<0.002	<0.005	
MW-10D	17-Jun-96	96.31		5.27		91.04	<0.002	<0.002	<0.002	<0.005	
MW-10D	25-Sep-96	96.31		6.17		90.14	<0.002	<0.002	<0.002	<0.005	
MW-10D	24-Apr-97	96.31		5.77		90.54	<0.002	<0.002	<0.002	<0.005	
MW-10D	17-Jun-97	96.31		5.74		90.57	<0.002	<0.002	<0.002	<0.005	
MW-10D	27-Aug-97	96.31		6.83		89.48	<0.002	<0.002	<0.002	<0.005	
MW-10D	5-Nov-97	108.93		6.13		102.80	<0.001	<0.001	<0.001	<0.003	
MW-10D	27-Feb-98	108.93		5.71		103.22	<0.001	<0.001	<0.001	<0.003	
MW-10D	10-Jun-98	108.93		5.61		103.32	<0.001	<0.001	<0.001	<0.003	
MW-10D	8-Oct-98	108.93		6.79		102.14	<0.001	<0.001	<0.001	<0.003	
MW-10D	31-Mar-99	108.93		5.90		103.03	<0.001	<0.001	<0.001	<0.003	
MW-10D	9-Jun-99	108.93		5.81		103.12	<0.001	<0.001	<0.001	<0.003	
MW-10D	2-Sep-99	108.93		6.18		102.75	<0.001	<0.001	<0.001	<0.003	
MW-10D	28-Oct-99	108.93		6.18		102.75	<0.001	<0.001	<0.001	<0.003	
MW-10D	23-Feb-00	108.93		6.10		102.83	<0.001	<0.001	<0.001	<0.003	
MW-10D	24-May-00	108.93		5.55		103.38	<0.001	<0.001	<0.001	<0.003	
MW-10D	15-Aug-00	108.93		5.91		103.02	<0.001	<0.001	<0.001	<0.003	
MW-10D	9-Nov-00	108.93		5.80		103.13	<0.001	<0.005	<0.001	<0.003	
MW-10D	11-Oct-01	108.93		5.90		103.03	<0.001	<0.001	<0.001	<0.003	
MW-10D	14-Mar-02	108.93		5.74		103.19	<0.001	<0.001	<0.001	<0.003	
MW-10D	6-Jun-02	108.93		5.52		103.41	<0.001	<0.001	<0.001	<0.003	
MW-10D	30-Aug-02	108.93		5.85		103.08	<0.001	<0.001	<0.001	<0.003	
MW-10D	6-Dec-02	108.93		6.22		102.71	<0.001	<0.001	<0.001	<0.003	
MW-10D	6-May-04	108.93		6.09		102.84	<0.001	<0.001	<0.001	<0.003	0.0055
MW-10D	21-Apr-05	108.93		5.94		102.99					
MW-10D	22-Apr-05						<0.001	<0.001	<0.001	<0.003	0.0041
MW-10D	5-Jan-09	108.93		5.62		103.31					
MW-10D	6-Jan-09	108.93					<0.001	<0.001	<0.001	<0.003	<0.001
MW-11S	1-Apr-91	85.82		5.52		80.30	**0.15**	<0.005	<0.005	0.011	
MW-11S	27-Jan-92						**3.6**	0.021	0.18	4.491	
MW-11S	24-Aug-92						**0.006**	0.029	0.006	0.81	
MW-11S	19-Jan-93						**1.3**	0.007	0.03	0.1	
MW-11S	17-Jun-93	96.99		6.01		90.98	**0.14**	<0.001	<0.001	<0.001	
MW-11S	11-Nov-93	96.99		6.80		90.19	**1.35**	<0.001	<0.001	<0.001	
MW-11S	27-Jun-94	96.99		6.84		90.15	**0.785**	0.0094	0.173	0.282	
MW-11S	16-Feb-95	96.99		6.53		90.46	**1.55**	0.0248	0.163	0.239	
MW-11S	28-Jul-95	96.99		6.42		90.57	**0.954**	0.0545	0.316	0.29	
MW-11S	22-Mar-96	96.99				96.99					
MW-11S	17-Jun-96	96.99		4.43		92.56	<0.002	<0.002	<0.002	<0.005	
MW-11S	25-Sep-96	96.99		6.77		90.22	**1.76**	0.0443	0.519	1.22	
MW-11S	24-Apr-97	96.99		6.12		90.87	**0.384**	0.0087	0.134	2.1	
MW-11S	17-Jun-97	96.99		6.11		90.88	**3.94**	**1.02**	**0.734**	2.06	
MW-11S	27-Aug-97	96.99		6.58		90.41	**1.79**	0.586	0.657	1.2	
MW-11S	5-Nov-97	109.54		6.85		102.69	**1**	0.05	0.37	0.023	
MW-11S	27-Feb-98	109.54		6.58		102.96	**0.19**	<0.005	0.033	0.11	
MW-11S	10-Jun-98	109.54		6.29		103.25	**0.8**	0.014	0.12	<0.001	
MW-11S	8-Oct-98	109.54		6.49		103.05	**0.91**	0.03	0.4	0.76	
MW-11S	31-Mar-99	109.54		6.42		103.12	**0.28**	<0.002	0.04	0.012/<0.002	
MW-11S	9-Jun-99	109.54		6.40		103.14	**3.7**	**6.7**	**0.73**	2.77	
MW-11S	2-Sep-99	109.54		7.16		102.38	**1.4**	0.029	0.43	1.34	
MW-11S	28-Oct-99	109.54		6.84		102.70	**0.78**	0.038	0.31	0.889	
MW-11S	23-Feb-00	109.54		6.25		103.29	0.0028	<0.001	<0.001	<0.003	
MW-11S	24-May-00	109.54		6.05		103.49	**0.018**	<0.001	0.0011	<0.003	
MW-11S	15-Aug-00	109.54		6.62		102.92	**1.3**	0.051	0.42	1.116	
MW-11S	9-Nov-00	109.54		6.35		103.19	**0.37**	<0.025	0.03	0.097/<0.005	
MW-11S	11-Oct-01	109.54		6.56		102.98	**0.78**	<0.021	0.44	0.95/<0.01	
MW-11S	14-Mar-02	109.54		5.89		103.65	**0.024**	<0.001	<0.001	<0.003	
MW-11S	6-Jun-02	109.54		5.43		104.11	**0.073**	0.0036	0.012	0.0077/<0.001	
MW-11S	30-Aug-02	109.54		6.52		103.02	**1.2**	0.051	0.55	0.86/<0.01	
MW-11S	6-Dec-02	109.54		6.88		102.66	**2.1**	0.045	0.67	0.26/<0.02	
MW-11S	6-May-04	109.54		6.59		102.95	**0.059**	<0.001	<0.001	<0.003	<0.001
MW-11S	21-Apr-05	109.54		6.38		103.16	**0.012**	<0.001	<0.001	<0.003	<0.001

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-11S	6-Jan-09	109.54		5.65		103.89	<0.001	<0.001	<0.001	<0.003	<0.001
MW-11D	1-Apr-91	85.90		6.57		79.33	<0.005	<0.005	<0.005	<0.01	
MW-11D	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-11D	24-Aug-92						<0.004	<0.002	<0.002	<0.005	
MW-11D	19-Jan-93										
MW-11D	17-Jun-93										
MW-11D	11-Nov-93	97.02		6.81		90.21	<0.001	<0.001	<0.001	<0.001	
MW-11D	27-Jun-94	97.02		6.95		90.07	**0.248**	0.0028	0.0637	0.135	
MW-11D	16-Feb-95	97.02		6.70		90.32	**0.433**	0.0058	0.0407	0.0446	
MW-11D	28-Jul-95	97.02		6.49		90.53	**0.94**	0.0386	0.219	0.215	
MW-11D	22-Mar-96	97.02		7.07		89.95	**0.424**	0.0075	0.0467	0.0191	
MW-11D	17-Jun-96	97.02		6.12		90.90	**0.0482**	<0.002	<0.002	<0.005	
MW-11D	25-Sep-96	97.02		6.89		90.13	**0.392**	0.0077	0.104	0.204	
MW-11D	24-Apr-97	97.02		6.31		90.71	**0.339**	0.131	0.0807	0.184	
MW-11D	17-Jun-97	97.02		6.32		90.70	**1.56**	0.368	0.278	0.956	
MW-11D	27-Aug-97	97.02		7.84		89.18	**0.311**	0.0167	0.0837	0.224	
MW-11D	5-Nov-97	109.58		7.13		102.45	**0.17**	0.0045	0.09	0.29	
MW-11D	27-Feb-98	109.58		6.23		103.35	**0.024**	<0.001	<0.001	<0.003	
MW-11D	10-Jun-98	109.58		6.52		103.06	**0.02**	<0.001	<0.001	<0.003	
MW-11D	8-Oct-98	109.58		6.76		102.82	**0.12**	0.004	0.038	0.044	
MW-11D	31-Mar-99	109.58		6.90		102.68	0.0034	<0.001	<0.001	<0.003	
MW-11D	9-Jun-99	109.58		6.64		102.94	**0.75**	1.4	0.14	0.53	
MW-11D	2-Sep-99	109.58		7.22		102.36	**0.082**	0.0048	0.037	0.1225	
MW-11D	28-Oct-99	109.58		7.10		102.48	**0.077**	0.0023	0.035	0.1	
MW-11D	23-Feb-00	109.58		6.91		102.67	**0.16**	0.0012	0.0098	0.1	
MW-11D	24-May-00	109.58		6.49		103.09	0.0011	<0.001	<0.001	<0.003	
MW-11D	15-Aug-00	109.58		7.04		102.54	**0.014**	<0.001	0.0053	0.011	
MW-11D	9-Nov-00	109.58		6.95		102.63	**0.26**	<0.012	0.027	0.059	
MW-11D	11-Oct-01	109.58		6.83		102.75	**0.017**	<0.001	0.0035	<0.003	
MW-11D	14-Mar-02	109.58		6.42		103.16	<0.001	<0.001	<0.001	<0.003	
MW-11D	6-Jun-02	109.58		6.33		103.25	<0.001	<0.001	<0.001	<0.003	
MW-11D	30-Aug-02	109.58		6.74		102.84	**0.035**	<0.001	0.0012	<0.003	
MW-11D	6-Dec-02	109.58		7.09		102.49	0.001	<0.001	<0.001	<0.003	
MW-11D	6-May-04	109.58		6.80		102.78	**0.008**	<0.001	<0.001	<0.003	0.0025
MW-11D	21-Apr-05	109.58		6.63		102.95	<0.001	<0.001	<0.001	<0.003	<0.001
MW-11D	6-Jan-09	109.58		6.26		103.32	<0.001	<0.001	<0.001	<0.003	0.0017
MW-12S	1-Apr-91	81.23		2.21		79.02	**1.8**	0.14	0.11	0.4	
MW-12S	27-Jan-92						**0.041**	0.002	0.013	0.054	
MW-12S	24-Aug-92						**0.2**	0.002	0.004	0.005	
MW-12S	19-Jan-93						BDL	BDL	BDL	BDL	
MW-12S	17-Jun-93	92.64		2.60		90.04	0.003	<0.001	<0.001	<0.001	
MW-12S	11-Nov-93	92.64		2.45		90.19	<0.001	<0.001	<0.001	<0.001	
MW-12S	27-Jun-94	92.64		2.52		90.12	**0.137**	<0.001	<0.001	<0.003	
MW-12S	16-Feb-95	92.64		2.25		90.39	**0.0902**	<0.002	<0.002	<0.005	
MW-12S	28-Jul-95	92.64		2.10		90.54	**0.0137**	<0.002	<0.002	<0.005	
MW-12S	22-Mar-96	92.64		2.62		90.02	<0.002	<0.002	<0.002	<0.005	
MW-12S	17-Jun-96	92.64		1.50		91.14	<0.002	<0.002	<0.002	<0.005	
MW-12S	25-Sep-96	92.64		2.36		90.28	<0.002	<0.002	<0.002	<0.005	
MW-12S	24-Apr-97	92.64		1.89		90.75	<0.002	<0.002	<0.002	<0.005	
MW-12S	17-Jun-97	92.64		1.76		90.88	<0.002	<0.002	<0.002	<0.005	
MW-12S	27-Aug-97	92.64		2.24		90.40	<0.002	<0.002	<0.002	<0.005	
MW-12S	5-Nov-97	105.19		2.50		102.69	0.0026	<0.001	<0.001	<0.003	
MW-12S	27-Feb-98	105.19		2.56		102.63	<0.001	<0.001	<0.001	<0.003	
MW-12S	10-Jun-98	105.19		1.90		103.29	<0.001	<0.001	<0.001	<0.003	
MW-12S	8-Oct-98	105.19		2.17		103.02	<0.001	<0.001	<0.001	<0.003	
MW-12S	31-Mar-99	105.19		2.29		102.90	<0.001	<0.001	<0.001	<0.003	
MW-12S	9-Jun-99	105.19		2.13		103.06	**0.07**	<0.001	<0.001	<0.003	
MW-12S	2-Sep-99	105.19		3.75		101.44	<0.001	<0.001	<0.001	<0.002	
MW-12S	28-Oct-99	105.19		2.58		102.61	**0.16**	0.0045	0.0043	0.005	
MW-12S	23-Feb-00	105.19		2.33		102.86	**0.054**	0.0021	0.011	0.012	
MW-12S	24-May-00	105.19		1.92		103.27	**0.13**	0.0034	0.015	0.017	
MW-12S	15-Aug-00	105.19		2.23		102.96	**0.24**	0.016	0.053	0.059	
MW-12S	9-Nov-00	105.19		2.15		103.04	**0.27**	0.037	0.12	0.2133	
MW-12S	11-Oct-01	105.19		2.32		102.87	**0.11**	0.013	0.12	0.1224	
MW-12S	14-Mar-02	105.19		1.98		103.21	**0.18**	0.0075	0.041	0.121	
MW-12S	6-Jun-02	105.19		1.80		103.39	**0.18**	0.023	0.042	0.0061	
MW-12S	30-Aug-02	105.19		2.20		102.99	**0.2**	0.027	0.077	0.1817	

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Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-12S	6-Dec-02	105.19		2.58		102.61	**0.051**	0.006	0.017	0.079	
MW-12S	6-May-04	105.19		2.40		102.79	**0.043**	0.0035	<0.001	0.022	0.0012
MW-12S	21-Apr-05	105.19		2.20		102.99	**0.027**	0.0014	<0.001	0.0097	0.0021
MW-12S	29-Dec-08	105.19		1.00		104.19					
MW-12S	5-Jan-09	105.19		1.84		103.35					
MW-12S	6-Jan-09	105.19					<0.001	<0.001	<0.001	<0.003	<0.001
MW-12D	1-Apr-91	81.36		2.21		79.15	**0.074**	<0.005	<0.005	<0.01	
MW-12D	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-12D	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-12D	19-Jan-93										
MW-12D	17-Jun-93										
MW-12D	11-Nov-93	92.79		2.57		90.22	<0.001	<0.001	<0.001	<0.001	
MW-12D	27-Jun-94	92.79		3.38		89.41	<0.001	<0.001	<0.001	<0.003	
MW-12D	16-Feb-95	92.79		2.85		89.94	<0.002	<0.002	<0.002	<0.005	
MW-12D	28-Jul-95	92.79		2.60		90.19	<0.002	<0.002	<0.002	<0.005	
MW-12D	22-Mar-96	92.79		3.15		89.64	<0.002	<0.002	<0.002	<0.005	
MW-12D	17-Jun-96	92.79		2.08		90.71	<0.002	<0.002	<0.002	<0.005	
MW-12D	25-Sep-96	92.79		2.93		89.86	<0.002	<0.002	<0.002	<0.005	
MW-12D	24-Apr-97	92.79		2.30		90.49	<0.002	<0.002	<0.002	<0.005	
MW-12D	17-Jun-97	92.79		2.29		90.50	<0.002	<0.002	<0.002	<0.005	
MW-12D	27-Aug-97	92.79		2.75		90.04	<0.002	<0.002	<0.002	<0.005	
MW-12D	5-Nov-97	105.34		3.13		102.21	<0.001	<0.001	<0.001	<0.003	
MW-12D	27-Feb-98	105.34		1.97		103.37	<0.001	<0.001	<0.001	<0.003	
MW-12D	10-Jun-98	105.34		2.47		102.87	<0.001	<0.001	<0.001	<0.003	
MW-12D	8-Oct-98	105.34		2.86		102.48	<0.001	<0.001	<0.001	<0.003	
MW-12D	31-Mar-99	105.34		2.77		102.57	<0.001	<0.001	<0.001	<0.003	
MW-12D	9-Jun-99	105.34		2.68		102.66	<0.001	<0.001	<0.001	<0.003	
MW-12D	2-Sep-99	105.34		3.31		102.03	<0.001	<0.001	<0.001	<0.002	
MW-12D	28-Oct-99	105.34		3.20		102.14	<0.001	<0.001	<0.001	<0.002	
MW-12D	23-Feb-00	105.34		3.00		102.34	<0.001	<0.001	<0.001	<0.003	
MW-12D	24-May-00	105.34		2.49		102.85	<0.001	<0.001	<0.001	<0.003	
MW-12D	15-Aug-00	105.34		2.82		102.52	<0.001	<0.001	<0.001	<0.003	
MW-12D	9-Nov-00	105.34		2.75		102.59	<0.001	<0.001	<0.001	<0.003	
MW-12D	11-Oct-01	105.34		2.82		102.52	<0.001	<0.001	<0.001	<0.003	
MW-12D	14-Mar-02	105.34		2.50		102.84	<0.001	<0.001	<0.001	<0.003	
MW-12D	6-Jun-02	105.34		2.34		103.00	<0.001	<0.001	<0.001	<0.003	
MW-12D	30-Aug-02	105.34		2.81		102.53	<0.001	<0.001	<0.001	<0.003	
MW-12D	6-Dec-02	105.34		3.20		102.14	<0.001	<0.001	<0.001	<0.003	
MW-12D	6-May-04	105.34		2.96		102.38	<0.001	<0.001	<0.001	<0.003	<0.001
MW-12D	21-Apr-05	105.34		3.73		101.61	<0.001	<0.001	<0.001	<0.03	<0.001
MW-12D	5-Jan-09	105.34		2.31		103.03					
MW-12D	6-Jan-09	105.34					<0.001	<0.001	<0.001	<0.003	<0.001
MW-13	1-Apr-91	85.19		5.24		79.95	2.6	0.3	0.19	0.56	
MW-13	27-Jan-92										
MW-13	19-Feb-92						1.9	0.01	0.14	0.72	
MW-13	24-Aug-92						14	2.1	0.85	13	
MW-13	19-Jan-93						0.009	BDL	BDL	0.005	
MW-13	17-Jun-93	96.50		6.00		90.50	<0.001	<0.001	<0.001	<0.001	
MW-13	11-Nov-93	96.50		6.28		90.22	**0.81**	0.054	0.346	4.56	
MW-13	27-Jun-94	96.50		6.29		90.21	**0.142**	0.0037	0.119	0.413	
MW-13	16-Feb-95	96.50		6.20		90.30	**0.0475**	<0.002	0.0202	0.129	
MW-13	28-Jul-95	96.50		6.01		90.49	**0.41**	0.0051	0.56	2.548	
MW-13	22-Mar-96	96.50		6.53		89.97	**0.212**	0.0092	0.0901	0.973	
MW-13	17-Jun-96	96.50		3.78		92.72	<0.002	<0.002	<0.002	<0.005	
MW-13	25-Sep-96	96.50		6.29		90.21	**0.109**	0.0261	**0.911**	9.6	
MW-13	24-Apr-97	96.50		5.80		90.70	<0.002	<0.002	<0.002	<0.005	
MW-13	17-Jun-97	96.50		5.59		90.91	**0.0195**	<0.002	0.0201	0.107	
MW-13	27-Aug-97	96.50		6.17		90.33	**1.4**	0.38	0.361	3.65	
MW-13	5-Nov-97	109.12		6.38		102.74	**0.16**	<0.025	0.67	5.8	
MW-13	27-Feb-98	109.12		5.51		103.61	<0.001	<0.001	<0.001	<0.003	
MW-13	10-Jun-98	109.12		5.78		103.34	**0.38**	<0.025	0.67	3.4	
MW-13	8-Oct-98	109.12		6.02		103.10	**<0.025**	<0.025	0.28	3.5	
MW-13	31-Mar-99	109.12		6.17		102.95	**0.027**	<0.0025	0.11	0.81	
MW-13	9-Jun-99	109.12		6.07		103.05	**0.008**	0.013	0.13	0.903.3	
MW-13	2-Sep-99	109.12		6.64		102.48	**0.23**	<0.025	0.12	0.72	
MW-13	28-Oct-99	109.12		6.45		102.67	**0.2**	<0.01	0.11	0.718	
MW-13	23-Feb-00	109.12		5.50		103.62					

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							**0.005**	**1**	**0.7**	**10**	0.07
GCGIER - Class II Groundwater							**0.025**	**2.5**	**1**	**10**	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-13	24-May-00	109.12		5.91		103.21	**0.0073**	<0.001	0.0019	0.021	
MW-13	15-Aug-00	109.12		6.24		102.88	**0.038**	<0.005	0.3	0.5453	
MW-13	9-Nov-00	109.12		6.08		103.04	<0.001	<0.005	0.0014	<0.003	
MW-13	11-Oct-01	109.12		6.21		102.91	**0.05**	0.0023	0.069	0.0122	
MW-13	14-Mar-02	109.12		5.89		103.23	<0.001	<0.001	<0.001	<0.003	
MW-13	6-Jun-02	109.12		5.06		104.06	**0.0077**	<0.001	0.009	<0.003	
MW-13	30-Aug-02	109.12		6.15		102.97	**0.013**	0.0018	0.03	0.0024	
MW-13	6-Dec-02	109.12		6.53		102.59	**0.044**	<0.01	0.085	<0.03	
MW-13	6-May-04	109.12		6.37		102.75	0.0039	<0.001	0.013	<0.003	<0.001
MW-13	21-Apr-05	109.12		6.27		102.85					
MW-13	22-Apr-05	109.12					**0.0077**	<0.001	0.039	0.013	<0.001
MW-13	29-Dec-08	109.12		5.00		104.12					
MW-13	5-Jan-09	109.12		5.88		103.24					
MW-13	6-Jan-09	109.12					<0.001	<0.001	<0.001	<0.003	<0.001
MW-14	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-14	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-14	19-Jan-93						BDL	BDL	BDL	BDL	
MW-14	17-Jun-93	89.62		0.00		89.62	<0.001	<0.001	<0.001	<0.001	
MW-14	11-Nov-93	89.62		0.00		89.62	<0.001	<0.001	<0.001	<0.001	
MW-14	27-Jun-94	89.62		0.00		89.62	<0.001	<0.001	<0.001	<0.003	
MW-14	16-Feb-95	89.62		0.00		89.62	<0.002	<0.002	<0.002	<0.005	
MW-14	28-Jul-95	89.62		0.00		89.62	<0.002	<0.002	<0.002	<0.005	
MW-14	22-Mar-96	89.62				89.62					
MW-14	17-Jun-96	89.62		0.03		89.59	<0.002	<0.002	<0.002	<0.005	
MW-14	25-Sep-96	89.62		0.05		89.57	<0.002	<0.002	<0.002	<0.005	
MW-14	24-Apr-97	89.62		0.00		89.62	<0.002	<0.002	<0.002	<0.005	
MW-14	17-Jun-97	89.62		0.00		89.62	<0.002	<0.002	<0.002	<0.005	
MW-14	27-Aug-97	89.62		0.00		89.62	<0.002	<0.002	<0.002	<0.005	
MW-14	5-Nov-97	99.46		0.79		98.67	<0.001	<0.001	<0.001	<0.003	
MW-14	27-Feb-98	99.46		0.00		99.46	<0.001	<0.001	<0.001	<0.003	
MW-14	10-Jun-98	99.46		0.00		99.46	<0.001	<0.001	<0.001	<0.003	
MW-14	8-Oct-98	99.46		0.09		99.37	<0.001	<0.001	<0.001	<0.003	
MW-14	31-Mar-99	99.46		0.00		99.46	<0.001	<0.001	<0.001	<0.003	
MW-14	9-Jun-99	99.46		0.00		99.46	<0.001	<0.001	<0.001	<0.003	
MW-14	2-Sep-99	99.46		0.19		99.27	<0.001	<0.001	<0.001	<0.003	
MW-14	28-Oct-99	99.46		0.00		99.46	<0.001	<0.001	<0.001	<0.003	
MW-14	23-Feb-00	99.46		0.00		99.46	<0.001	<0.001	<0.001	<0.003	
MW-14	24-May-00			0.00			<0.001	<0.001	<0.001	<0.003	
MW-14	15-Aug-00			0.00			<0.001	<0.001	<0.001	<0.003	
MW-14	9-Nov-00			0.00			<0.001	<0.001	<0.001	<0.003	
MW-14	11-Oct-01	99.16		0.02		99.14	<0.001	<0.001	<0.001	<0.003	
MW-14	14-Mar-02	99.16		0.02		99.14	<0.001	<0.001	<0.001	<0.003	
MW-14	6-Jun-02	99.16		0.00		99.16	<0.001	<0.001	<0.001	<0.003	
MW-14	30-Aug-02	99.16		0.00		99.16	<0.001	<0.001	<0.001	<0.003	
MW-14	6-Dec-02	99.16		0.00		99.16	<0.001	<0.001	<0.001	<0.003	
MW-14	6-May-04	99.16		0.00		99.16	<0.001	<0.001	<0.001	<0.003	<0.001
MW-14	21-Apr-05	99.16		0.00		99.16					
MW-14	22-Apr-05	99.16					<0.001	<0.001	<0.001	<0.003	<0.001
MW-14	5-Jan-09	99.16		0.30		98.86					
MW-14	6-Jan-09	99.16					<0.001	<0.001	<0.001	<0.003	<0.001
MW-15	27-Jan-92						0.005	<0.002	<0.002	<0.005	
MW-15	24-Aug-92						**0.03**	<0.002	<0.002	<0.005	
MW-15	19-Jan-93						**0.24**	BDL	BDL	BDL	
MW-15	17-Jun-93	88.40		0.00		88.40	**0.85**	<0.001	<0.001	<0.001	
MW-15	11-Nov-93	88.40		0.56		87.84	**1.03**	<0.001	<0.001	<0.001	
MW-15	27-Jun-94	88.40		0.50		87.90	**2.04**	<0.001	<0.001	<0.003	
MW-15	16-Feb-95	88.40		0.85		87.55	**1.82**	<0.002	<0.002	<0.005	
MW-15	28-Jul-95	88.40		0.20		88.20	**3.55**	<0.002	<0.002	<0.005	
MW-15	22-Mar-96	88.40		0.74		87.66	**10.5**	<0.002	<0.002	<0.005	
MW-15	17-Jun-96	88.40		0.00		88.40	**9.75**	<0.002	<0.002	<0.005	
MW-15	25-Sep-96	88.40		0.75		87.65	**7.6**	<0.002	<0.002	<0.005	
MW-15	24-Apr-97	88.40		0.16		88.24	**10.7**	0.0084	<0.002	<0.005	
MW-15	17-Jun-97	88.40		0.00		88.40	**9.59**	0.0381	<0.005	<0.005	
MW-15	27-Aug-97	88.40		0.40		88.00	**8.32**	<0.05	<0.05	<0.125	
MW-15	5-Nov-97	100.25		0.68		99.57	**8.2**	<0.05	<0.05	<0.15	
MW-15	27-Feb-98	100.25		0.22		100.03	7.4	<0.1	<0.1	<0.3	
MW-15	10-Jun-98	100.25		0.18		100.07	**6.9**	<0.1	<0.1	<0.3	

TABLE 1

Groundwater Elevation and Analytical Results

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399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							**0.005**	**1**	**0.7**	**10**	0.07
GCGIER - Class II Groundwater							**0.025**	**2.5**	**1**	**10**	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-15	8-Oct-98	100.25		0.43		99.82	**5.4**	<0.05	<0.05	<0.15	
MW-15	31-Mar-99	100.25		1.30		98.95	**4.6**	<0.025	<0.025	<0.075	
MW-15	9-Jun-99	100.25		1.20		99.05	**4.2**	0.032	<0.025	<0.075	
MW-15	2-Sep-99	100.25		1.55		98.70	**2.9**	0.036	0.034	0.079	
MW-15	28-Oct-99	100.25		1.44		98.81	**2.5**	0.049	0.078	0.165	
MW-15	23-Feb-00	100.25		0.90		99.35	**1.2**	0.045	0.091	0.2	
MW-15	24-May-00	100.25		0.71		99.54	**0.97**	0.034	0.11	0.255	
MW-15	15-Aug-00	100.25		0.86		99.39	**0.58**	0.024	0.12	0.264	
MW-15	9-Nov-00	100.25		0.75		99.50	**0.13**	0.0074	0.027	0.055	
MW-15	11-Oct-01	100.25		0.84		99.41	**0.2**	0.012	0.062	0.1125	
MW-15	14-Mar-02	100.25		0.62		99.63	**0.21**	0.011	0.055	0.0993	
MW-15	6-Jun-02	100.25		0.47		99.78	**0.17**	0.0055	0.033	0.0688	
MW-15	30-Aug-02	100.25		0.83		99.42	**0.22**	0.0073	0.04	0.0628	
MW-15	6-Dec-02	100.25		1.11		99.14	**0.24**	0.0062	0.031	0.0394	
MW-15	6-May-04	100.25		0.95		99.30	**0.12**	0.004	0.0023	0.0063	<0.001
MW-15	21-Apr-05	100.25		0.79		99.46					
MW-15	22-Apr-05	100.25					**0.076**	0.0024	<0.001	0.0045	<0.001
MW-15	5-Jan-09	100.25		0.40		99.85					
MW-15	6-Jan-09	100.25					**0.0739**	0.004	<0.001	0.0135	0.004
MW-16	27-Jan-92						<0.002	<0.002	<0.002	<0.005	
MW-16	24-Aug-92						<0.002	<0.002	<0.002	<0.005	
MW-16	19-Jan-93						BDL	BDL	BDL	BDL	
MW-16	17-Jun-93	91.82		2.23		89.59	<0.001	<0.001	<0.001	<0.001	
MW-16	11-Nov-93	91.82		2.47		89.35	<0.001	<0.001	<0.001	<0.001	
MW-16	27-Jun-94	91.82		2.59		89.23	<0.001	<0.001	<0.001	<0.003	
MW-16	16-Feb-95	91.82		2.60		89.22	**0.0103**	<0.002	<0.002	<0.005	
MW-16	28-Jul-95	91.82		2.44		89.38	**0.182**	<0.002	<0.002	<0.005	
MW-16	22-Mar-96	91.82		3.14		88.68	**1.83**	<0.002	<0.002	<0.005	
MW-16	17-Jun-96	91.82		1.63		90.19	**2.08**	<0.002	<0.002	<0.005	
MW-16	25-Sep-96	91.82		2.38		89.44	**2.19**	<0.002	<0.002	<0.005	
MW-16	24-Apr-97	91.82		7.95		83.87	**3.53**	<0.002	<0.002	<0.005	
MW-16	17-Jun-97	91.82		4.49		87.33	**3.6**	<0.002	<0.002	<0.005	
MW-16	27-Aug-97	91.82		5.51		86.31	**4.17**	0.219	<0.05	0.197	
MW-16	5-Nov-97	101.72		7.75		93.97	**3.9**	<0.025	<0.025	<0.075	
MW-16	27-Feb-98	101.72		6.28		95.44	**4.2**	<0.050	<0.05	<0.15	
MW-16	10-Jun-98	101.72		2.36		99.36	**3.3**	<0.050	<0.05	<0.15	
MW-16	8-Oct-98	101.72		2.55		99.17	**5.1**	<0.025	<0.025	<0.075	
MW-16	31-Mar-99	101.72		3.47		98.25	**4**	<0.025	<0.025	<0.075	
MW-16	9-Jun-99	101.72		3.30		98.42	**4.6**	<0.050	<0.05	<0.15	
MW-16	2-Sep-99	101.72		3.75		97.97	**4.4**	<0.050	<0.05	<0.1	
MW-16	28-Oct-99	101.72		3.50		98.22	**4.4**	<0.020	<0.02	<0.04	
MW-16	23-Feb-00	101.72		3.05		98.67	**3.3**	<0.025	<0.025	<0.075	
MW-16	24-May-00	101.72		2.91		98.81	**2.6**	<0.025	<0.025	<0.050	
MW-16	15-Aug-00	101.72		3.07		98.65	**1.7**	<0.010	<0.01	<0.03	
MW-16	9-Nov-00	101.72		3.11		98.61	**1.5**	<0.050	<0.01	<0.03	
MW-16	11-Oct-01	101.72		3.06		98.66	**0.35**	<0.050	<0.0025	<0.0075	
MW-16	14-Mar-02	101.72		2.75		98.97	**0.017**	<0.001	<0.001	<0.003	
MW-16	6-Jun-02	101.72		2.65		99.07	**0.2**	<0.002	<0.002	<0.006	
MW-16	30-Aug-02	101.72		2.97		98.75	**0.13**	<0.001	<0.001	<0.003	
MW-16	6-Dec-02	101.72		3.21		98.51	**0.12**	<0.001	<0.001	<0.003	
MW-16	6-May-04	101.72		3.07		98.65	**0.049**	<0.001	<0.001	<0.003	0.0034
MW-16	21-Apr-05	101.72		2.95		98.77					
MW-16	22-Apr-05	101.72					**0.045**	<0.001	<0.001	<0.003	0.0032
MW-16	5-Jan-09	101.72		2.58		99.14					
MW-16	6-Jan-09	101.72					**0.0191**	<0.001	<0.001	<0.003	<0.001
MW-17	5-Nov-97	100.91		2.05		98.86	<0.001	<0.001	<0.001	<0.003	
MW-17	27-Feb-98	100.91		1.63		99.28	<0.001	<0.001	<0.001	<0.003	
MW-17	10-Jun-98	100.91		1.58		99.33	<0.001	<0.001	<0.001	<0.003	
MW-17	8-Oct-98	100.91		1.87		99.04	<0.001	<0.001	<0.001	<0.003	
MW-17	31-Mar-99	100.91		2.29		98.62	<0.001	<0.001	<0.001	<0.003	
MW-17	9-Jun-99	100.91		2.15		98.76	<0.001	<0.001	<0.001	<0.003	
MW-17	2-Sep-99	100.91		2.65		98.26	<0.001	<0.001	<0.001	<0.002	
MW-17	28-Oct-99	100.91		2.54		98.37	<0.001	<0.001	<0.001	<0.002	
MW-17	23-Feb-00	100.91		2.04		98.87	<0.001	<0.001	<0.001	<0.003	
MW-17	24-May-00	100.91		1.81		99.10	<0.001	<0.001	<0.001	<0.002	
MW-17	15-Aug-00	100.91		2.07		98.84	<0.001	<0.001	<0.001	<0.003	
MW-17	9-Nov-00	100.91		1.98		98.93	<0.001	<0.005	<0.001	<0.003	

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							0.005	1	0.7	10	0.07
GCGIER - Class II Groundwater							0.025	2.5	1	10	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-17	11-Oct-01	100.91		2.14		98.77	<0.001	<0.001	<0.001	<0.003	
MW-17	14-Mar-02	100.91		1.81		99.10	<0.001	<0.001	<0.001	<0.003	
MW-17	6-Jun-02	100.91		1.59		99.32	0.0024	<0.001	<0.001	<0.003	
MW-17	30-Aug-02	100.91		2.01		98.90	<0.001	<0.001	<0.001	<0.003	
MW-17	6-Dec-02	100.91		2.34		98.57	<0.001	<0.001	<0.001	<0.003	
MW-17	6-May-04	100.91		2.13		98.78	0.0011	<0.001	<0.001	<0.003	0.053
MW-17	21-Apr-05	100.91		1.99		98.92					
MW-17	22-Apr-05	100.91					0.0041	<0.001	<0.001	<0.003	0.057
MW-17	5-Jan-09	100.91		1.48		99.43					
MW-17	6-Jan-09	100.91					<0.001	<0.001	<0.001	<0.003	0.0128
MW-18	5-Nov-97	99.19		5.32		93.87	<0.001	<0.001	<0.001	<0.003	
MW-18	27-Feb-98	99.19		2.63		96.56	<0.001	<0.001	<0.001	<0.003	
MW-18	10-Jun-98	99.19		2.85		96.34	<0.001	<0.001	<0.001	<0.003	
MW-18	8-Oct-98	99.19		6.37		92.82	<0.001	<0.001	<0.001	<0.003	
MW-18	31-Mar-99	99.19		2.81		96.38	<0.001	<0.001	<0.001	<0.003	
MW-18	9-Jun-99	99.19		2.46		96.73	<0.001	<0.001	<0.001	<0.003	
MW-18	2-Sep-99	99.19		4.73		94.46	<0.001	<0.001	<0.001	<0.003	
MW-18	28-Oct-99	99.19		3.95		95.24	<0.001	<0.001	<0.001	<0.003	
MW-18	23-Feb-00	99.19		3.25		95.94	<0.001	<0.001	<0.001	<0.003	
MW-18	24-May-00	99.19		2.34		96.85	<0.001	<0.001	<0.001	<0.003	
MW-18	15-Aug-00	99.19		2.98		96.21	<0.001	<0.001	<0.001	<0.003	
MW-18	9-Nov-00	99.19		3.35		95.84	<0.001	<0.005	<0.001	<0.003	
MW-18	11-Oct-01	99.19		3.42		95.77	<0.001	<0.001	<0.001	<0.003	
MW-18	14-Mar-02	99.19		2.40		96.79	<0.001	<0.001	<0.001	<0.003	
MW-18	6-Jun-02	99.19		2.33		96.86	<0.001	<0.001	<0.001	<0.003	
MW-18	30-Aug-02	99.19		3.50		95.69	<0.001	<0.001	<0.001	<0.003	
MW-18	6-Dec-02	99.19		3.54		95.65	<0.001	<0.001	<0.001	<0.003	
MW-18	6-May-04	99.19		2.83		96.36	<0.001	<0.001	<0.001	<0.003	<0.001
MW-18	21-Apr-05	99.19		2.73		96.46					
MW-18	22-Apr-05	99.19					<0.001	<0.001	<0.001	<0.003	<0.001
MW-18	5-Jan-09	99.19		2.34		96.85					
MW-18	6-Jan-09	99.19					<0.001	<0.001	<0.001	<0.003	<0.001
MW-19	19-Oct-01	100.62		5.42		95.20	<0.001	<0.001	<0.001	<0.003	
MW-19	14-Mar-02	100.62		3.70		96.92	<0.001	<0.001	<0.001	<0.003	
MW-19	6-Jun-02	100.62		2.90		97.72	<0.001	<0.001	<0.001	<0.003	
MW-19	30-Aug-02	100.62		4.85		95.77	<0.001	<0.001	<0.001	<0.003	
MW-19	6-Dec-02	100.62		5.71		94.91	<0.001	<0.001	<0.001	<0.003	
MW-19	3-May-04	100.62		4.10		96.52	<0.001	<0.001	<0.001	<0.003	<0.001
MW-19	21-Apr-05	100.62		3.77		96.85					
MW-19	22-Apr-05	100.62					<0.001	<0.001	<0.001	<0.003	<0.001
MW-19	5-Jan-09	100.62		3.33		97.29					
MW-19	6-Jan-09	100.62					<0.001	<0.001	<0.001	<0.003	<0.001
BW-1	19-Jan-93						BDL	BDL	BDL	BDL	
BW-1	17-Jun-93						<0.001	<0.001	<0.001	<0.001	
BW-1	11-Jan-93						<0.001	<0.001	<0.001	<0.001	
BW-1	27-Jun-94						<0.001	<0.001	<0.001	<0.003	
BW-1	16-Feb-95						<0.002	<0.002	<0.002	<0.005	
BW-1	28-Jul-95						<0.002	<0.002	<0.002	<0.005	
BW-1	22-Mar-96						<0.002	<0.002	<0.002	<0.005	
BW-1	27-Feb-98										
BW-1	11-Oct-01	99.08		27.34		71.74	<0.001	<0.001	<0.001	<0.003	
BW-1	14-Mar-02	99.08		25.56		73.52	<0.001	<0.001	<0.001	<0.003	
BW-1	6-Jun-02	99.08		30.36		68.72	<0.001	<0.001	<0.001	<0.003	
BW-1	30-Aug-02	99.08		28.25		70.83	<0.001	<0.001	<0.001	<0.003	
BW-1	6-Dec-02	99.08		26.61		72.47	<0.001	<0.001	<0.001	<0.003	
BW-1	6-May-04	99.08					Not able to open, manhole needs to be repaired				
RW-1 ('04)	21-Apr-05	108.01		4.58		103.43	**0.44**	0.0097	0.028	0.11	0.01
RW-1 ('04)	29-Dec-08	108.01		2.42		105.59					
RW-1 ('04)	5-Jan-09	108.01		3.93		104.08					
MP-1	21-Apr-05	108.51		5.09		103.42	**0.49**	0.013	<0.0025	0.015	0.0096
MP-1	6-Jan-09	108.51					**0.0301**	0.0011	0.0021	<0.003	0.001
MP-2	21-Apr-05	108.72		5.31		103.41	**0.23**	0.0095	0.14	0.2	0.0077
MP-3	21-Apr-05	109.30		5.89		103.41	**0.13**	0.65	0.13	1.2	0.011
MP-3	29-Dec-08	109.30		5.17		104.13					
MP-4	21-Apr-05	109.33		5.89		103.44	**0.24**	0.014	<0.001	0.013	0.0061
MW-21	21-Apr-05	102.43		8.79		93.64					
MW-21	22-Apr-05	102.43					<0.001	<0.001	<0.001	<0.003	<0.001

TABLE 1

Groundwater Elevation and Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes							Tier 1 Groundwater Remediation Objectives				
							Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)
GCGIER - Class I Groundwater							**0.005**	**1**	**0.7**	**10**	0.07
GCGIER - Class II Groundwater							**0.025**	**2.5**	**1**	**10**	0.07
Sample ID	Date Sampled	Reference Elevation (feet)	Static Depth to Free Product (feet below TOC)	Static Depth to Water (feet below TOC)	Free Product Thickness (feet)	Groundwater Elevation (feet)					
MW-21	5-Jan-09	102.43		6.12		96.31					
MW-21	6-Jan-09	102.43					<0.001	<0.001	<0.001	<0.003	<0.001
MW-22	21-Apr-05	107.15		4.62		102.53					
MW-22	22-Apr-05	107.15					<0.001	<0.001	<0.001	<0.003	<0.001
MW-22	6-Jan-09	107.15		4.34		102.81	<0.001	<0.001	<0.001	<0.003	<0.001
MW-23	21-Apr-05	104.89		6.90		97.99					
MW-23	22-Apr-05	104.89					<0.001	<0.001	<0.001	<0.003	<0.001
MW-23	5-Jan-09	104.89		6.78		98.11					
MW-23	6-Jan-09	104.89					<0.001	<0.001	<0.001	<0.003	<0.001
MW-24	21-Apr-05	105.54		4.35		101.19	<0.001	<0.001	<0.001	<0.003	<0.001
MW-25	24-May-05	107.74		4.31		103.43	<0.001	<0.001	<0.001	<0.003	<0.001
MW-26	21-Apr-05	111.38		7.48		103.90					
MW-26	22-Apr-05	111.38					<0.001	<0.001	<0.001	<0.003	<0.001
MW-26	29-Dec-08	111.38		6.00		105.38					
MW-26	31-Dec-08	111.38		6.94		104.44					
MW-26	5-Jan-09	111.38		7.23		104.15					
MW-26	6-Jan-09	111.38					**0.0403**	0.0755	0.0048	0.0597	0.0017
MW-26	13-Mar-09	111.38		6.83		104.55					
MW-26	1-Apr-09	111.38		6.72							
MW-27	21-Apr-05	111.15		7.54		103.61	**0.048**	0.0095	0.15	0.68	0.016
MW-27	29-Dec-08	111.15		6.83	Sheen	104.32					
MW-27	31-Dec-08	111.15	6.97	7.03	0.06	104.17					
MW-27	5-Jan-09	111.15	7.25	7.35	0.10	103.88					
MW-27	9-Jan-09	111.15	7.29	7.39	0.10	103.84					
MW-27	27-Jan-09	111.15	7.59	7.72	0.13	103.53					
MW-27	30-Jan-09	111.15	7.66	7.68	0.02	103.49					
MW-27	26-Feb-09	111.15	7.28	7.36	0.08	103.85					
MW-27	9-Mar-09	111.15		6.5		104.65					
MW-27	13-Mar-09	111.15	6.82	6.825	0.005	104.33					
MW-27	1-Apr-09	111.15		6.71		104.44					
MW-28	21-Apr-05	112.55		8.10		104.45					
MW-28	22-Apr-05	112.55					<0.001	<0.001	<0.001	<0.003	<0.001
MW-28	5-Jan-09	112.55		7.80		110.83					
MW-28	6-Jan-09	112.55					<0.001	<0.001	<0.001	<0.003	<0.001
RW-1	6-Jan-09						**0.764**	<0.005	0.0052	<0.015	0.0118
RW-2	1-Apr-09			9.40							

Notes:
1) GCGIER = groundwater component of the groundwater ingestion exposure route
2) mg/L = milligrams per Liter; TOC = top-of-casing; BDL= concentration below the laboratory detection limit; FP = free product present
3) <0.005 = concentration less than the laboratory reporting limit
4) **Bold** = a concentration above the Tier 1 groundwater remediation objective(s) established in 35 Illinois Administrative Code Part 742
5) All groundwater samples were analyzed for and methyl tert-butyl ether (MTBE) and/or benzene, toluene, ethylbenzene, and total xylenes using United States Environmental Protection Agency Method 8020 or 8021B
6) Shading = not available, not applicable, or not present; Sheen = a sheen of free product was present on the groundwater
7) Groundwater elevations are relative to a site specific datum of 100 feet

TABLE 2

Free Product Recovery Volumes

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Well ID	Recovery/Gauging Date	Depth to Free Product (feet below TOC)	Depth to Water (feet below TOC)	Free Product Thickness (feet)	Free Product Recovered (gallons)	Free Product and Groundwater Recovered (gallons)
MW-2	29-Nov-90	10.00	10.30	0.30		
MW-2	27-Jan-92	FP				
MW-2	19-Feb-92	FP				
MW-2	24-Aug-92	FP				
MW-2	19-Jan-93	FP				
MW-2	27-Jun-94	10.95	10.96	0.01		
MW-6	11-Oct-01	sheen	7.39			
MW-6	14-Mar-02	sheen	6.93			
MW-6	6-Jun-02	sheen	6.7			
MW-6	30-Aug-02	sheen	7.27			
MW-6	6-Dec-02	sheen	7.83			
MW-6	6-May-04	sheen	7.45			
MW-7	29-Nov-90	7.39	7.69	0.30		
S-1	31-Dec-08	6.15	6.19	0.04	15	2,500
S-1	5-Jan-09	6.95	7.00	0.05	0.01	4
S-1	9-Jan-09	6.95	6.99	0.04	10	2,000
S-1	27-Jan-09	7.78	7.87	0.09	10	2,100
S-1	30-Jan-09	8.83	8.87	0.04		
S-1	26-Feb-09	7.23	7.31	0.08	0.01	4
S-1	9-Mar-09	5.97	6.03	0.06	15	3,000
S-1	13-Mar-09	6.43	6.47	0.04	14	2,800
S-1	1-Apr-09	6.2	6.23	0.03	10	2,000
S-2	31-Dec-08	6.24	6.27	0.03	See S-1 Above	See S-1 Above
S-2	27-Jan-09	9.19	9.30	0.11	See S-1 Above	See S-1 Above
S-2	26-Feb-09	7.32	7.39	0.07	See S-1 Above	See S-1 Above
S-2	9-Mar-09	6.04	6.08	0.04	See S-1 Above	See S-1 Above
S-2	13-Mar-09	6.52	6.55	0.03	See S-1 Above	See S-1 Above
S-2	1-Apr-09	6.25	6.27	0.02	See S-1 Above	See S-1 Above
S-3	31-Dec-08	6.23	6.26	0.03	See S-1 Above	See S-1 Above
S-3	5-Jan-09	6.77	6.82	0.05	0.01	4
S-3	9-Jan-09	6.96	7.02	0.06	See S-1 Above	See S-1 Above
S-3	27-Jan-09	8.15	8.3	0.15	See S-1 Above	See S-1 Above
S-2	30-Jan-09	8.93	8.97	0.04		
S-3	26-Feb-09	7.32	7.39	0.07	See S-1 Above	See S-1 Above
S-3	9-Mar-09	6.04	6.10	0.06	See S-1 Above	See S-1 Above
S-3	13-Mar-09	6.51	6.54	0.03	See S-1 Above	See S-1 Above
S-3	1-Apr-09	6.26	6.29	0.03	See S-1 Above	See S-1 Above
MW-27	31-Dec-08	6.97	7.03	0.06	See S-1 Above	See S-1 Above
MW-27	5-Jan-09	7.25	7.35	0.1	0.01	4
MW-27	6-Jan-09	7.3	7.36	0.06	0.01	1
MW-27	9-Jan-09	7.29	7.39	0.1	See S-1 Above	See S-1 Above
MW-27	27-Jan-09	7.59	7.72	0.13	See S-1 Above	See S-1 Above
MW-27	30-Jan-09	7.66	7.68	0.02	See S-1 Above	See S-1 Above
MW-27	26-Feb-09	7.28	7.36	0.08	See S-1 Above	See S-1 Above
MW-27	13-Mar-09	6.82	6.825	0.005	See S-1 Above	See S-1 Above
				Totals:	74.05	14,417.0

Notes:
1) TOC = top-of-casing
2) Shading = not applicable or not present
3) See S-1 above indicates that the individual volumes of product and groundwater recovered for each well was not noted during that event. The total volumes recovered during that event are noted in S-1.

TABLE 3

Soil Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes				Tier 1 Soil Remediation Objectives				
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)
SCGIER - Class I Groundwater				0.03	12	13	150	0.32
SCGIER - Class II Groundwater				0.17	29	19	150	0.32
Inhalation - Residential				0.8	650	400	320	8,800
Inhalation - Construction Worker				2.2	42	58	5.6	140
Ingestion - Residential				12	16,000	7,800	16,000	780
Ingestion - Construction Worker				2,300	410,000	20,000	41,000	2,000
Soil Saturation Limit				870	650	400	320	8,800
Sample ID	Date Sampled	Sample Depth (feet bls)	PID Reading (ppm)					
SB-1	21-Nov-90	4-5	20	<0.005	0.083	<0.005	0.085	
SB-2/MW-2	21-Nov-90	4-5	20	<0.005	0.11	0.29	1.8	
SB-3	21-Nov-90	4-5	>100	<0.005	0.2	0.22	2	
SB-4/MW-4	21-Nov-90	7-8	50	0.042	0.11	<0.005	<0.01	
SB-5/MW-5	21-Nov-90	9-10	0	0.041	0.11	<0.005	<0.01	
SB-6/MW-6	21-Nov-90	7-8	50	2.9	58	27	150	
SB-7/MW-7	21-Nov-90	7-8	200	0.27	33	20	120	
B-1	14-Jun-94	4-5.5	1	<0.002	<0.002	<0.002	<0.005	
B-2	14-Jun-94	1-3	10	<0.002	<0.002	<0.002	0.0085	
B-3	14-Jun-94	5-7	60	<0.002	<0.002	<0.002	0.342	
B-4	14-Jun-94	5-7	50	<0.002	<0.002	<0.002	0.098	
B-5	14-Jun-94	2-4	13	<0.002	<0.002	<0.002	<0.005	
B-6	14-Jun-94	2-4	500	<0.002	<0.002	<0.002	<0.005	
B-7	14-Jun-94			0.029	0.0168	0.219	0.066	
HA-1	27-Aug-97	7.5-8	0	<0.002	<0.002	<0.002	<0.005	
HA-2	27-Aug-97	7.5-8	12	<0.002	0.147	0.0068	0.376	
HA-3	27-Aug-97	7.5-8	212	8.21	92.4	39.4	238	
HA-4	27-Aug-97	6.0-6.5	284	1.45	6.06	3.46	44.5	
SB-19/MW-17	31-Oct-97	10-12	0	<0.01	<0.01	<0.01	<0.03	
SB-19/MW-17	31-Oct-97	20-22	0	<0.01	<0.01	<0.01	<0.03	
SB-20/MW-18	31-Oct-97	12-14	0	<0.01	<0.01	<0.01	<0.03	
SB-20/MW-18	31-Oct-97	20-22	0	<0.01	<0.01	<0.01	<0.03	
CB-1	25-Oct-99	6-8	104	0.2	0.35	0.72	<0.03	
CB-2	25-Oct-99	8-10	294	26	240	89	38	
CB-3	25-Oct-99	6-8	510	4.7	190	95	49	
CB-4	25-Oct-99	8-10	90	<0.12	1.9	3.4	200/<60	
CB-5	25-Oct-99	8-10	21.9	<0.028	<0.056	<0.056	37	
CB-6	25-Oct-99	4-6	6.6	<0.029	<0.058	<0.058	0.72	
CB-7	25-Oct-99	24-26	2.6	0.58	<0.063	<0.063	<0.6	
CB-8	25-Oct-99	22-24	6.3	0.57	<0.06	<0.06	<0.179	
CB-9	25-Oct-99	26-28	7.6	1.6	<0.06	<0.06	<0.178	
CB-10	25-Oct-99	10-12	2.6	<0.14	<0.28	<0.28	<0.167	
CB-11	26-Jul-00	10-12	321	0.7	13	5.9	3.9	
CB-12	26-Jul-00	6-8	553	<0.049	4.8	5.5	540	
CB-13	26-Jul-00	8-10	307	<0.03	0.11	0.085	590	
CB-14	26-Jul-00	8-10	514	<0.052	0.76	3.4	22.7	
CB-15	26-Jul-00	8-10	18	<0.03	<0.060	<0.060	<0.166	
CB-16	26-Jul-00	6-8	2.7	<0.021	<0.200	<0.2	<0.178	
CB-17	26-Jul-00	2-4	3.0	<0.029	<0.059	<0.059	<0.193	
CB-18	26-Jul-00	6-8	3.6	<0.029	<0.058	<0.058	<0.18	
CB-19	26-Jul-00	0-2	3.3	<0.029	<0.057	<0.057	<0.18	
CB-20	26-Jul-00	6-8	3.2	<0.018	<0.17	<0.17	<0.84	
MW-19	17-Aug-01	22-24		<0.029	<0.057	<0.057	<0.51	
B-1a	17-Aug-01	4-6		<0.029	<0.058	<0.058	<0.167	
B-1b	17-Aug-01	16-18		<0.03	<0.06	<0.06	<0.178	
B-1c	17-Aug-01	22-24		<0.029	<0.058	<0.058	<0.18	
B-2a	16-Aug-01	8-10		<0.029	<0.057	<0.057	<0.178	
B-2b	16-Aug-01	16-18		<0.0079	<0.120	<0.12	<0.167	
B-2c	16-Aug-01	22-24		<0.029	<0.058	<0.058	<0.35	
B-3a	16-Aug-01	8-10		<0.03	<0.06	<0.06	<0.178	
B-3b	16-Aug-01	16-18		<0.03	<0.059	<0.059	<0.18	
B-3c	16-Aug-01	22-24		<0.03	<0.059	<0.059	<0.179	
B-4a	16-Aug-01	8-10		<0.029	<0.059	<0.059	<0.179	
B-4b	16-Aug-01	16-18		<0.029	<0.057	<0.057	<0.179	
B-4c	16-Aug-01	20-22		0.034	<0.066	<0.066	<0.167	

TABLE 3

Soil Analytical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Tier 1 Exposure Routes				Tier 1 Soil Remediation Objectives				
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)
SCGIER - Class I Groundwater				**0.03**	**12**	**13**	**150**	**0.32**
SCGIER - Class II Groundwater				**0.17**	**29**	**19**	**150**	**0.32**
Inhalation - Residential				**0.8**	**650**	400	**320**	8,800
Inhalation - Construction Worker				**2.2**	**42**	**58**	**5.6**	140
Ingestion - Residential				12	16,000	7,800	16,000	780
Ingestion - Construction Worker				2,300	410,000	20,000	41,000	2,000
Soil Saturation Limit				870	**650**	400	**320**	8,800
Sample ID	Date Sampled	Sample Depth (feet bls)	PID Reading (ppm)					
B-5a	16-Aug-01	8-10		<0.028	<0.057	<0.057	<0.196	
B-5b	16-Aug-01	10-12		**0.55**	<0.058	<0.058	<0.167	
B-5c	16-Aug-01	22-24		<0.029	<0.057	<0.057	<0.178	
B-6a	16-Aug-01	2-4		<0.029	<0.059	<0.059	<0.167	
B-6b	16-Aug-01	16-18		<0.03	<0.060	<0.060	<0.179	
B-6c	16-Aug-01	20-22		<0.03	<0.059	<0.059	<0.017	
RW-1	11-Apr-05	4	1.3	<0.024	<0.059	<0.059	<0.12	<0.059
MP-1	11-Apr-05	5-7	0.8	<0.025	<0.062	<0.062	<0.12	<0.062
MP-2	11-Apr-05	5-6	0.7	<0.024	<0.06	<0.06	<0.12	<0.06
MP-3	11-Apr-05	6-7	238	**0.15**	0.13	1.7	**8.197**	0.16
MP-4	11-Apr-05	5-6	24.5	<0.023	<0.059	<0.059	<0.12	<0.059
SB-21/MW-21	12-Apr-05	2-3	5.1	<0.027	<0.067	<0.067	<0.2	<0.067
SB-22/MW-22	12-Apr-05	3	1.7	<0.025	<0.063	<0.063	<0.19	<0.063
SB-24/MW-24	12-Apr-05	4-5	0.9	<0.024	<0.059	<0.059	<0.18	<0.059
SB-25/MW-25	12-Apr-05	4	0.6	<0.023	<0.058	<0.058	<0.17	<0.058
SB-26/MW-26	12-Apr-05	5-6	5.3	<0.003	<0.074	<0.074	<0.22	<0.074
SB-27/MW-27	12-Apr-05	3-4	1.6	<0.023	<0.058	<0.058	<0.17	<0.058
SB-28	12-Apr-05	5-7	0.6	<0.02	<0.05	<0.05	<0.15	<0.05
SB-29	12-Apr-05	7-8	1.2	<0.023	<0.058	<0.058	<0.17	<0.058
SB-23/MW-23	15-Apr-05	4-5	1.3	<0.023	<0.056	<0.056	<0.17	<0.056
SB-30/MW-28	15-Apr-05	4-5	0.9	<0.024	<0.059	<0.059	<0.18	<0.18
SB-31	1-Jun-06	7-8	0.0	<0.023	<0.057	<0.057	<0.11	<0.057
SB-41	2-Feb-09	4-5	901	**0.289**	0.619	0.0731	0.731	<0.056
SB-41	2-Feb-09	5-8	>9,999	**1.4**	**29.3**	**13.3**	**70.1**	**<0.673**
SB-42	2-Feb-09	2-3	0.0	<0.0236	<0.059	<0.059	<0.177	<0.059
SB-42	2-Feb-09	6-8	629	**0.0616**	0.378	0.101	0.722	<0.0537
SB-43	2-Feb-09	4-5	33.7	<0.0232	<0.058	<0.058	<0.174	<0.058
SB-43	2-Feb-09	6-8	70.8	**0.192**	0.0798	1.24	**6**	0.219
SB-44	2-Feb-09	2-4	38.1	<0.0229	<0.0572	<0.0572	<0.171	<0.0572
SB-44	2-Feb-09	6-8	9,914	**104**	**1,000**	**294**	**1,530**	**30.1**
SB-45	2-Feb-09	4-5	7.8	<0.0233	<0.0581	<0.0581	<0.174	<0.0581
SB-45	2-Feb-09	5-7	16.0	<0.0234	<0.0585	<0.0585	<0.176	<0.0585
SB-46	2-Feb-09	1.5-2	11.4	<0.0237	<0.0593	<0.0593	<0.178	<0.0593
SB-46	2-Feb-09	6-8	314	<0.023	<0.0576	0.245	0.461	0.116
SB-47	2-Feb-09	2-4	0.6	<0.0227	<0.0567	<0.0567	<0.17	<0.0567
SB-47	2-Feb-09	6-8	6.8	**0.0362**	<0.058	<0.058	<0.174	0.108
SB-48	2-Feb-09	2-4	0.0	<0.028	<0.0701	<0.0701	<0.21	<0.0701
SB-48	2-Feb-09	6-8	>9,999	**0.112**	0.94	0.557	3.51	<0.0577
SB-49	2-Feb-09	3-4	63.7	**0.709**	2.48	0.175	2.57	<0.0573
SB-49	2-Feb-09	4-8	7,109	**12.7**	**143**	**46.8**	**246**	**2.92**
SB-50	2-Feb-09	5-8	8.5	<0.0268	<0.0669	<0.0669	<0.201	<0.0669

Notes:
1) PID = photoionization detector
2) mg/kg = milligrams per kilogram; ppm = parts per million; bls = below land surface
3) <0.065 = concentration less than the laboratory reporting limit
4) SCGIER = soil component of the groundwater ingestion exposure route
5) **Bold** = a concentration above the Tier 1 soil remediation objective(s) established in 35 Illinois Administrative Code Part 742
6) All soil samples were analyzed for methyl tert-butyl ether (MTBE) and/or benzene, toluene, ethylbenzene, and total xylenes using United States Environmental Protection Agency Method 8020 or 8021
7) Shading = not applicable or the soil sample location has been resampled

TABLE 4

Geochemical and Geotechnical Results

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Sample ID	Date Sampled	Sample Depth (feet bls)	PID Reading (ppm)	Geochemical and Geotechnical Parameters: Total Organic Carbon (mg/kg)	pH (—)	Reactive Cyanide (mg/kg)	Reactive Sulfide (mg/kg)	Description	Visual Soil Classification	Total Porosity (%)	Moisture Content (%)	Dry Bulk Density (pcf)	Wet Bulk Density (pcf)	Specific Gravity (—)	TPH Gasoline Range Organics (mg/kg)	Chemical Oxygen Demand (mg/L)	Fraction of Organic Carbon (%)
MP-2	11-Apr-05	1-3	0.5	14,000													
MP-2	11-Apr-05	5-6	0.7	19,000													
MP-3	11-Apr-05	6-7	238		7.2												
SB-32	1-Jun-06	7-9.5	414			<0.025	<20										
SB-32	1-Jun-06	9.5-11	NA					97% Sand 3% Silt	Dark grayish brown, fine grained SAND (SP)	34.4	17.2	108.6	127.2	2.65			
SB-33	18-Jan-07	10-11	31												<12	3,200	
SB-34	18-Jan-07	8-10	1,333												16	1,700	
SB-35	18-Jan-07	8-10	118												<13	2,000	
SB-36	18-Jan-07	10-11	0.3												<12	9,900	
SB-37	18-Jan-07	8-9	0.4												<12	4,200	
SB-38	11-Dec-07	2-3	0.1														3.27
SB-38	11-Dec-07	3-4	0.1														0.777
SB-39	7-Aug-08	14.25-15.25	NA												<11.8	12,760.88	
SB-40	7-Aug-08	16-17	0												<11.8	15,330.15	

Notes:
1) bls = below land surface; PID = photoionization detector
2) mg/kg = milligrams per kilogram; mg/L = milligrams per Liter; ppm = parts per million; pcf = pounds per cubic foot; % = percent; — = no specific units
3) <1.9 = concentration less than the laboratory reporting limit
4) The samples were analyzed for grain size analysis, visual soil classification, total porosity, moisture content, dry bulk density, wet bulk density, specific gravity, and fraction of organic carbon using American Society for Testing and Materials methods
5) The samples were analyzed for total organic carbon using United States Environmental Protection Agency (USEPA) Method 9060
6) The sample was analyzed for pH using USEPA Method 9045C
7) The sample was analyzed for reactive cyanide using USEPA Method 7.3.3.2
8) The sample was analyzed for reactive sulfide using USEPA Method 7.3.4.2
9) The samples were analyzed for total petroleum hydrocarbon (TPH) gasoline range organics using USEPA Method 8015
10) The samples were analyzed for chemical oxygen demand using USEPA Method 410.4
11) Shading = not applicable

APPENDIX A

WASTE MANIFESTS

Please print/type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number 0434825101	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number 003434758 JJK

5. Generator's Name and Mailing Address
North Branch Environmental
7N458 [illegible] Ave
Roselle, IL 60110

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name: North Branch Environmental — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number 0311740001
[illegible] W 47th street
McCook, Il 60525 (708)762-5119

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-Hazardous Liquid	001		250		
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

86820 Work order 8819

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Steve [illegible] — Signature: [signature] — Month Day Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Steve [illegible] — Signature: [signature] — Month Day Year
Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Lowell Aughenbaugh — Signature: [signature] — Month 1 Day 2 Year 09

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

TRANSPORTER'S COPY

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

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	[illegible]		[illegible]	00343496 1 JJK

GENERATOR

5. Generator's Name and Mailing Address

North Branch Environmental
7N 458 Garden ave
Roselle, IL 60172 (630)628-0240

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name: North Branch Environmental — [illegible] — U.S. EPA ID Number: IL[illegible]

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address

Onyx
7601 W. 47th street
McCook, IL 60525 (708)762-5119

U.S. EPA ID Number: 081746001

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-Hazardous Liquid	001	DM	0240	G	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Work order 3514

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name [illegible] — Signature — Month 1 Day 07 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name [illegible] — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

EPA Form [illegible] (Rev. 3-05). Previous editions are obsolete.

GENERATOR'S INITIAL COPY

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

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number: 0434625101	2. Page 1 of	3. Emergency Response Phone: (630)529-0240	4. Manifest Tracking Number: 005349085 JJK

GENERATOR

5. Generator's Name and Mailing Address
North Branch Environmental
7 N 458 Garden ave
Roselle, Il 60172 (630)529-0240
Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: North Branch Environmental — [illegible]
U.S. EPA ID Number: IL[illegible]

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
[illegible]
7601 W. 47th street
McCook, Il 60525 (708)[illegible]-5119
Facility's Phone:
U.S. EPA ID Number: [illegible]

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-Hazardous Liquid Waste Water	001	[illegible]	210	[illegible]	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
76986
Work order 5786

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Tom Surick
Signature: [signature]
Month: 01 Day: 27 Year: 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Tom Surick
Signature: [signature]
Month: 01 Day: 27 Year: 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Lowell Aughenbaugh
Signature: [signature]
Month: 1 Day: 27 Year: 09

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

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
0434625101		(630)529-0240	005349239 JJK

GENERATOR

5. Generator's Name and Mailing Address
North Branch Environmental
7 N 456 Garden ave
Roselle, IL 60172 (630)529-0240
Generator's Phone:

Generator's Site Address (if different than mailing address)
CLARK
399 W. LIBERTY ST
WAUCONDA IL

6. Transporter 1 Company Name: North Branch Environmental — U.S. EPA ID Number: ILR000082977

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clark
7401 W. 47th street
McCook, IL 60525 (708)752-5119
Facility's Phone:

U.S. EPA ID Number: 021174001

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-Hazardous Liquid	001	TT	3000	G	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
87266
Work order 89022

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Scott Schaefer — Signature — Month 03 Day 09 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Scott Schaefer — Signature — Month 03 Day 09 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Roswell Research — Signature — Month 03 Day 09 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

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

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: 0434825101
2. Page 1 of
3. Emergency Response Phone: (630)539-0240
4. Manifest Tracking Number: 004066462 JJK

GENERATOR

5. Generator's Name and Mailing Address: North Branch Environmental 2451 Bardon Ave Roselle, IL 60172
Generator's Site Address (if different than mailing address)
Generator's Phone:

6. Transporter 1 Company Name: North Branch Environmental — USEPA ID Number: ILR000052977

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: Cytec, 7601 W 47th street, McCook, IL 60525 (708)762-5119 — U.S. EPA ID Number: 0311746001
Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-Hazardous Liquid	001	tt	2800	G	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information: 87327 — Work order 89044

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: STEVE MOELLER BRUNK — Signature — Month 3 Day 19 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: STEVE MOELLER BRUNK — Signature — Month 3 Day 19 Year 09

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month 3 Day 23 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

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

Form Approved. OMB No. 2050-0039

GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	0434825101		(630)529-0240	005349202 JJK

5. Generator's Name and Mailing Address

North Branch Environmental
7 N 458 Garden ave
Roselle, Il 60172

Generator's Phone: (630)529-0240

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: North Branch Environmental UPM035046IIL — U.S. EPA ID Number: ILR000052977

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address

Criteck
7601 W. 47th street
McCook, Il 60525

Facility's Phone: (708)762-5119

U.S. EPA ID Number: 0311740001

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non-Hazardous Liquid	001	tt	2000	G	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

Work order 39148

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: B. McGowan — Signature: [signature] — Month 9 Day 01 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: B. McGowan — Signature: [signature] — Month 09 Day 01 Year 09
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

From: Clark Sta 399 Liberty Waukegan [illegible] 2000 gals

APPENDIX B

ANALYTICAL LABORATORY REPORTS AND CERTIFICATION - GROUNDWATER

REV

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical™ www.pacelabs.com

4013018

Page: 1 of 3

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TriCore Environmental, LLC	Report To: Marcos I. Czako	Attention: Shawn Rodeck
Address: 1800 W. Hawthorne Lane, Suite P	Copy To:	Company Name: TriCore Environmental, LLC
West Chicago, Illinois 60185		Address: 1800 W. Hawthorne Lane, Suite P
Email To: miczako@comcast.net	Purchase Order No.: 100018	Pace Quote Reference:
Phone: 630-520-9973 Fax 630-520-9976	Project Name: Former Clark #646	Pace Project Manager:
Requested Due Date/TAT: standard	Project Number: 100018	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☑ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ GA ☐ IL ☑ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER____

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / ,-)

Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL/WP
WIPE	AR
AIR	OT
OTHER	TS
TISSUE	

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: BTEX and MTBE	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.
001	~~MW-8~~ RW-1	WT	G			1/6/09	1330		3				3					X	N	3-40 ul
2	~~MW-1~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
002 3	MW-6	WT	G			1/6/09	1315		3				3					X	N	
003 4	MW-8S	WT	G			1/6/09	1330		3				3					X	N	
004 5	MW-8D	WT	G			1/6/09	1320		3				3					X	N	
6	~~MW-9S~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
005 7	MW-9D	WT	G			1/6/09	1335		3				3					X	N	
006 8	MW-10S	WT	G			1/6/09	1407		3				3					X	N	
007 9	MW-10D	WT	G			1/6/09	1405		3				3					X	N	
10	MW-11S	WT	G			1/6/09	1345		3				3					X	N	
009 11	MW-11D	WT	G			1/6/09	1350		3				3					X	N	
010 12	MW-12S	WT	G			1/6/09	1340		3				3					X	N	

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	1/6/09	1430		1/6/09	1430
	1/6/09	1700	Waltco		
Waltco	1/7/09	0915	Ashley Burks	1/7/09	0925

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Marcos Czako

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 01/06/09

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
1°C	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

e-File(ALLQ020rev.3,31Mar05))22Jun2005

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

4013018

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TriCore Environmental, LLC	Report To: Marcos I. Czako	Attention: Shawn Rodeck
Address: 1800 W. Hawthorne Lane, Suite P	Copy To:	Company Name: TriCore Environmental, LLC
West Chicago, Illinois 60185		Address: 1800 W. Hawthorne Lane, Suite P
Email To: miczako@comcast.net	Purchase Order No.: 100018	Pace Quote Reference:
Phone: 630-520-9973 Fax 630-520-9976	Project Name: Former Clark #646	Pace Project Manager:
Requested Due Date/TAT: standard	Project Number: 100018	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER

SITE LOCATION: ☐ GA ☐ IL ☑ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER / DW; WATER / WT; WASTE WATER / WW; PRODUCT / P; SOIL/SOLID / SL; OIL / OL; WP; AR; ST; TS

ITEM #	Section D Required Client Information: SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: BTEX and MTBE	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.
1	MW-12D	WT	G			1/6/09	1345		3				3					X	N	3-40 MIB
2	MW-13	WT	G			1/6/09	1346		3				3					X	N	
3	MW-14	WT	G			1/6/09	1416		3				3					X	N	
4	MW-15	WT	G			1/6/09	1411		3				3					X	N	
5	MW-16	WT	G			1/6/09	1420		3				3					X	N	
6	MW-17	WT	G			1/6/09	1425		3				3					X	N	
7	MW-18	WT	G			1/6/09	1415		3				3					X	N	
8	MW-19	WT	G			1/6/09	1420		3				3					X	N	
9	MW-21	WT	G			1/6/09	1352		3				3					X	N	
10	MW-22	WT	G			1/6/09	1350		3				3					X	N	
11	MW-23	WT	G			1/6/09	1347		3				3					X	N	
12	~~MW-24~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	N	

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	1/6/09	1430		1/6/09	1430		Y/N	Y/N	Y/N
Walt Lo	1/6/09	0700	Walt Lo				Y/N	Y/N	Y/N
Walt Lo	1/7/09	0925	Lindsay Bunsky	1/7/09	0925	1°C	Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
PRINT Name of SAMPLER: Marcos Czako					
SIGNATURE of SAMPLER:	DATE Signed (MM / DD / YY): 1/06/09				

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

4013018

Page: 3 of 3

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: TriCore Environmental, LLC	Report To: Marcos I. Czako	Attention: Shawn Rodeck
Address: 1800 W. Hawthorne Lane, Suite P	Copy To:	Company Name: TriCore Environmental, LLC
West Chicago, Illinois 60185		Address: 1800 W. Hawthorne Lane, Suite P
Email To: miczako@comcast.net	Purchase Order No.: 100018	Pace Quote Reference:
Phone: 630-520-9973 Fax 630-520-9976	Project Name: Former Clark #646	Pace Project Manager:
Requested Due Date/TAT: standard	Project Number: 100018	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ GA ☐ IL ☑ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER_____

Section D Required Client Information

SAMPLE ID
One Character per box.
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL WP
AIR	AR
	OT
	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: BTEX and MTBE	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.
1	MW-25	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				3					X	N	
2	MW-26	WT	G			1/6/09	1325		3				3					X	N	3-40ml VB
3	~~MW-27~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
4	MW-28	WT	G			1/6/09	1317		3				3					X	N	
5	~~RW-1~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
6	MP-1	WT	G			1/6/09	1327		3				3					X	N	
7	~~MP-7~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
8	~~MP-8~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
9	~~MP-9~~	~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
10		~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
11		~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	
12		~~WT~~	~~G~~			~~1/6/09~~			~~3~~				~~3~~					~~X~~	~~N~~	

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	1/6/09	1430		1/6/09	1430
	1/6/09	1700	Waffco		
Waffco	1/7/09	0925	Ashley Burkey	1/7/09	0925

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Marcos Czako

SIGNATURE of SAMPLER:

DATE Signed (MM / DD / YY): 01/06/09

SAMPLE CONDITIONS			
Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
10°C	Y/N	Y/N	Y/N

e-File(ALLQ020rev.3,31Mar05))22Jun2005

Pace Analytical

Client Name: Tricor Environmental Project # 40130 18

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Walk-O

Tracking #: _____

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used JB Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 1/7/09 AD

Temp should be above freezing to 6°C Comments:

Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W				
All containers needing preservation have been checked.	☐Yes	☐No	☒N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No		Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	15.
Trip Blank Present:	☐Yes	☒No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: LW **Date:** 1/7/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

This page can be completed online.

Illinois Environmental Protection Agency
Leaking Underground Storage Tank Program
Laboratory Certification for Chemical Analysis

A. Site Identification

IEMA Incident #: _____ IEPA LPC# (10-digit): 0971855024

Site Name: Former Clark Retail Station #646

Site Address (Not a P.O. Box): 399 West Liberty Street

City: Wauconda County: Lake ZIP Code: 60084

B. Sample Collector

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples. MR (initial)
2. Chain-of-custody procedures were followed in the field. MR (initial)
3. Sample integrity was maintained by proper preservation. MR (initial)
4. All samples were properly labeled. MR (initial)

C. Laboratory Representative

I certify that:

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms [illegible] (initial)
2. Sample integrity was maintained by proper preservation. [illegible] (initial)
3. All samples were properly labeled. [illegible] (initial)

4013018

This page can be completed online.

4. Quality assurance/quality control procedures were established and carried out. LWW (initial)

5. Sample holding times were not exceeded. LWW (initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses. LWW (initial)

7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003). LWW (initial)

D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sample Collector

Name: Marcos Czako

Title: Project Manager

Company: TriCore Environmental, LLC

Address: 1800 West Hawthorne Lane, Suite P

City, State, ZIP: West Chicago, Illinois 60185

Phone: 630-520-9973

Signature: Marcos Czako

Date: 01/06/09

Laboratory Representative

Name: Laurie Woelfel

Title: Project Manager

Company: Pace Analytical

Address: 1241 Bellevue Street

City, State, ZIP: Green Bay, WI 54302

Phone: 920-469-2436

Signature: Laurie Woelfel

Date: 1/9/09

4013018

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

January 09, 2009

Marcos Czako
TriCore Environmental, LLC.
1800 West Hawthorne Lane
Suite P
West Chicago, IL 60185

RE: Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Dear Marcos Czako:
Enclosed are the analytical results for sample(s) received by the laboratory on January 07, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Laurie Woelfel

Laurie Woelfel

laurie.woelfel@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Green Bay Certification IDs

Wisconsin DATCP Certification #: 105-444
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
South Carolina Certification #: 83006001
North Dakota Certification #: R-200
North Dakota Certification #: R-150
North Carolina Certification #: 503
North Carolina Certification #: 503
New York Certification #: 11888
New York Certification #: 11887
Minnesota Certification #: 055-999-334
Minnesota Certification #: 055-999-334
Louisiana Certification #: 04169
Louisiana Certification #: 04168
Kentucky Certification #: 83
Kentucky Certification #: 82
Illinois Certification #: 200051
Illinois Certification #: 200050
Florida/NELAP Certification #: E87951
Florida/NELAP Certification #: E87948

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4013018001	RW-1	Water	01/06/09 13:30	01/07/09 09:25
4013018002	MW-6	Water	01/06/09 13:15	01/07/09 09:25
4013018003	MW-8S	Water	01/06/09 13:30	01/07/09 09:25
4013018004	MW-8D	Water	01/06/09 13:20	01/07/09 09:25
4013018005	MW-9D	Water	01/06/09 13:35	01/07/09 09:25
4013018006	MW-10S	Water	01/06/09 14:07	01/07/09 09:25
4013018007	MW-10D	Water	01/06/09 14:05	01/07/09 09:25
4013018008	MW-11S	Water	01/06/09 13:45	01/07/09 09:25
4013018009	MW-11D	Water	01/06/09 13:50	01/07/09 09:25
4013018010	MW-12S	Water	01/06/09 13:40	01/07/09 09:25
4013018011	MW-12D	Water	01/06/09 13:45	01/07/09 09:25
4013018012	MW-13	Water	01/06/09 13:46	01/07/09 09:25
4013018013	MW-14	Water	01/06/09 14:10	01/07/09 09:25
4013018014	MW-15	Water	01/06/09 14:11	01/07/09 09:25
4013018015	MW-16	Water	01/06/09 14:20	01/07/09 09:25
4013018016	MW-17	Water	01/06/09 14:25	01/07/09 09:25
4013018017	MW-18	Water	01/06/09 14:15	01/07/09 09:25
4013018018	MW-19	Water	01/06/09 14:20	01/07/09 09:25
4013018019	MW-21	Water	01/06/09 13:52	01/07/09 09:25
4013018020	MW-22	Water	01/06/09 13:50	01/07/09 09:25
4013018021	MW-23	Water	01/06/09 13:47	01/07/09 09:25
4013018022	MW-26	Water	01/06/09 13:25	01/07/09 09:25
4013018023	MW-28	Water	01/06/09 13:17	01/07/09 09:25
4013018024	MP-1	Water	01/06/09 13:27	01/07/09 09:25

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SAMPLE ANALYTE COUNT

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4013018001	RW-1	EPA 8021	SES	6	PASI-G
4013018002	MW-6	EPA 8021	SES	6	PASI-G
4013018003	MW-8S	EPA 8021	SES	6	PASI-G
4013018004	MW-8D	EPA 8021	SES	6	PASI-G
4013018005	MW-9D	EPA 8021	SES	6	PASI-G
4013018006	MW-10S	EPA 8021	SES	6	PASI-G
4013018007	MW-10D	EPA 8021	SES	6	PASI-G
4013018008	MW-11S	EPA 8021	SES	6	PASI-G
4013018009	MW-11D	EPA 8021	SES	6	PASI-G
4013018010	MW-12S	EPA 8021	SES	6	PASI-G
4013018011	MW-12D	EPA 8021	SES	6	PASI-G
4013018012	MW-13	EPA 8021	SES	6	PASI-G
4013018013	MW-14	EPA 8021	SES	6	PASI-G
4013018014	MW-15	EPA 8021	SES	6	PASI-G
4013018015	MW-16	EPA 8021	SES	6	PASI-G
4013018016	MW-17	EPA 8021	SES	6	PASI-G
4013018017	MW-18	EPA 8021	SES	6	PASI-G
4013018018	MW-19	EPA 8021	SES	6	PASI-G
4013018019	MW-21	EPA 8021	SES	6	PASI-G
4013018020	MW-22	EPA 8021	SES	6	PASI-G
4013018021	MW-23	EPA 8021	PMS	6	PASI-G
4013018022	MW-26	EPA 8021	PMS	6	PASI-G
4013018023	MW-28	EPA 8021	PMS	6	PASI-G
4013018024	MP-1	EPA 8021	PMS	6	PASI-G

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: RW-1 **Lab ID: 4013018001** Collected: 01/06/09 13:30 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**764**	ug/L	5.0	5		01/08/09 22:01	71-43-2	
Ethylbenzene	**5.2**	ug/L	5.0	5		01/08/09 22:01	100-41-4	
Methyl-tert-butyl ether	**11.8**	ug/L	5.0	5		01/08/09 22:01	1634-04-4	
Toluene	**<5.0**	ug/L	5.0	5		01/08/09 22:01	108-88-3	
Xylene (Total)	**<15.0**	ug/L	15.0	5		01/08/09 22:01	1330-20-7	
a,a,a-Trifluorotoluene (S)	94	%	80-124	5		01/08/09 22:01	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-6 **Lab ID: 4013018002** Collected: 01/06/09 13:15 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 18:09	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 18:09	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 18:09	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 18:09	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 18:09	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 18:09	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-8S **Lab ID: 4013018003** Collected: 01/06/09 13:30 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 18:35	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 18:35	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 18:35	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 18:35	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 18:35	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-124	1		01/08/09 18:35	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-8D **Lab ID: 4013018004** Collected: 01/06/09 13:20 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 19:01	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 19:01	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 19:01	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 19:01	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 19:01	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 19:01	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-9D **Lab ID: 4013018005** Collected: 01/06/09 13:35 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 19:26	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 19:26	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 19:26	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 19:26	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 19:26	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-124	1		01/08/09 19:26	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-10S **Lab ID: 4013018006** Collected: 01/06/09 14:07 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 19:52	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 19:52	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 19:52	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 19:52	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 19:52	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 19:52	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-10D **Lab ID: 4013018007** Collected: 01/06/09 14:05 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 20:18	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 20:18	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 20:18	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 20:18	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 20:18	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 20:18	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-11S **Lab ID: 4013018008** Collected: 01/06/09 13:45 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 20:44	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 20:44	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 20:44	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 20:44	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 20:44	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 20:44	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-11D Lab ID: **4013018009** Collected: 01/06/09 13:50 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 21:09	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 21:09	100-41-4	
Methyl-tert-butyl ether	**1.7**	ug/L	1.0	1		01/08/09 21:09	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 21:09	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 21:09	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 21:09	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-12S **Lab ID: 4013018010** Collected: 01/06/09 13:40 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 21:35	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 21:35	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 21:35	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 21:35	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 21:35	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-124	1		01/08/09 21:35	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-12D **Lab ID: 4013018011** Collected: 01/06/09 13:45 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 12:59	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 12:59	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 12:59	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 12:59	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 12:59	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-124	1		01/08/09 12:59	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-13 **Lab ID: 4013018012** Collected: 01/06/09 13:46 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 13:25	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 13:25	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 13:25	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 13:25	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 13:25	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 13:25	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-14 **Lab ID: 4013018013** Collected: 01/06/09 14:10 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 13:51	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 13:51	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 13:51	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 13:51	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 13:51	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-124	1		01/08/09 13:51	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-15 **Lab ID: 4013018014** Collected: 01/06/09 14:11 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**73.9**	ug/L	1.0	1		01/08/09 14:17	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 14:17	100-41-4	
Methyl-tert-butyl ether	**4.0**	ug/L	1.0	1		01/08/09 14:17	1634-04-4	
Toluene	**4.0**	ug/L	1.0	1		01/08/09 14:17	108-88-3	
Xylene (Total)	**13.5**	ug/L	3.0	1		01/08/09 14:17	1330-20-7	
a,a,a-Trifluorotoluene (S)	97	%	80-124	1		01/08/09 14:17	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-16 **Lab ID: 4013018015** Collected: 01/06/09 14:20 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**19.1**	ug/L	1.0	1		01/08/09 14:43	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 14:43	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 14:43	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 14:43	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 14:43	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 14:43	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-17 **Lab ID: 4013018016** Collected: 01/06/09 14:25 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 15:09	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 15:09	100-41-4	
Methyl-tert-butyl ether	**12.8**	ug/L	1.0	1		01/08/09 15:09	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 15:09	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 15:09	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 15:09	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-18 **Lab ID: 4013018017** Collected: 01/06/09 14:15 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 15:34	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 15:34	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 15:34	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 15:34	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 15:34	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-124	1		01/08/09 15:34	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-19 **Lab ID: 4013018018** Collected: 01/06/09 14:20 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 16:00	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 16:00	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 16:00	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 16:00	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 16:00	1330-20-7	
a,a,a-Trifluorotoluene (S)	101	%	80-124	1		01/08/09 16:00	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-21 **Lab ID: 4013018019** Collected: 01/06/09 13:52 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 16:26	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 16:26	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 16:26	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 16:26	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 16:26	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%	80-124	1		01/08/09 16:26	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-22 **Lab ID: 4013018020** Collected: 01/06/09 13:50 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 16:52	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 16:52	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 16:52	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 16:52	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 16:52	1330-20-7	
a,a,a-Trifluorotoluene (S)	102	%	80-124	1		01/08/09 16:52	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-23 **Lab ID: 4013018021** Collected: 01/06/09 13:47 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 12:31	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 12:31	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 12:31	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 12:31	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 12:31	1330-20-7	
a,a,a-Trifluorotoluene (S)	97	%	80-124	1		01/08/09 12:31	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-26 **Lab ID: 4013018022** Collected: 01/06/09 13:25 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**40.3**	ug/L	1.0	1		01/08/09 12:57	71-43-2	
Ethylbenzene	**4.8**	ug/L	1.0	1		01/08/09 12:57	100-41-4	
Methyl-tert-butyl ether	**1.7**	ug/L	1.0	1		01/08/09 12:57	1634-04-4	
Toluene	**75.5**	ug/L	1.0	1		01/08/09 12:57	108-88-3	
Xylene (Total)	**59.7**	ug/L	3.0	1		01/08/09 12:57	1330-20-7	
a,a,a-Trifluorotoluene (S)	100	%	80-124	1		01/08/09 12:57	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MW-28 **Lab ID: 4013018023** Collected: 01/06/09 13:17 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**<1.0**	ug/L	1.0	1		01/08/09 13:22	71-43-2	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/08/09 13:22	100-41-4	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/08/09 13:22	1634-04-4	
Toluene	**<1.0**	ug/L	1.0	1		01/08/09 13:22	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 13:22	1330-20-7	
a,a,a-Trifluorotoluene (S)	97	%	80-124	1		01/08/09 13:22	98-08-8	

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

Sample: MP-1 **Lab ID: 4013018024** Collected: 01/06/09 13:27 Received: 01/07/09 09:25 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021							
Benzene	**30.1**	ug/L	1.0	1		01/08/09 13:48	71-43-2	
Ethylbenzene	**2.1**	ug/L	1.0	1		01/08/09 13:48	100-41-4	
Methyl-tert-butyl ether	**1.0**	ug/L	1.0	1		01/08/09 13:48	1634-04-4	
Toluene	**1.1**	ug/L	1.0	1		01/08/09 13:48	108-88-3	
Xylene (Total)	**<3.0**	ug/L	3.0	1		01/08/09 13:48	1330-20-7	
a,a,a-Trifluorotoluene (S)	95	%	80-124	1		01/08/09 13:48	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

QC Batch: GCV/2846 Analysis Method: EPA 8021
QC Batch Method: EPA 8021 Analysis Description: 8021 GCV BTEX
Associated Lab Samples: 4013018001, 4013018002, 4013018003, 4013018004, 4013018005, 4013018006, 4013018007, 4013018008, 4013018009, 4013018010, 4013018011, 4013018012, 4013018013, 4013018014, 4013018015, 4013018016, 4013018017, 4013018018, 4013018019, 4013018020

METHOD BLANK: 118018 Matrix: Water
Associated Lab Samples: 4013018001, 4013018002, 4013018003, 4013018004, 4013018005, 4013018006, 4013018007, 4013018008, 4013018009, 4013018010, 4013018011, 4013018012, 4013018013, 4013018014, 4013018015, 4013018016, 4013018017, 4013018018, 4013018019, 4013018020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<1.0	1.0	01/08/09 11:42	
Ethylbenzene	ug/L	<1.0	1.0	01/08/09 11:42	
Methyl-tert-butyl ether	ug/L	<1.0	1.0	01/08/09 11:42	
Toluene	ug/L	<1.0	1.0	01/08/09 11:42	
Xylene (Total)	ug/L	<3.0	3.0	01/08/09 11:42	
a,a,a-Trifluorotoluene (S)	%	104	80-124	01/08/09 11:42	

LABORATORY CONTROL SAMPLE & LCSD: 118019 118020

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	21.2	21.2	106	106	80-120	.2	20	
Ethylbenzene	ug/L	20	21.3	21.3	107	107	80-120	.03	20	
Methyl-tert-butyl ether	ug/L	20	21.4	21.5	107	107	80-120	.3	20	
Toluene	ug/L	20	21.3	21.4	106	107	80-120	.4	20	
Xylene (Total)	ug/L	60	62.6	62.7	104	105	80-120	.2	20	
a,a,a-Trifluorotoluene (S)	%				103	102	80-124			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 118146 118147

Parameter	Units	4013018001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	764	100	100	834	858	69	94	58-141	3	20	
Ethylbenzene	ug/L	5.2	100	100	104	103	99	98	80-127	.8	20	
Methyl-tert-butyl ether	ug/L	11.8	100	100	104	105	92	93	80-120	1	20	
Toluene	ug/L	<5.0	100	100	106	104	102	100	80-120	1	20	
Xylene (Total)	ug/L	<15.0	300	300	312	305	99	97	76-135	2	20	
a,a,a-Trifluorotoluene (S)	%						86	85	80-124			

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QUALITY CONTROL DATA

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

QC Batch: GCV/2847 Analysis Method: EPA 8021
QC Batch Method: EPA 8021 Analysis Description: 8021 GCV BTEX
Associated Lab Samples: 4013018021, 4013018022, 4013018023, 4013018024

METHOD BLANK: 118021 Matrix: Water
Associated Lab Samples: 4013018021, 4013018022, 4013018023, 4013018024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<1.0	1.0	01/08/09 09:30	
Ethylbenzene	ug/L	<1.0	1.0	01/08/09 09:30	
Methyl-tert-butyl ether	ug/L	<1.0	1.0	01/08/09 09:30	
Toluene	ug/L	<1.0	1.0	01/08/09 09:30	
Xylene (Total)	ug/L	<3.0	3.0	01/08/09 09:30	
a,a,a-Trifluorotoluene (S)	%	97	80-124	01/08/09 09:30	

LABORATORY CONTROL SAMPLE & LCSD: 118022 118023

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	19.6	19.2	98	96	80-120	2	20	
Ethylbenzene	ug/L	20	19.5	19.3	97	96	80-120	.9	20	
Methyl-tert-butyl ether	ug/L	20	19.6	19.3	98	96	80-120	2	20	
Toluene	ug/L	20	19.7	19.4	99	97	80-120	2	20	
Xylene (Total)	ug/L	60	57.8	57.4	96	96	80-120	.6	20	
a,a,a-Trifluorotoluene (S)	%				97	97	80-124			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 118124 118125

Parameter	Units	4013031001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	1470	400	400	1940	1910	118	110	58-141	2	20	
Ethylbenzene	ug/L	222	400	400	647	637	106	104	80-127	2	20	
Methyl-tert-butyl ether	ug/L	<20.0	400	400	407	410	102	103	80-120	.8	20	
Toluene	ug/L	2560	400	400	3100	3030	136	119	80-120	2	20	M0
Xylene (Total)	ug/L	1180	1200	1200	2460	2420	107	104	76-135	2	20	
a,a,a-Trifluorotoluene (S)	%						100	96	80-124			

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013018

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

APPENDIX C

ANALYTICAL LABORATORY REPORTS AND CERTIFICATION - SOIL

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: TriCore Environmental, LLC	
Address: 1800 W. Hawthorne Lane, Suite P	
West Chicago, Illinois 60185	
Email To: miczako@comcast.net	
Phone: 630-520-9973	Fax 630-520-9976
Requested Due Date/TAT: standard	

Section B Required Project Information:

Report To: Marcos I. Czako	
Copy To:	
Purchase Order No.: 100018	
Project Name: Former Clark #646	
Project Number: 100018	

Section C Invoice Information:

Attention: Shawn Rodeck	
Company Name: TriCore Environmental, LLC	
Address: 1800 W. Hawthorne Lane, Suite P	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ GA ☐ IL ☑ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER_____

Section D Required Client Information

Valid Matrix Codes: DRINKING WATER (DW), WATER (WT), WASTE WATER (WW), PRODUCT (P), SOIL/SOLID (SL), OIL (OL WP), AIR (AR), OTHER (OT), TISSUE (TS)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Requested Analysis: BTEX and MTBE	Moisture	Residual Chlorine (Y/N)
																		N			N
1	SB-41 @ 4-5 001					2/2/09	0823		3	1						2			X	X	
2	SB-41 @ 5-8 002					2/2/09	0827		3	1						2			X	X	
3	SB-42 @ 2-3 003					2/2/09	0857		3	1						2			X	X	
4	SB-42 @ 6-8 004					2/2/09	0907		3	1						2			X	X	
6	SB-43 @ 4-5 005					2/2/09	0935		3	1						2			X	X	
6	SB-43 @ 6-8 006					2/2/09	0948		3	1						2			X	X	
7	SB-44 @ 2-4 007					2/2/09	1021		3	1						2			X	X	
8	SB-44 @ 6-8 008					2/2/09	1024		3	1						2			X	X	
9	SB-45 @ 4-5 009					2/2/09	1052		3	1						2			X	X	
10	SB-45 @ 5-7 010					2/2/09	1053		3	1						2			X	X	
11	SB-46 @ 1.5-2 011					2/2/09	1126		3	1						2			X	X	
12	SB-46 @ 6-8 012					2/2/09	1133		3	1						2			X	X	

Pace Project No. / Lab I.D.: 4043709

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	2/2/09	1535		2/2/09	1535
	2/2/09	1700			
WACCO	2/3/09	900		2/3/09	900

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Marcos I. Czako

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 02/02/09

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
1	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: TriCore Environmental, LLC
Address: 1800 W. Hawthorne Lane, Suite P
West Chicago, Illinois 60185
Email To: miczako@comcast.net
Phone: 630-520-9973 Fax 630-520-9976
Requested Due Date/TAT: standard

Section B Required Project Information:

Report To: Marcos I. Czako
Copy To:
Purchase Order No.: 100018
Project Name: Former Clark #646
Project Number: 100018

Section C Invoice Information:

Attention: Shawn Rodeck
Company Name: TriCore Environmental, LLC
Address: 1800 W. Hawthorne Lane, Suite P
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☑ UST ☐ RCRA ☐ OTHER

SITE LOCATION: ☐ GA ☐ IL ☑ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER

Section D Required Client Information

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER / DW; WATER / WT; WASTE WATER / WW; PRODUCT / P; SOIL/SOLID / SL; OIL / OL; WP / AR; OT; TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis: BTEX and MTBE	Moisture	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.
1	SB-47@2-4 03					2/2/09	1204		3	1						2		X	X	N	2-40mL F, 1-4oz Amb
2	SB-47@6-8 04					2/2/09	1208		3	1						2		X	X	N	
3	SB-48@2-4 05					2/2/09	1336		3	1						2		X	X	N	
4	SB-48@6-8 06					2/2/09	1342		3	1						2		X	X	N	
5	SB-49@3-4 07					2/2/09	1406		3	1						2		X	X	N	
6	SB-49@4-8 08					2/2/09	1409		3	1						2		X	X	N	
7	~~SB-50@4-5~~ MS/MSD 09					2/2/09	1426		3	1						2		X	X	N	
8	SB-50@5-8 10					2/2/09	1430		3	1						2		X	X	N	
9																					
10																					403709
11																					
12																					

Additional Comments: @ per Marcos - Cancel sample because no MS/SD in vial. MC 2/4/09

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	2/2/09	1535		2/2/09	1535
	2/3/09	1700			
MARCO	2/3/09	900		2/3/09	900

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
1	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Marcos I. Czako
SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 02/03/09

Sample Condition Upon Receipt

Pace Analytical

Client Name: Tri Core

Project # 4013709

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals Intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used: VB

Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 1°

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: A 2-3-09

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10. No MeOH in SP → 019 ?
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S				
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No		Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☑Yes	☐No	☐N/A	15.
Trip Blank Present:	☐Yes	☑No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Marcos Date/Time: 2/4/09

Comments/ Resolution: Per Marcos - Cancel sample 019. MK 2/4/09

Project Manager Review: (jw) Date: 2/3/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

This page can be completed online.

Illinois Environmental Protection Agency
Leaking Underground Storage Tank Program
Laboratory Certification for Chemical Analysis

A. Site Identification

IEMA Incident #: 892744, 903199 IEPA LPC# (10-digit): 0971855024

Site Name: Former Clark Retail Station #646

Site Address (Not a P.O. Box): 399 West Liberty Street

City: Wauconda County: Lake ZIP Code: 60084

B. Sample Collector

I certify that:

1. Appropriate sampling equipment/methods were utilized to obtain representative samples. MEE (initial)
2. Chain-of-custody procedures were followed in the field. MEE (initial)
3. Sample integrity was maintained by proper preservation. MEE (initial)
4. All samples were properly labeled. MEE (initial)

C. Laboratory Representative

I certify that:

1. Proper chain-of-custody procedures were followed as documented on the chain-of-custody forms Uw (initial)
2. Sample integrity was maintained by proper preservation. Uw (initial)
3. All samples were properly labeled. Uw (initial)

This page can be completed online.

4. Quality assurance/quality control procedures were established and carried out. LW (initial)

5. Sample holding times were not exceeded. LW (initial)

6. SW-846 Analytical Laboratory Procedure (USEPA) methods were used for the analyses. LW (initial)

7. An accredited lab performed quantitative analysis using test methods identified in 35 IAC 186.180 (for samples collected on or after January 1, 2003). LW (initial)

D. Signatures

I hereby affirm that all information contained in this form is true and accurate to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sample Collector

Name: Marcos I. Czako

Title: Project Manager

Company: TriCore Environmental, LLC

Address: 1800 West Hawthorne Lane, Suite P

City, State, ZIP: West Chicago, Illinois 60185

Phone: 630-520-9973

Signature: [signature]

Date: 02/02/09

Laboratory Representative

Name: Laurie Wolfel

Title: Project Manager

Company: Pace Analytical

Address: 1241 Bellevue St

City, State, ZIP: Green Bay WI 54302

Phone: 920 469 2436

Signature: Laurie Wolfel

Date: 2/10/09

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

February 10, 2009

Marcos Czako
TriCore Environmental, LLC.
1800 West Hawthorne Lane
Suite P
West Chicago, IL 60185

RE: Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Dear Marcos Czako:
Enclosed are the analytical results for sample(s) received by the laboratory on February 03, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Laurie Woelfel

Laurie Woelfel

laurie.woelfel@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Green Bay Certification IDs

Wisconsin DATCP Certification #: 105-444
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
South Carolina Certification #: 83006001
North Dakota Certification #: R-200
North Dakota Certification #: R-150
North Carolina Certification #: 503
North Carolina Certification #: 503
New York Certification #: 11888
New York Certification #: 11887
Minnesota Certification #: 055-999-334
Minnesota Certification #: 055-999-334
Louisiana Certification #: 04169
Louisiana Certification #: 04168
Kentucky Certification #: 83
Kentucky Certification #: 82
Illinois Certification #: 200051
Illinois Certification #: 200050
Florida/NELAP Certification #: E87951
Florida/NELAP Certification #: E87948

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SAMPLE SUMMARY

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4013709001	SB-41 @ 4-5	Solid	02/02/09 08:23	02/03/09 09:00
4013709002	SB-41 @ 5-8	Solid	02/02/09 08:27	02/03/09 09:00
4013709003	SB-42 @ 2-3	Solid	02/02/09 08:57	02/03/09 09:00
4013709004	SB-42 @ 6-8	Solid	02/02/09 09:07	02/03/09 09:00
4013709005	SB-43 @ 4-5	Solid	02/02/09 09:35	02/03/09 09:00
4013709006	SB-43 @ 6-8	Solid	02/02/09 09:48	02/03/09 09:00
4013709007	SB-44 @ 2-4	Solid	02/02/09 10:21	02/03/09 09:00
4013709008	SB-44 @ 6-8	Solid	02/02/09 10:24	02/03/09 09:00
4013709009	SB-45 @ 4-5	Solid	02/02/09 10:52	02/03/09 09:00
4013709010	SB-45 @ 5-7	Solid	02/02/09 10:53	02/03/09 09:00
4013709011	SB-46 @ 1.5-2	Solid	02/02/09 11:26	02/03/09 09:00
4013709012	SB-46 @ 6-8	Solid	02/02/09 11:33	02/03/09 09:00
4013709013	SB-47 @ 2-4	Solid	02/02/09 12:04	02/03/09 09:00
4013709014	SB-47 @ 6-8	Solid	02/02/09 12:08	02/03/09 09:00
4013709015	SB-48 @ 2-4	Solid	02/02/09 13:36	02/03/09 09:00
4013709016	SB-48 @ 6-8	Solid	02/02/09 13:42	02/03/09 09:00
4013709017	SB-49 @ 3-4	Solid	02/02/09 14:06	02/03/09 09:00
4013709018	SB-49 @ 4-8	Solid	02/02/09 14:09	02/03/09 09:00
4013709020	SB-50 @ 5-8	Solid	02/02/09 14:30	02/03/09 09:00

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SAMPLE ANALYTE COUNT

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4013709001	SB-41 @ 4-5	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709002	SB-41 @ 5-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709003	SB-42 @ 2-3	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709004	SB-42 @ 6-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709005	SB-43 @ 4-5	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709006	SB-43 @ 6-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709007	SB-44 @ 2-4	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709008	SB-44 @ 6-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709009	SB-45 @ 4-5	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709010	SB-45 @ 5-7	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709011	SB-46 @ 1.5-2	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709012	SB-46 @ 6-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709013	SB-47 @ 2-4	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709014	SB-47 @ 6-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709015	SB-48 @ 2-4	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709016	SB-48 @ 6-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709017	SB-49 @ 3-4	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709018	SB-49 @ 4-8	ASTM D2974-87	ARB	1	PASI-G
		EPA 8021	SES	6	PASI-G
4013709020	SB-50 @ 5-8	ASTM D2974-87	ARB	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8021	SES	6	PASI-G

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-41 @ 4-5 **Lab ID: 4013709001** Collected: 02/02/09 08:23 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**289**	ug/kg	22.4	1	02/05/09 07:34	02/05/09 18:41	71-43-2	
Ethylbenzene	**73.1**	ug/kg	56.0	1	02/05/09 07:34	02/05/09 18:41	100-41-4	
Methyl-tert-butyl ether	**<56.0**	ug/kg	56.0	1	02/05/09 07:34	02/05/09 18:41	1634-04-4	
Toluene	**619**	ug/kg	56.0	1	02/05/09 07:34	02/05/09 18:41	108-88-3	
Xylene (Total)	**731**	ug/kg	168	1	02/05/09 07:34	02/05/09 18:41	1330-20-7	
a,a,a-Trifluorotoluene (S)	116	%	69-146	1	02/05/09 07:34	02/05/09 18:41	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**10.7**	%	0.10	1		02/04/09 07:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-41 @ 5-8 Lab ID: 4013709002 Collected: 02/02/09 08:27 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**1400**	ug/kg	269	12.5	02/05/09 07:34	02/05/09 21:15	71-43-2	
Ethylbenzene	**13300**	ug/kg	673	12.5	02/05/09 07:34	02/05/09 21:15	100-41-4	
Methyl-tert-butyl ether	**<673**	ug/kg	673	12.5	02/05/09 07:34	02/05/09 21:15	1634-04-4	
Toluene	**29300**	ug/kg	673	12.5	02/05/09 07:34	02/05/09 21:15	108-88-3	
Xylene (Total)	**70100**	ug/kg	2020	12.5	02/05/09 07:34	02/05/09 21:15	1330-20-7	
a,a,a-Trifluorotoluene (S)	180	%	69-146	12.5	02/05/09 07:34	02/05/09 21:15	98-08-8	D3,S4
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**7.1**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-42 @ 2-3 Lab ID: **4013709003** Collected: 02/02/09 08:57 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<23.6**	ug/kg	23.6	1	02/05/09 07:34	02/05/09 13:32	71-43-2	
Ethylbenzene	**<59.0**	ug/kg	59.0	1	02/05/09 07:34	02/05/09 13:32	100-41-4	
Methyl-tert-butyl ether	**<59.0**	ug/kg	59.0	1	02/05/09 07:34	02/05/09 13:32	1634-04-4	
Toluene	**<59.0**	ug/kg	59.0	1	02/05/09 07:34	02/05/09 13:32	108-88-3	
Xylene (Total)	**<177**	ug/kg	177	1	02/05/09 07:34	02/05/09 13:32	1330-20-7	
a,a,a-Trifluorotoluene (S)	113	%	69-146	1	02/05/09 07:34	02/05/09 13:32	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**15.2**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-42 @ 6-8 **Lab ID: 4013709004** Collected: 02/02/09 09:07 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**61.6**	ug/kg	21.5	1	02/05/09 07:34	02/05/09 13:58	71-43-2	
Ethylbenzene	**101**	ug/kg	53.7	1	02/05/09 07:34	02/05/09 13:58	100-41-4	
Methyl-tert-butyl ether	**<53.7**	ug/kg	53.7	1	02/05/09 07:34	02/05/09 13:58	1634-04-4	
Toluene	**378**	ug/kg	53.7	1	02/05/09 07:34	02/05/09 13:58	108-88-3	
Xylene (Total)	**722**	ug/kg	161	1	02/05/09 07:34	02/05/09 13:58	1330-20-7	
a,a,a-Trifluorotoluene (S)	99	%	69-146	1	02/05/09 07:34	02/05/09 13:58	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**6.9**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-43 @ 4-5 Lab ID: **4013709005** Collected: 02/02/09 09:35 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<23.2**	ug/kg	23.2	1	02/05/09 07:34	02/05/09 14:23	71-43-2	
Ethylbenzene	**<58.0**	ug/kg	58.0	1	02/05/09 07:34	02/05/09 14:23	100-41-4	
Methyl-tert-butyl ether	**<58.0**	ug/kg	58.0	1	02/05/09 07:34	02/05/09 14:23	1634-04-4	
Toluene	**<58.0**	ug/kg	58.0	1	02/05/09 07:34	02/05/09 14:23	108-88-3	
Xylene (Total)	**<174**	ug/kg	174	1	02/05/09 07:34	02/05/09 14:23	1330-20-7	
a,a,a-Trifluorotoluene (S)	96	%	69-146	1	02/05/09 07:34	02/05/09 14:23	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.7**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-43 @ 6-8 Lab ID: **4013709006** Collected: 02/02/09 09:48 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**192**	ug/kg	23.0	1	02/05/09 07:34	02/05/09 14:49	71-43-2	
Ethylbenzene	**1240**	ug/kg	57.4	1	02/05/09 07:34	02/05/09 14:49	100-41-4	
Methyl-tert-butyl ether	**219**	ug/kg	57.4	1	02/05/09 07:34	02/05/09 14:49	1634-04-4	
Toluene	**79.8**	ug/kg	57.4	1	02/05/09 07:34	02/05/09 14:49	108-88-3	
Xylene (Total)	**6000**	ug/kg	172	1	02/05/09 07:34	02/05/09 14:49	1330-20-7	
a,a,a-Trifluorotoluene (S)	100	%	69-146	1	02/05/09 07:34	02/05/09 14:49	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**12.9**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-44 @ 2-4 Lab ID: **4013709007** Collected: 02/02/09 10:21 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<22.9**	ug/kg	22.9	1	02/05/09 07:34	02/05/09 15:15	71-43-2	
Ethylbenzene	**<57.2**	ug/kg	57.2	1	02/05/09 07:34	02/05/09 15:15	100-41-4	
Methyl-tert-butyl ether	**<57.2**	ug/kg	57.2	1	02/05/09 07:34	02/05/09 15:15	1634-04-4	
Toluene	**<57.2**	ug/kg	57.2	1	02/05/09 07:34	02/05/09 15:15	108-88-3	
Xylene (Total)	**<171**	ug/kg	171	1	02/05/09 07:34	02/05/09 15:15	1330-20-7	
a,a,a-Trifluorotoluene (S)	99	%	69-146	1	02/05/09 07:34	02/05/09 15:15	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**12.5**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-44 @ 6-8 Lab ID: 4013709008 Collected: 02/02/09 10:24 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**104000**	ug/kg	8950	400	02/05/09 07:34	02/05/09 22:07	71-43-2	
Ethylbenzene	**294000**	ug/kg	22400	400	02/05/09 07:34	02/05/09 22:07	100-41-4	
Methyl-tert-butyl ether	**30100**	ug/kg	22400	400	02/05/09 07:34	02/05/09 22:07	1634-04-4	
Toluene	**1000000**	ug/kg	22400	400	02/05/09 07:34	02/05/09 22:07	108-88-3	
Xylene (Total)	**1530000**	ug/kg	67200	400	02/05/09 07:34	02/05/09 22:07	1330-20-7	
a,a,a-Trifluorotoluene (S)	2460	%	69-146	400	02/05/09 07:34	02/05/09 22:07	98-08-8	D3,S4
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**6.9**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-45 @ 4-5 Lab ID: **4013709009** Collected: 02/02/09 10:52 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<23.3**	ug/kg	23.3	1	02/05/09 07:34	02/05/09 15:41	71-43-2	
Ethylbenzene	**<58.1**	ug/kg	58.1	1	02/05/09 07:34	02/05/09 15:41	100-41-4	
Methyl-tert-butyl ether	**<58.1**	ug/kg	58.1	1	02/05/09 07:34	02/05/09 15:41	1634-04-4	
Toluene	**<58.1**	ug/kg	58.1	1	02/05/09 07:34	02/05/09 15:41	108-88-3	
Xylene (Total)	**<174**	ug/kg	174	1	02/05/09 07:34	02/05/09 15:41	1330-20-7	
a,a,a-Trifluorotoluene (S)	94	%	69-146	1	02/05/09 07:34	02/05/09 15:41	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.0**	%	0.10	1		02/04/09 07:49		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-45 @ 5-7 Lab ID: **4013709010** Collected: 02/02/09 10:53 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<23.4**	ug/kg	23.4	1	02/05/09 07:34	02/05/09 16:06	71-43-2	
Ethylbenzene	**<58.5**	ug/kg	58.5	1	02/05/09 07:34	02/05/09 16:06	100-41-4	
Methyl-tert-butyl ether	**<58.5**	ug/kg	58.5	1	02/05/09 07:34	02/05/09 16:06	1634-04-4	
Toluene	**<58.5**	ug/kg	58.5	1	02/05/09 07:34	02/05/09 16:06	108-88-3	
Xylene (Total)	<176	ug/kg	176	1	02/05/09 07:34	02/05/09 16:06	1330-20-7	
a,a,a-Trifluorotoluene (S)	129	%	69-146	1	02/05/09 07:34	02/05/09 16:06	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.6**	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-46 @ 1.5-2 Lab ID: **4013709011** Collected: 02/02/09 11:26 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<23.7**	ug/kg	23.7	1	02/05/09 07:34	02/05/09 16:32	71-43-2	
Ethylbenzene	**<59.3**	ug/kg	59.3	1	02/05/09 07:34	02/05/09 16:32	100-41-4	
Methyl-tert-butyl ether	**<59.3**	ug/kg	59.3	1	02/05/09 07:34	02/05/09 16:32	1634-04-4	
Toluene	**<59.3**	ug/kg	59.3	1	02/05/09 07:34	02/05/09 16:32	108-88-3	
Xylene (Total)	<178	ug/kg	178	1	02/05/09 07:34	02/05/09 16:32	1330-20-7	
a,a,a-Trifluorotoluene (S)	101	%	69-146	1	02/05/09 07:34	02/05/09 16:32	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**15.6**	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-46 @ 6-8 **Lab ID: 4013709012** Collected: 02/02/09 11:33 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<23.0**	ug/kg	23.0	1	02/05/09 07:34	02/05/09 20:50	71-43-2	
Ethylbenzene	**245**	ug/kg	57.6	1	02/05/09 07:34	02/05/09 20:50	100-41-4	
Methyl-tert-butyl ether	**116**	ug/kg	57.6	1	02/05/09 07:34	02/05/09 20:50	1634-04-4	
Toluene	**<57.6**	ug/kg	57.6	1	02/05/09 07:34	02/05/09 20:50	108-88-3	
Xylene (Total)	**461**	ug/kg	173	1	02/05/09 07:34	02/05/09 20:50	1330-20-7	
a,a,a-Trifluorotoluene (S)	120	%	69-146	1	02/05/09 07:34	02/05/09 20:50	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.2**	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-47 @ 2-4 Lab ID: **4013709013** Collected: 02/02/09 12:04 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<22.7**	ug/kg	22.7	1	02/05/09 07:34	02/05/09 16:58	71-43-2	
Ethylbenzene	**<56.7**	ug/kg	56.7	1	02/05/09 07:34	02/05/09 16:58	100-41-4	
Methyl-tert-butyl ether	**<56.7**	ug/kg	56.7	1	02/05/09 07:34	02/05/09 16:58	1634-04-4	
Toluene	**<56.7**	ug/kg	56.7	1	02/05/09 07:34	02/05/09 16:58	108-88-3	
Xylene (Total)	**<170**	ug/kg	170	1	02/05/09 07:34	02/05/09 16:58	1330-20-7	
a,a,a-Trifluorotoluene (S)	114	%	69-146	1	02/05/09 07:34	02/05/09 16:58	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**11.8**	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-47 @ 6-8 Lab ID: **4013709014** Collected: 02/02/09 12:08 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**36.2**	ug/kg	23.2	1	02/05/09 07:34	02/05/09 17:24	71-43-2	
Ethylbenzene	**<58.0**	ug/kg	58.0	1	02/05/09 07:34	02/05/09 17:24	100-41-4	
Methyl-tert-butyl ether	**108**	ug/kg	58.0	1	02/05/09 07:34	02/05/09 17:24	1634-04-4	
Toluene	**<58.0**	ug/kg	58.0	1	02/05/09 07:34	02/05/09 17:24	108-88-3	
Xylene (Total)	**<174**	ug/kg	174	1	02/05/09 07:34	02/05/09 17:24	1330-20-7	
a,a,a-Trifluorotoluene (S)	105	%	69-146	1	02/05/09 07:34	02/05/09 17:24	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.8**	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-48 @ 2-4 **Lab ID: 4013709015** Collected: 02/02/09 13:36 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<28.0**	ug/kg	28.0	1	02/05/09 07:34	02/05/09 19:07	71-43-2	
Ethylbenzene	**<70.1**	ug/kg	70.1	1	02/05/09 07:34	02/05/09 19:07	100-41-4	
Methyl-tert-butyl ether	**<70.1**	ug/kg	70.1	1	02/05/09 07:34	02/05/09 19:07	1634-04-4	
Toluene	**<70.1**	ug/kg	70.1	1	02/05/09 07:34	02/05/09 19:07	108-88-3	
Xylene (Total)	**<210**	ug/kg	210	1	02/05/09 07:34	02/05/09 19:07	1330-20-7	
a,a,a-Trifluorotoluene (S)	131	%	69-146	1	02/05/09 07:34	02/05/09 19:07	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.0**	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-48 @ 6-8 Lab ID: 4013709016 Collected: 02/02/09 13:42 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	112	ug/kg	23.1	1	02/05/09 07:34	02/05/09 20:24	71-43-2	
Ethylbenzene	557	ug/kg	57.7	1	02/05/09 07:34	02/05/09 20:24	100-41-4	
Methyl-tert-butyl ether	<57.7	ug/kg	57.7	1	02/05/09 07:34	02/05/09 20:24	1634-04-4	
Toluene	940	ug/kg	57.7	1	02/05/09 07:34	02/05/09 20:24	108-88-3	
Xylene (Total)	3510	ug/kg	173	1	02/05/09 07:34	02/05/09 20:24	1330-20-7	
a,a,a-Trifluorotoluene (S)	98	%	69-146	1	02/05/09 07:34	02/05/09 20:24	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	13.3	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-49 @ 3-4 Lab ID: 4013709017 Collected: 02/02/09 14:06 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	709	ug/kg	22.9	1	02/05/09 07:34	02/05/09 19:33	71-43-2	
Ethylbenzene	175	ug/kg	57.3	1	02/05/09 07:34	02/05/09 19:33	100-41-4	
Methyl-tert-butyl ether	<57.3	ug/kg	57.3	1	02/05/09 07:34	02/05/09 19:33	1634-04-4	
Toluene	2480	ug/kg	57.3	1	02/05/09 07:34	02/05/09 19:33	108-88-3	
Xylene (Total)	2570	ug/kg	172	1	02/05/09 07:34	02/05/09 19:33	1330-20-7	
a,a,a-Trifluorotoluene (S)	121	%	69-146	1	02/05/09 07:34	02/05/09 19:33	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	12.8	%	0.10	1		02/04/09 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-49 @ 4-8 Lab ID: **4013709018** Collected: 02/02/09 14:09 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**12700**	ug/kg	1060	50	02/05/09 07:34	02/05/09 21:41	71-43-2	
Ethylbenzene	**46800**	ug/kg	2640	50	02/05/09 07:34	02/05/09 21:41	100-41-4	
Methyl-tert-butyl ether	**2920**	ug/kg	2640	50	02/05/09 07:34	02/05/09 21:41	1634-04-4	
Toluene	**143000**	ug/kg	2640	50	02/05/09 07:34	02/05/09 21:41	108-88-3	
Xylene (Total)	**246000**	ug/kg	7920	50	02/05/09 07:34	02/05/09 21:41	1330-20-7	
a,a,a-Trifluorotoluene (S)	452	%	69-146	50	02/05/09 07:34	02/05/09 21:41	98-08-8	D3,S4
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**5.3**	%	0.10	1		02/04/09 07:51		

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ANALYTICAL RESULTS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

Sample: SB-50 @ 5-8 Lab ID: **4013709020** Collected: 02/02/09 14:30 Received: 02/03/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Med BTEX	Analytical Method: EPA 8021 Preparation Method: EPA 5030 Medium Soil							
Benzene	**<26.8**	ug/kg	26.8	1	02/05/09 07:34	02/05/09 19:58	71-43-2	
Ethylbenzene	**<66.9**	ug/kg	66.9	1	02/05/09 07:34	02/05/09 19:58	100-41-4	
Methyl-tert-butyl ether	**<66.9**	ug/kg	66.9	1	02/05/09 07:34	02/05/09 19:58	1634-04-4	
Toluene	**<66.9**	ug/kg	66.9	1	02/05/09 07:34	02/05/09 19:58	108-88-3	
Xylene (Total)	**<201**	ug/kg	201	1	02/05/09 07:34	02/05/09 19:58	1330-20-7	
a,a,a-Trifluorotoluene (S)	126	%	69-146	1	02/05/09 07:34	02/05/09 19:58	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**6.6**	%	0.10	1		02/04/09 07:51		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

QC Batch: PMST/2198
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 4013709001, 4013709002, 4013709003, 4013709004, 4013709005, 4013709006, 4013709007, 4013709008, 4013709009, 4013709010, 4013709011, 4013709012, 4013709013, 4013709014, 4013709015, 4013709016, 4013709017, 4013709018, 4013709020

SAMPLE DUPLICATE: 124203

Parameter	Units	4013709001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.7	12.9	18	10	

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QUALITY CONTROL DATA

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

QC Batch: GCV/2935 Analysis Method: EPA 8021
QC Batch Method: EPA 5030 Medium Soil Analysis Description: 8021 Med Level Solid GCV
Associated Lab Samples: 4013709001, 4013709002, 4013709003, 4013709004, 4013709005, 4013709006, 4013709007, 4013709008, 4013709009, 4013709010, 4013709011, 4013709012, 4013709013, 4013709014, 4013709015, 4013709016, 4013709017, 4013709018, 4013709020

METHOD BLANK: 124583 Matrix: Solid
Associated Lab Samples: 4013709001, 4013709002, 4013709003, 4013709004, 4013709005, 4013709006, 4013709007, 4013709008, 4013709009, 4013709010, 4013709011, 4013709012, 4013709013, 4013709014, 4013709015, 4013709016, 4013709017, 4013709018, 4013709020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	<20.0	20.0	02/05/09 12:15	
Ethylbenzene	ug/kg	<50.0	50.0	02/05/09 12:15	
Methyl-tert-butyl ether	ug/kg	<50.0	50.0	02/05/09 12:15	
Toluene	ug/kg	<50.0	50.0	02/05/09 12:15	
Xylene (Total)	ug/kg	<150	150	02/05/09 12:15	
a,a,a-Trifluorotoluene (S)	%	99	69-146	02/05/09 12:15	

LABORATORY CONTROL SAMPLE & LCSD: 124584 124585

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/kg	1000	990	977	99	98	80-120	1	20	
Ethylbenzene	ug/kg	1000	1050	1040	105	104	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	1010	971	101	97	80-120	3	20	
Toluene	ug/kg	1000	1040	1020	104	102	80-120	1	20	
Xylene (Total)	ug/kg	3000	3170	3120	106	104	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				102	88	69-146			

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 100018 FORMER CLARK #646
Pace Project No.: 4013709

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

APPENDIX D

SOIL BORING LOGS AND MONITROING WELL CONSTRUCTION DIAGRAMS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB-1 **DATE:** 11/21/90

CLIENT: Clark Oil & Refining Corporation **JOB #** 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: **AUGER SIZE:** 4" I.D. Hollow Stem

DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0 - 3′	CLAY:	Brown, silty, moist
3 - 8′	SAND:	Brown, medium-fine grained, moderately sorted, saturated
8 - 10′	SAND:	Light gray-brown, fine, well sorted, saturated

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
	1 - 2′	0
X	4 - 5′	20
	6 - 7′	0
	9 - 10′	0

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB/MW-2 **DATE:** 11/21/90

CLIENT: Clark Oil & Refining Corporation **JOB #** 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: **AUGER SIZE:** 4" I.D. Hollow Stem

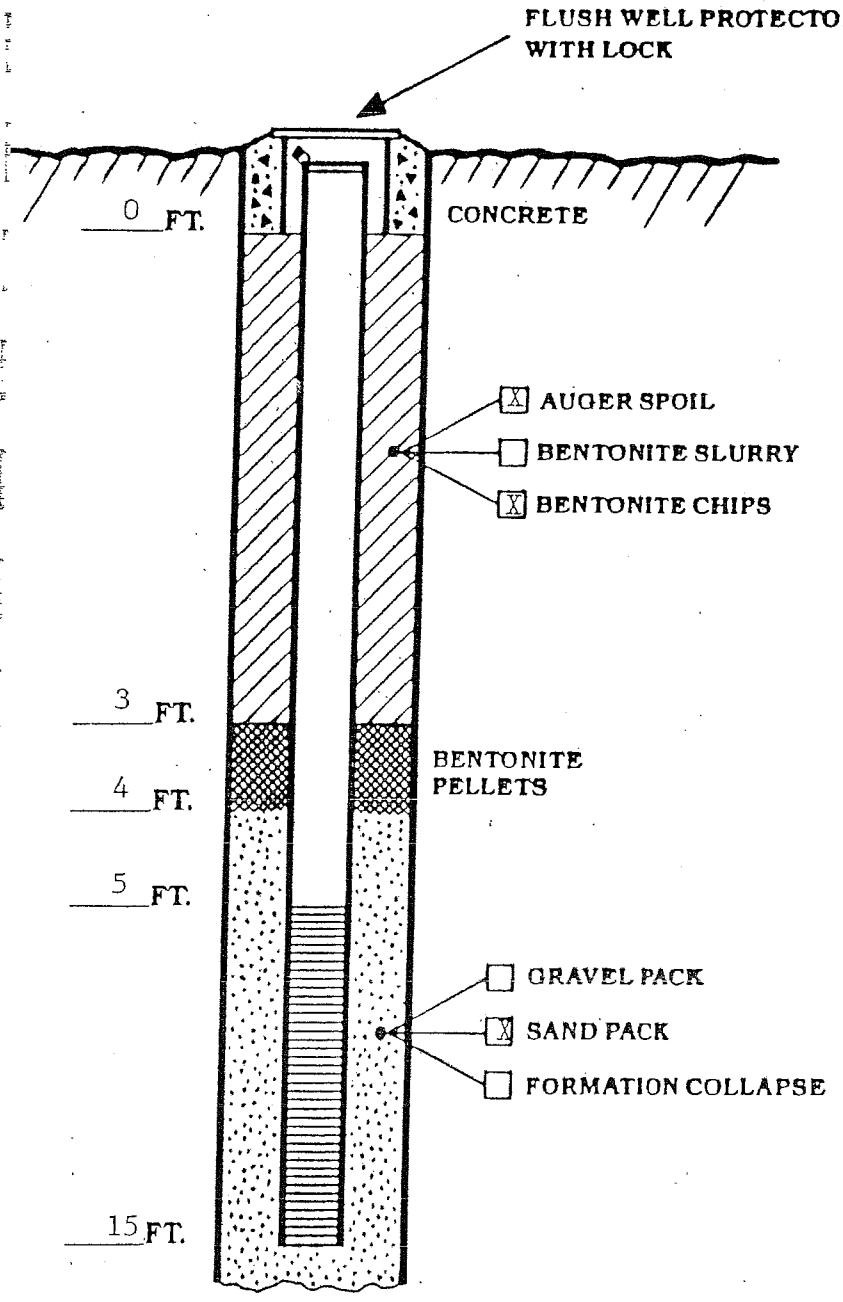
DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION
0 - 2′	CLAY: Brown, silty, moist
2 - 5′	SAND: Brown, medium-fine grained, moderately sorted, strong fuel odor
5 - 16′	SAND: Light brown, fine, well sorted, saturated

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
	1 - 2′	20
X	4 - 5′	>100
	6 - 7′	>200

WELL CONSTRUCTION LOG



PROJECT Clark Wauconda

LOCATION 399 West Liberty St.

WELL NO. SB/MW-2

INSTALLATION DATE 11 / 21 / 90

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE PVC

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 100.00 ft.

ELEVATION GROUND SURFACE _____

WATER LEVEL 10.30 **FT.**

DATE MEASURED 11 / 29 / 90

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB-3 **DATE:** 11/21/90

CLIENT: Clark Oil & Refining Corporation **JOB #** 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: **AUGER SIZE:** 4" I.D. Hollow Stem

DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0 - 4'	CLAY:	Brown, moist, some silt and fine gravel
5 - 19'	SAND:	Brown - light gray, fine, some silt, saturated

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
	1 - 2'	0
X	4 - 5'	>100
	7 - 8'	>100

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB/MW-4 **DATE:** 11/21/90

CLIENT: Clark Oil & Refining Corporation **JOB #** 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: **AUGER SIZE:** 4" I.D. Hollow Stem

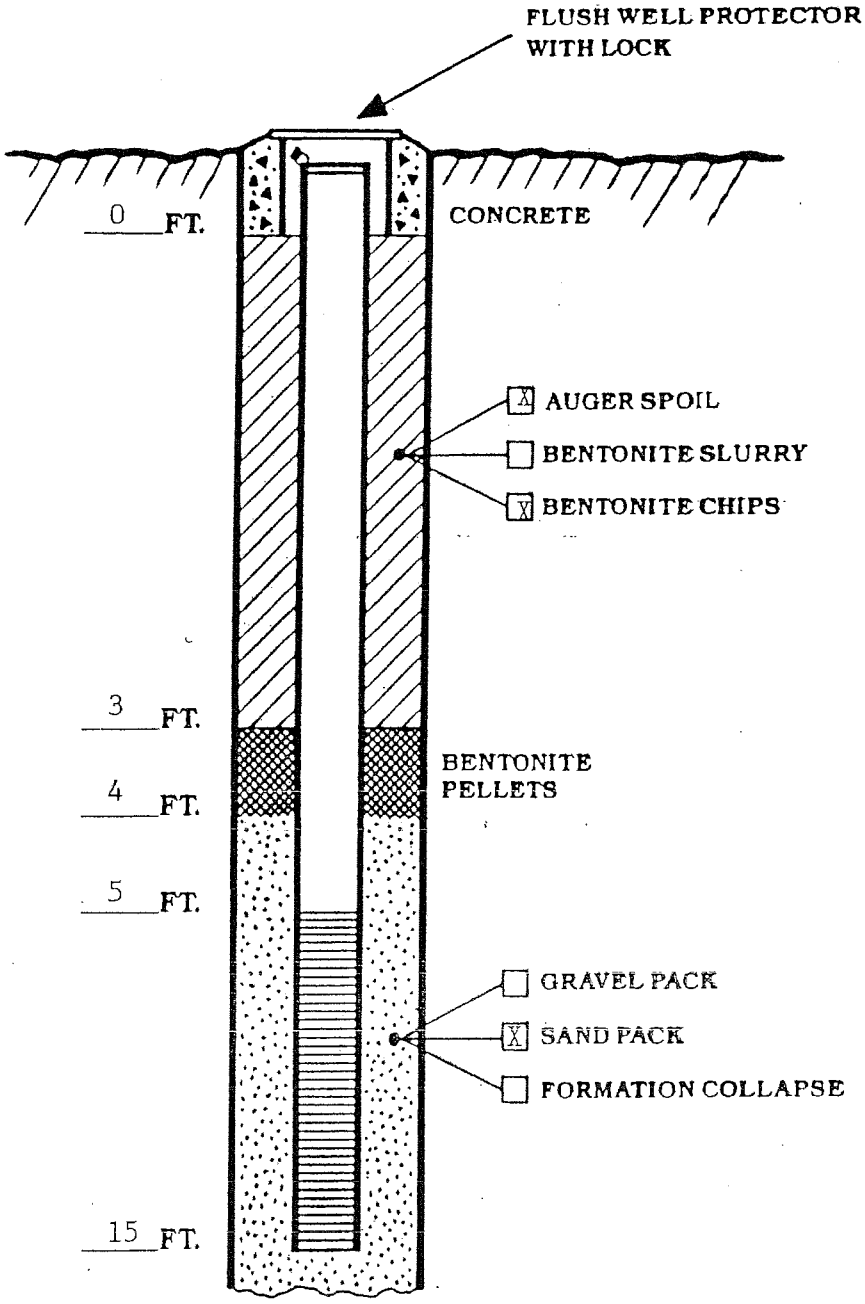
DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0 - 2′	CLAY:	Brown-black, moist, some organic material
2 - 7′	CLAY:	Brown, moist, silty saturated
7 - 17′	SAND:	Tan-brown, medium to fine, saturated

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
	1 - 2′	0
	4 - 5′	0
X	7 - 8′	50
	9 - 10′	0

WELL CONSTRUCTION LOG



PROJECT Clark Wauconda

LOCATION 399 West Liberty St.

WELL NO. SB/MW-4

INSTALLATION DATE 11 / 21 / 90

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE PVC

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 97.81

ELEVATION GROUND SURFACE _____

WATER LEVEL 7.77 **FT.**

DATE MEASURED 11 / 29 / 90

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB/MW-5 **DATE:** 11/21/90

CLIENT: Clark Oil & Refining Corporation **JOB #** 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: **AUGER SIZE:** 4" I.D. Hollow Stem

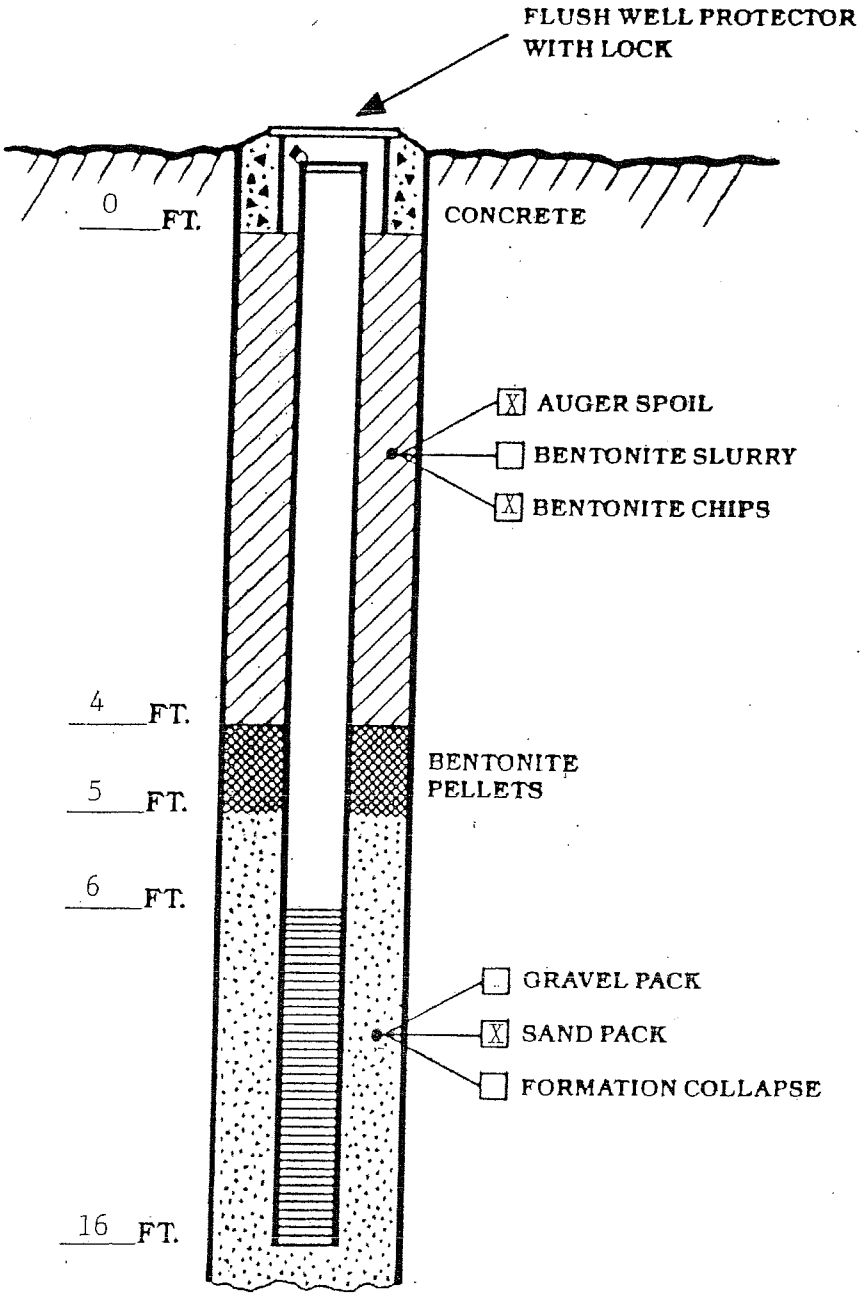
DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION
0 - 9′	CLAY: Brown, moist, some small gravel
9 - 15′	CLAY: Light brown, very silty, very moist
15 - 19′	SAND: Brown - light brown, very silty

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
	1 - 2′	0
	4 - 5′	0
	7 - 8′	0
X	9 - 10′	0
	12 - 13′	0
	14 - 15′	0

WELL CONSTRUCTION LOG



PROJECT Clark Wauconda

LOCATION 399 West Liberty St.

WELL NO. SB/MW-5

INSTALLATION DATE 11 / 21 / 90

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE PVC

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 94.20

ELEVATION GROUND SURFACE _____

WATER LEVEL 5.97 **FT.**

DATE MEASURED 11 / 29 / 90

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB/MW-6 **DATE:** 11/21/90

CLIENT: Clark Oil & Refining Corporation **JOB #** 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: **AUGER SIZE:** 4" I.D. Hollow Stem

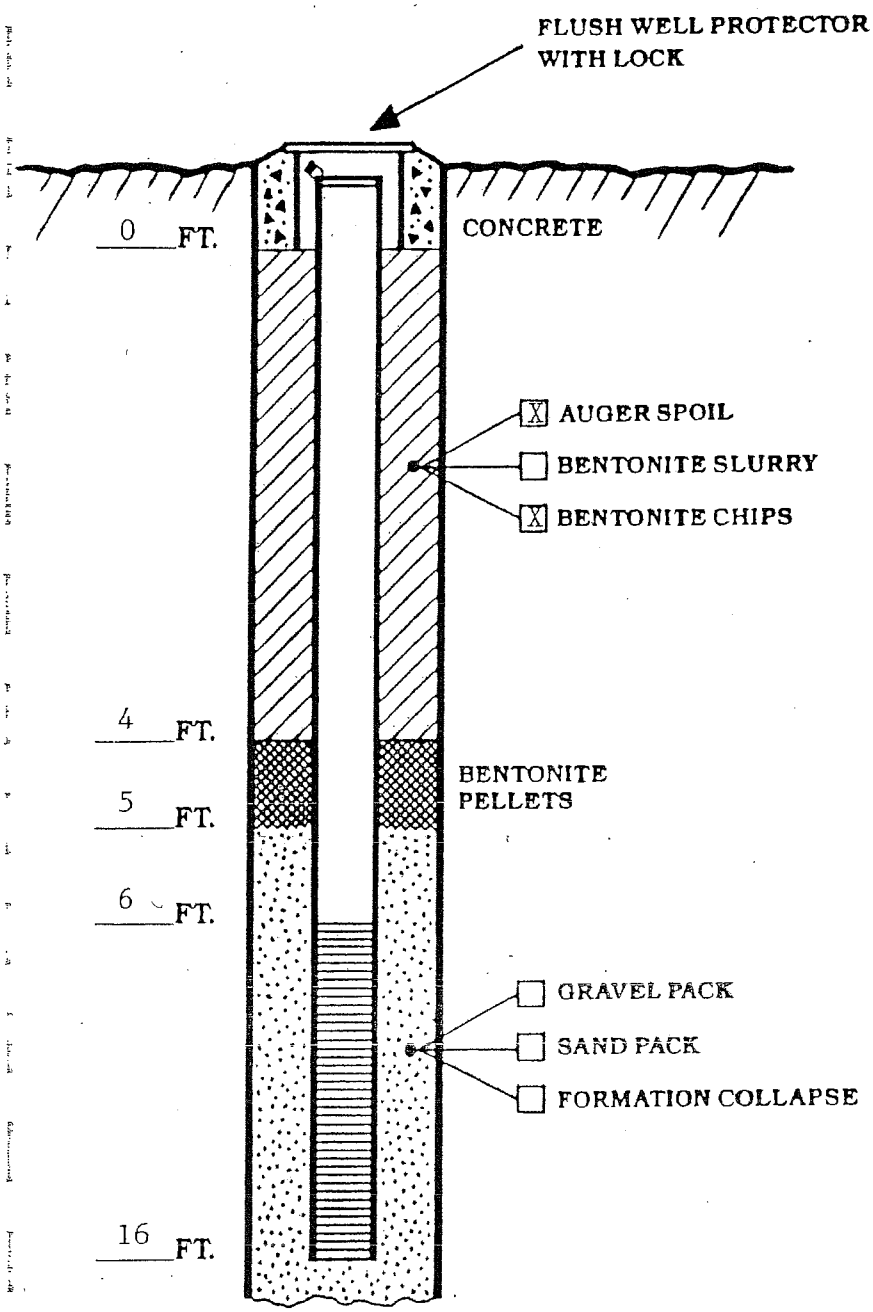
DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION
0 - 9′	CLAY: Brown, moist, slight fuel odor
9 - 17′	SAND: Light brown, fine - medium, saturated

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
	1 - 2′	40
	4 - 5′	20
X	7 - 8′	50
	9 - 10′	0

WELL CONSTRUCTION LOG



PROJECT Clark Wauconda

LOCATION 399 West Liberty St.

WELL NO. SB/MW-6

INSTALLATION DATE 11 / 21 / 90

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE PVC

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 97.26

ELEVATION GROUND SURFACE _____

WATER LEVEL 7.02 FT.

DATE MEASURED 11 / 29 / 90

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB/MW-7 **DATE:** 11/21/90

CLIENT: Clark Oil & Refining Corporation **JOB #** 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: **AUGER SIZE:** 4" I.D. Hollow Stem

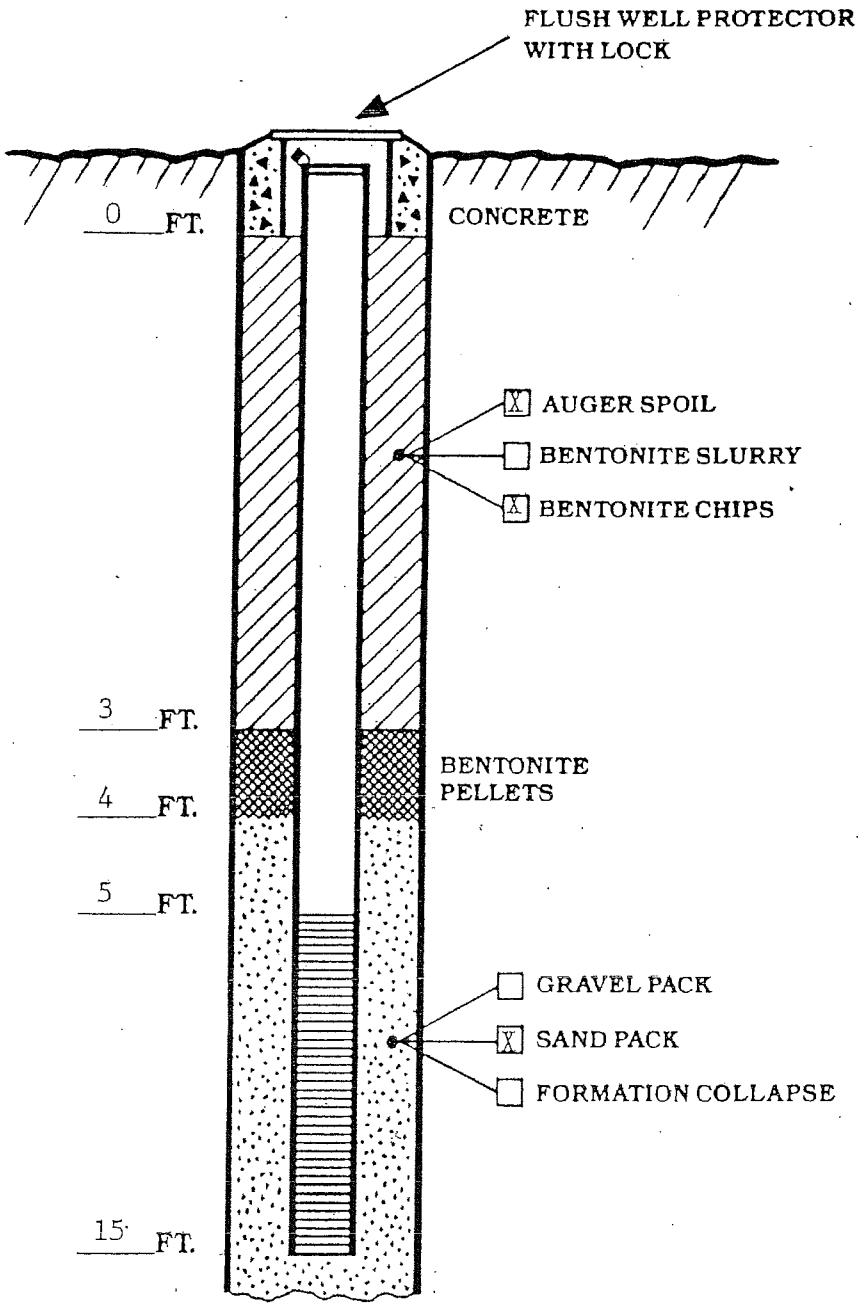
DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0 - 6′	CLAY:	Brown, some small gravel
6 - 17′	SAND:	Brown, coarse - medium, saturated, strong fuel odor.

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
	1 - 2′	0
	4 - 5′	10
X	7 - 8′	200

WELL CONSTRUCTION LOG



PROJECT Clark Wauconda

LOCATION 399 West Liberty St.

WELL NO. SB/MW-7

INSTALLATION DATE 11 / 21 / 90

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE PVC

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 97.65

ELEVATION GROUND SURFACE _____

WATER LEVEL 7.69 FT.

DATE MEASURED 11 / 29 / 90

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: MW-8 DATE: 3/15/91

CLIENT: Clark Oil & Refining Corporation JOB # 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: AUGER SIZE: 8 1/4" O.D.

DRILLING COMPANY: Rock & Soil Drilling Corp.

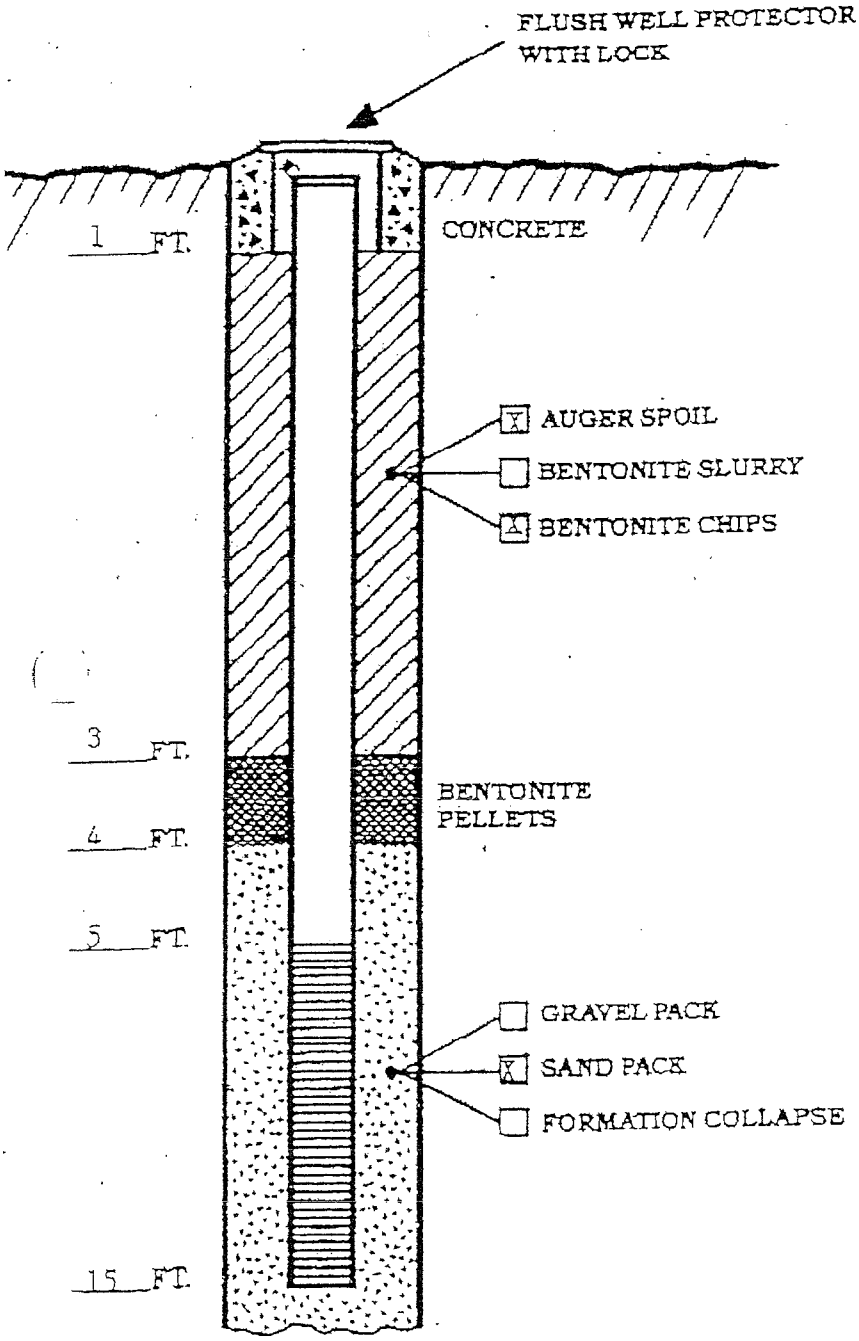
INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0 - .75	ASPHALT:	Sand and gravel fill
.75 - 8	CLAY:	Dark tan and gray, silty, gravel inclusions, moist
8 - 26	SAND:	Tan and gray grading to gray, wet
26 - 30	SILT:	Gray, sandy, wet
30 - 35	CLAY:	Gray, very silty, wet

NOTES:

Water at approximately 8.5 ft.

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW - 8S

INSTALLATION DATE 3 / 15 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 86.88

ELEVATION GROUND SURFACE _____

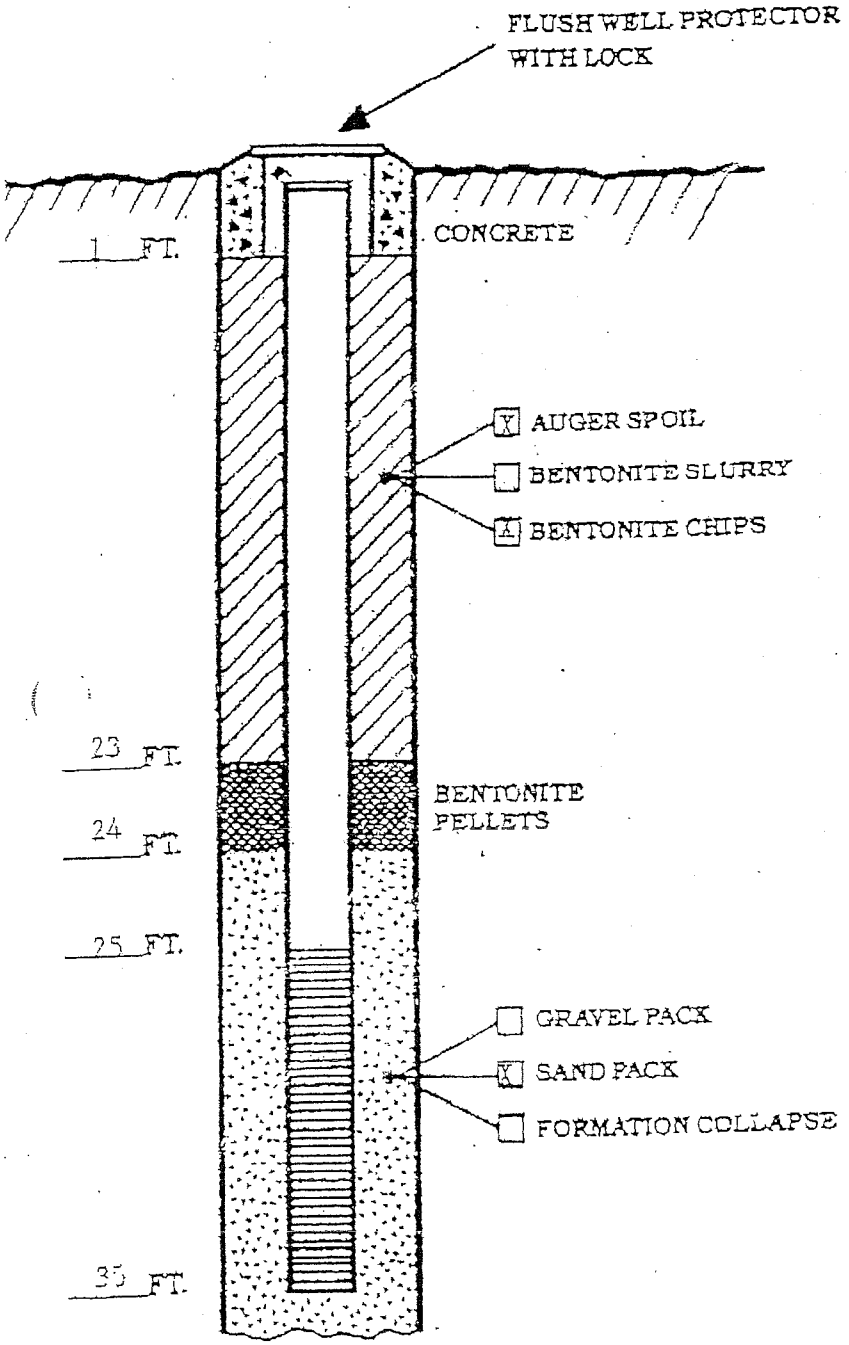
WATER LEVEL 80.27 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St., Wauconda, IL

WELL NO. MW -6d

INSTALLATION DATE 3 / 15 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 86.96

ELEVATION GROUND SURFACE _____

WATER LEVEL 80.91 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC

SOIL BORING LOGS

SOIL BORING NUMBER: MW-9 DATE: 3/15/91

CLIENT: Clark Oil & Refining Corporation JOB # 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: AUGER SIZE: 8 1/4" O.D.

DRILLING COMPANY: Rock & Soil Drilling Corp.
0 - .75 ASPHALT and fill

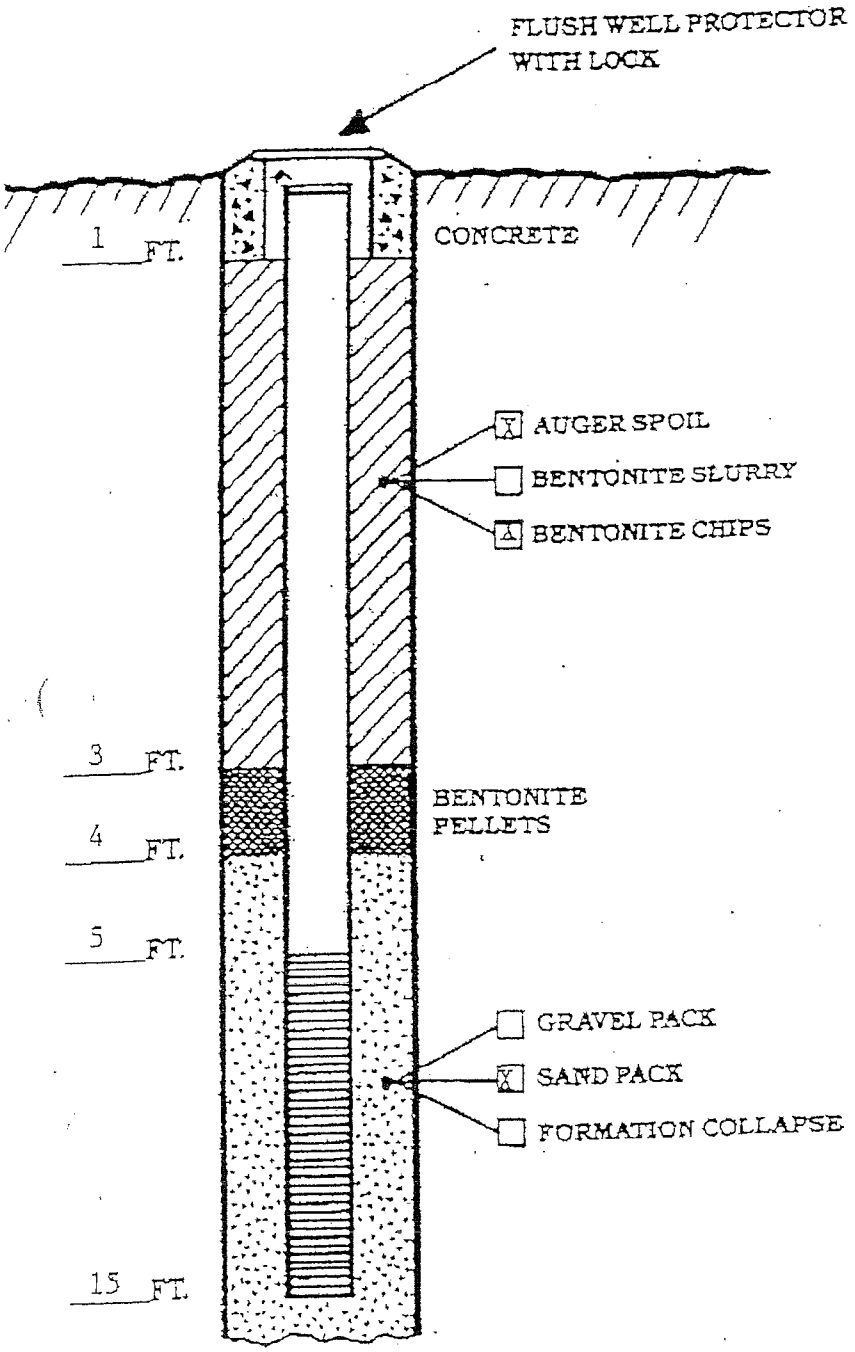
INTERVAL (ft.)	MATERIAL CLASSIFICATION	
.75 - 7	CLAY:	Gray and tan, silty, moist, gravel & pebbles
7 - 9	SAND:	Brown, medium grain, moist then wet, minor odor
9 - 26	SILTY SAND:	Gray, wet
26 - 35	SILT:	Gray, well compacted, wet

NOTES:

Water at approximately 8.5 ft.

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW - 9S

INSTALLATION DATE 3 / 15 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 86.00

ELEVATION GROUND SURFACE _____

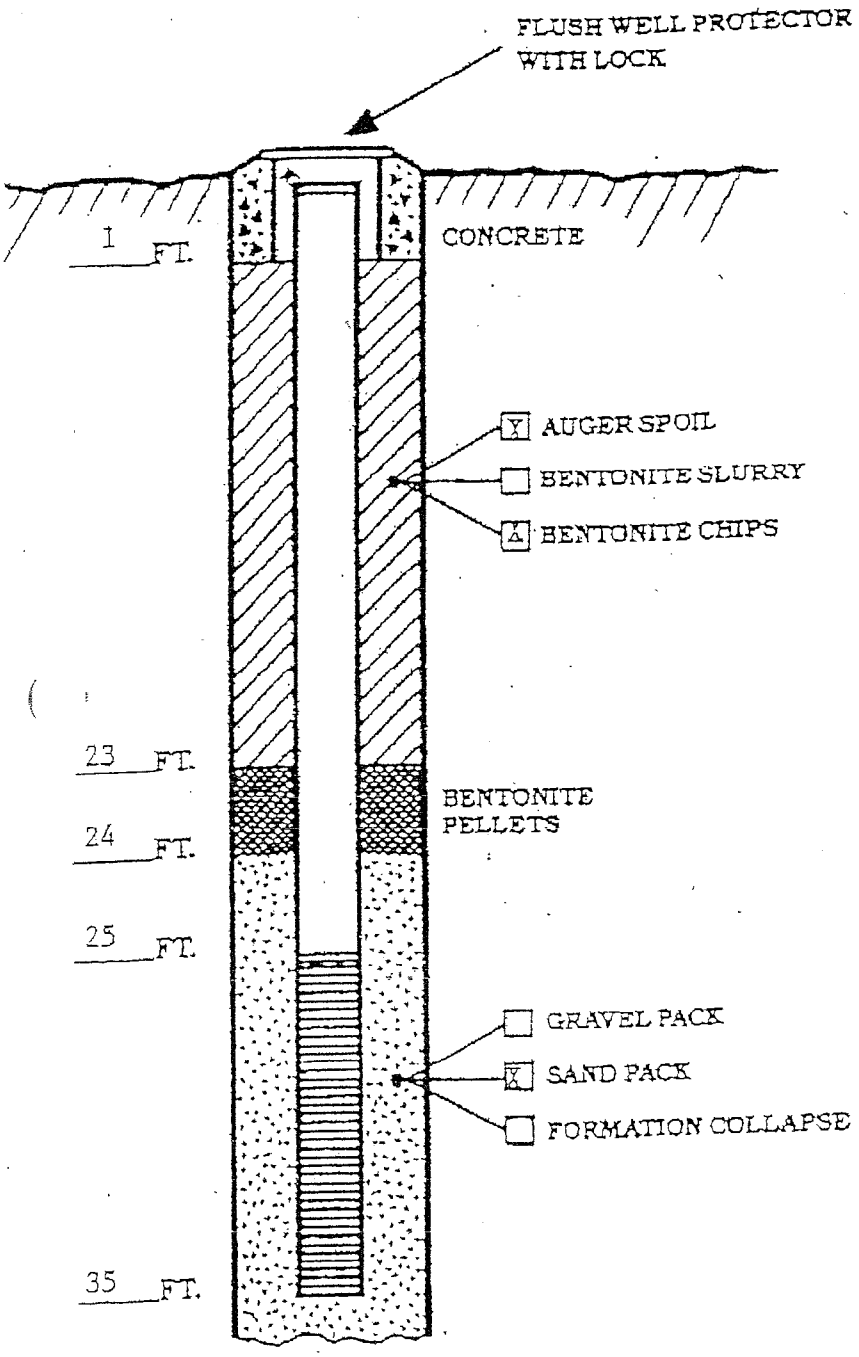
WATER LEVEL 79.88 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW - 9D

INSTALLATION DATE 3 / 15 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 86.06

ELEVATION GROUND SURFACE _____

WATER LEVEL 79.80 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: MW-10 DATE: 3/14/91

CLIENT: Clark Oil & Refining Corporation JOB # 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: AUGER SIZE: 8 1/4" O.D.

DRILLING COMPANY: Rock & Soil Drilling Corp.

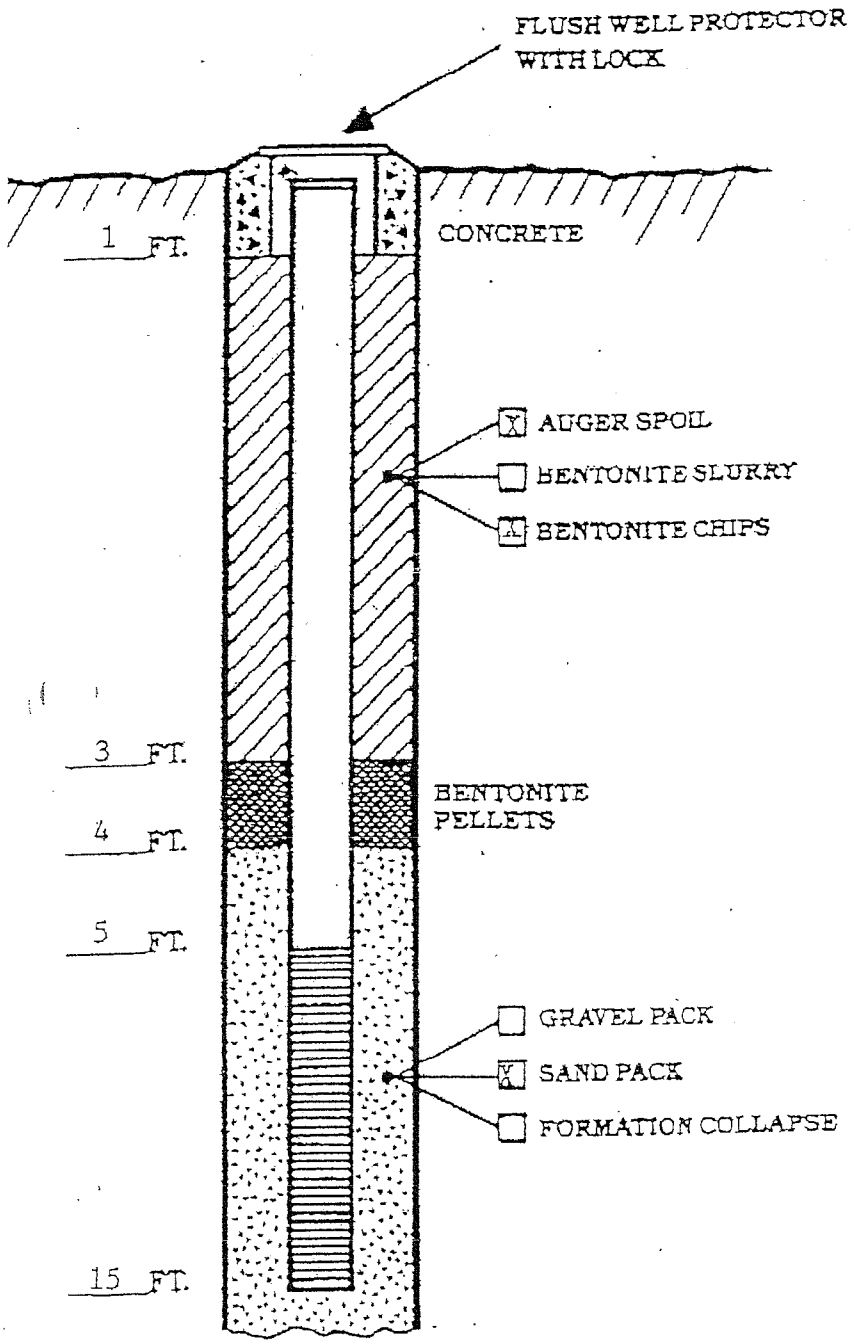
INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0 - 3	SOIL	Black, moist
3 - 8	CLAY:	Tan to brown, silty, gravel inclusions, moist
8 - 22	SAND:	Tan, medium grained, wet, some mica
22 - 27	SILTY SAND:	Tan to gray
27 - 35	SILT:	Gray, well compacted, wet

NOTES:

Water at approximately 8 ft.
Deep well set 30 - 35'
All sand to 8' (filter pack)
Shallow well set 15.5'

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
S-1	5	

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW - 10S

INSTALLATION DATE 3 / 14 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 85.93

ELEVATION GROUND SURFACE _____

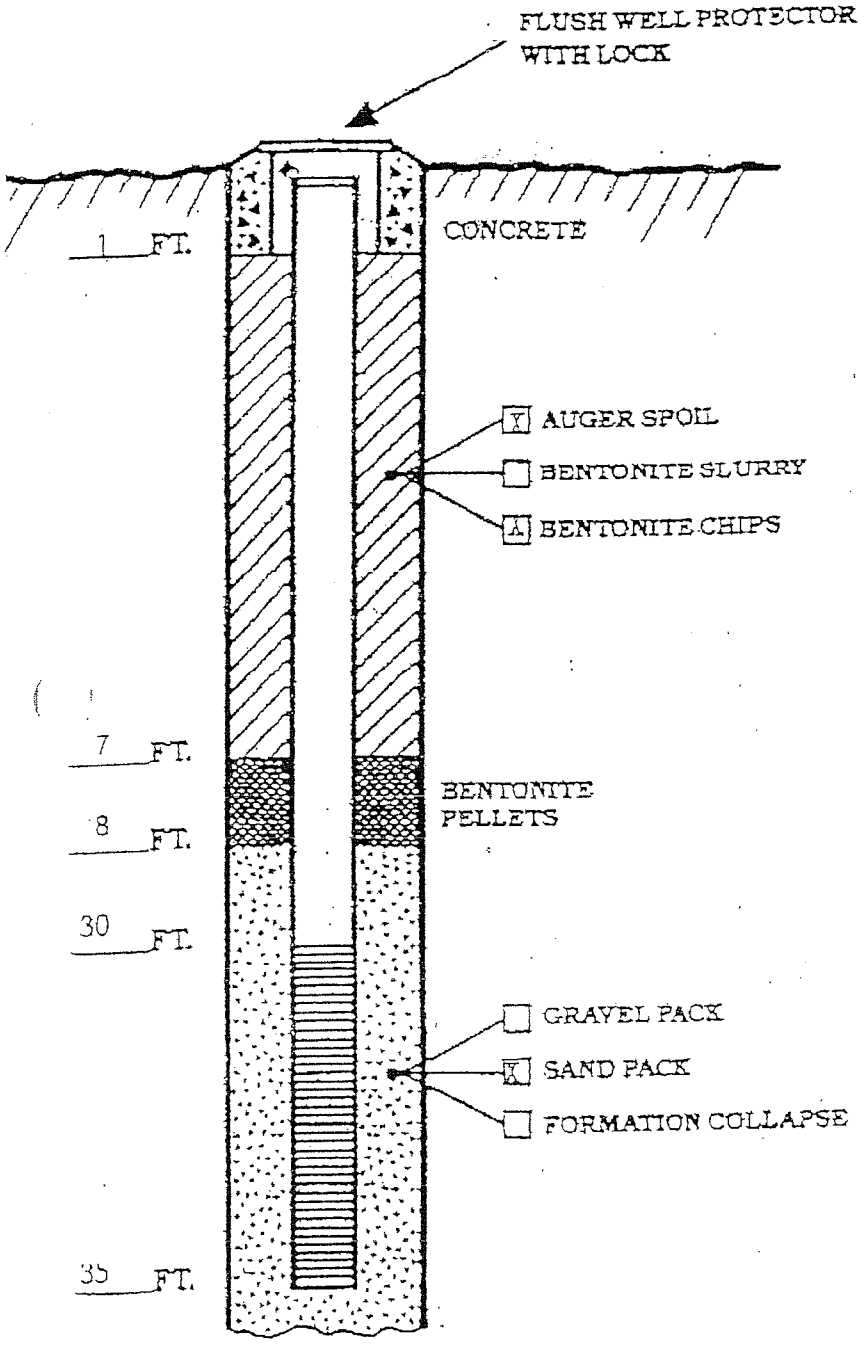
WATER LEVEL 80.65 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW - 10D

INSTALLATION DATE 3 / 14 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 85.06

ELEVATION GROUND SURFACE _____

WATER LEVEL 79.44 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

SOIL BORING LOGS

SOIL BORING NUMBER: MW-11 DATE: 3/22/91

CLIENT: Clark Oil & Refining Corporation JOB # 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: AUGER SIZE: 6 1/4" O.D.

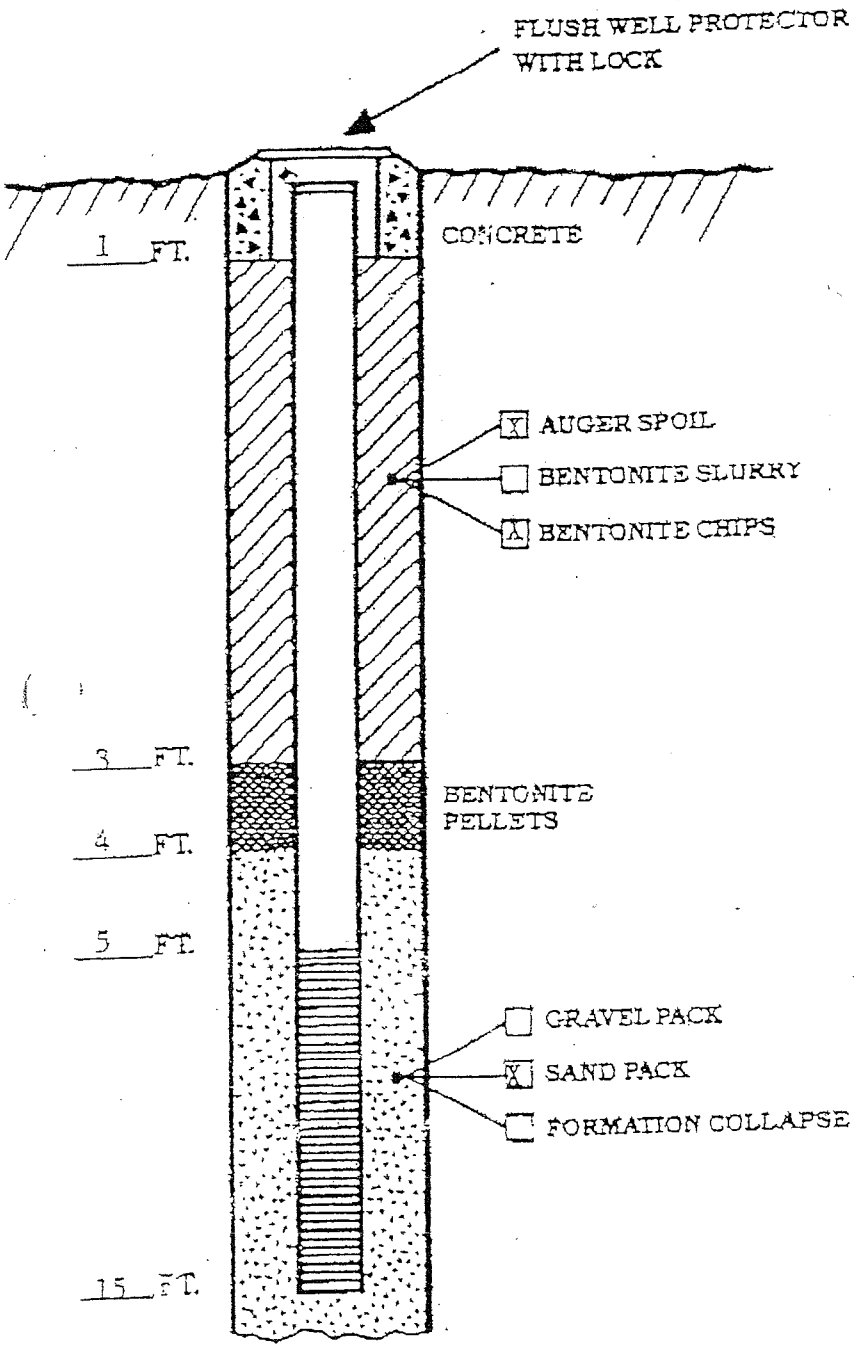
DRILLING COMPANY: Rock & Soil Drilling Corp.

INTERVAL (ft.)	MATERIAL CLASSIFICATION
0 - 4	TOP SOIL Black
4 - 6	SAND: Orange, fine to medium grained, moist
6 - 9	SAND: Tan/gray, silty, fine grained, moist
9 - 18	CLAY: Gray/black, silty, moist, no odor
18 - 26	SILTY SAND: Gray, wet, odor
26 - 35	SANDY SILT with clay, gray, wet

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW - 11S

INSTALLATION DATE 3 / 22 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 85.82

ELEVATION GROUND SURFACE _____

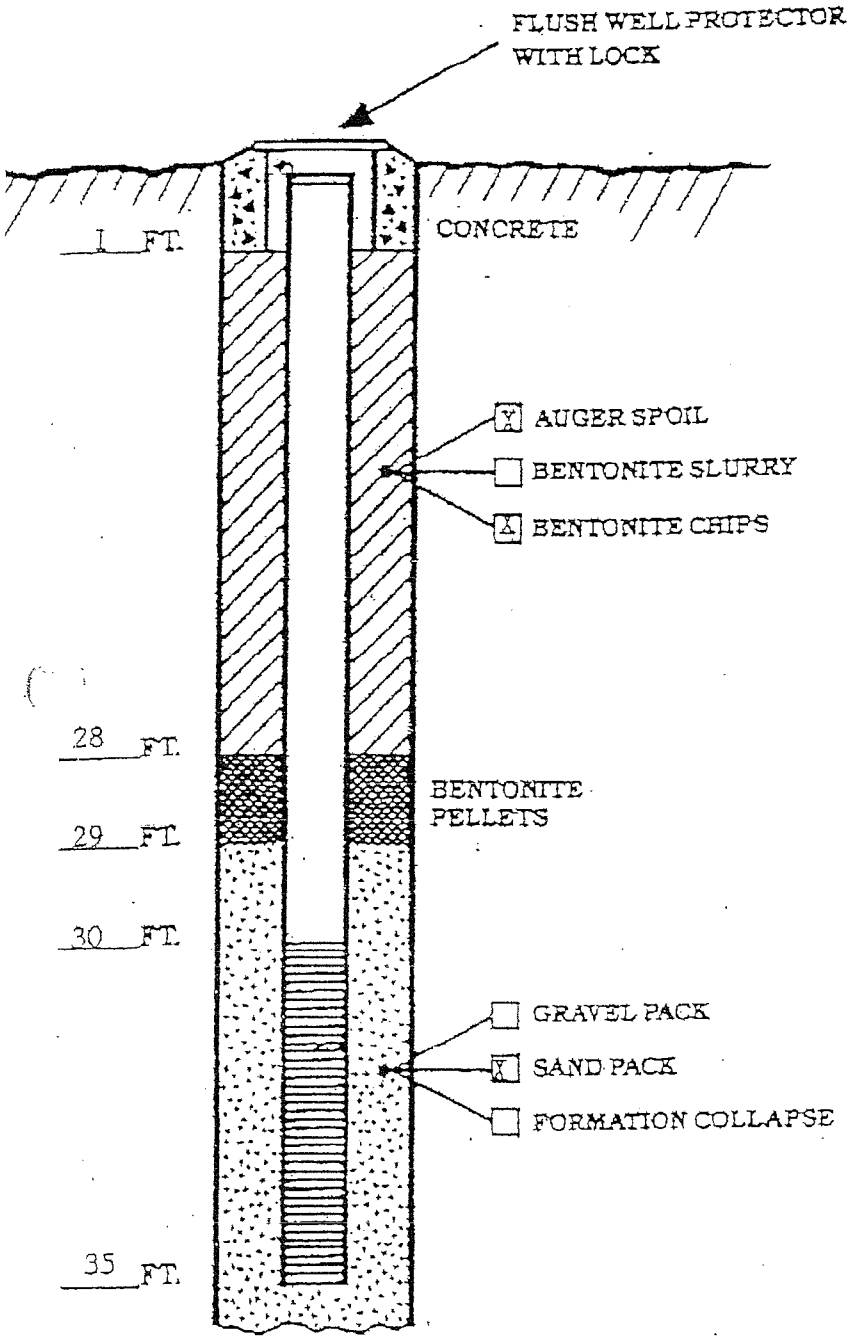
WATER LEVEL 80.30 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St., Wauconda, IL

WELL NO. MW - 11D

INSTALLATION DATE 3 / 22 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 85.90

ELEVATION GROUND SURFACE _____

WATER LEVEL 79.33 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: MW-12 DATE: 3/22/91

CLIENT: Clark Oil & Refining Corporation JOB # 112
LOCATION: 399 West Liberty Street, Wauconda, Illinois

RIG: AUGER SIZE: 6 1/4" O.D.

DRILLING COMPANY: Rock & Soil Drilling Corp.

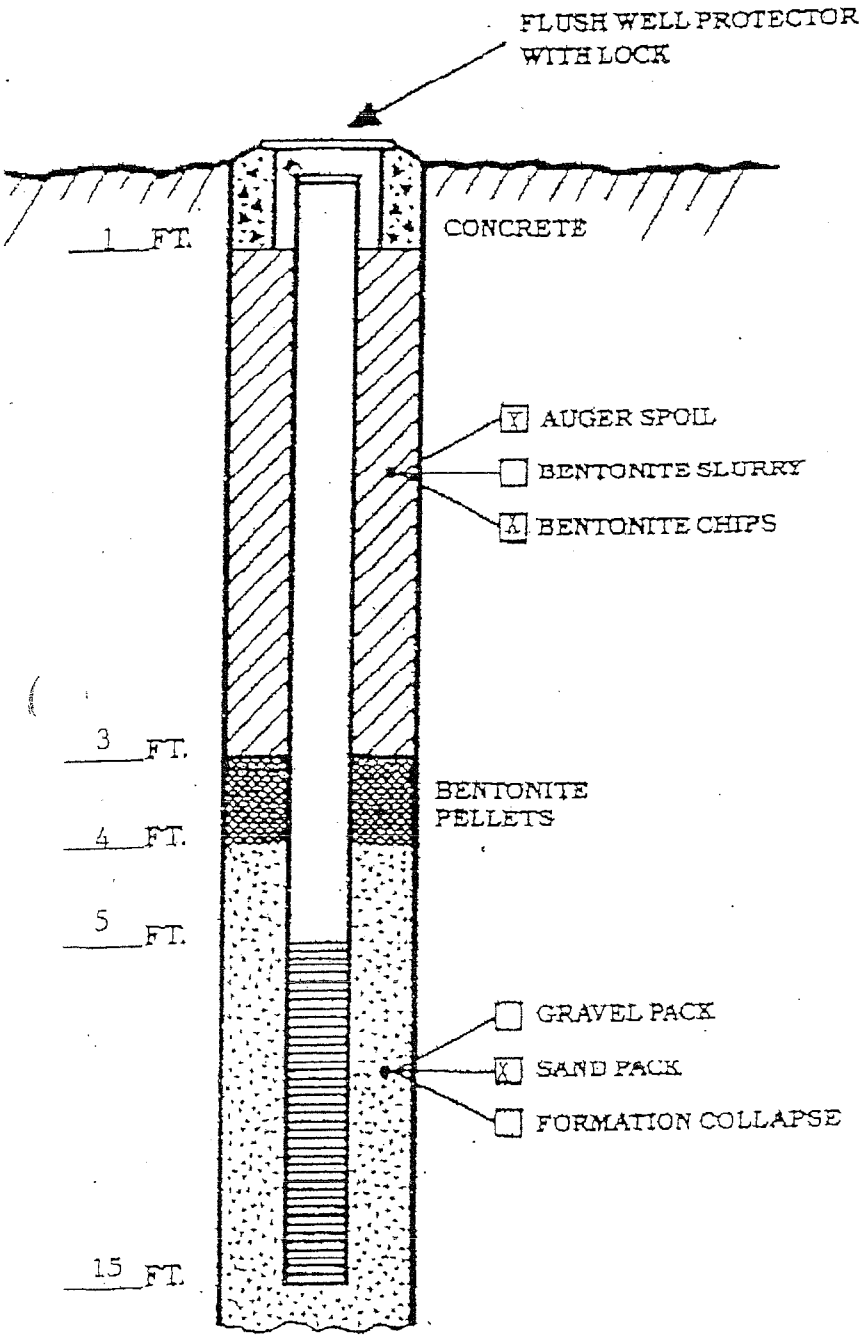
INTERVAL (ft.)	MATERIAL CLASSIFICATION
0 - 1	TOP SOIL: Black and grass
1 - 8	CLAY: Tan and gray, silty, moist, pebbles and gravel
8 - 16	CLAY: Gray, silty, moist, pebbles and gravel, more silty with depth
16 - 23	SANDY SILT: Gray, wet, fine to medium grained
23 - 31	CLAYEY SILT: Gray, wet
31 - 35	CLAY:

NOTES:

1 - 2' gravel layer at approx. 8 ft.
Product and odor on water

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW - 12S

INSTALLATION DATE 3 / 22 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 81.23

ELEVATION GROUND SURFACE ____

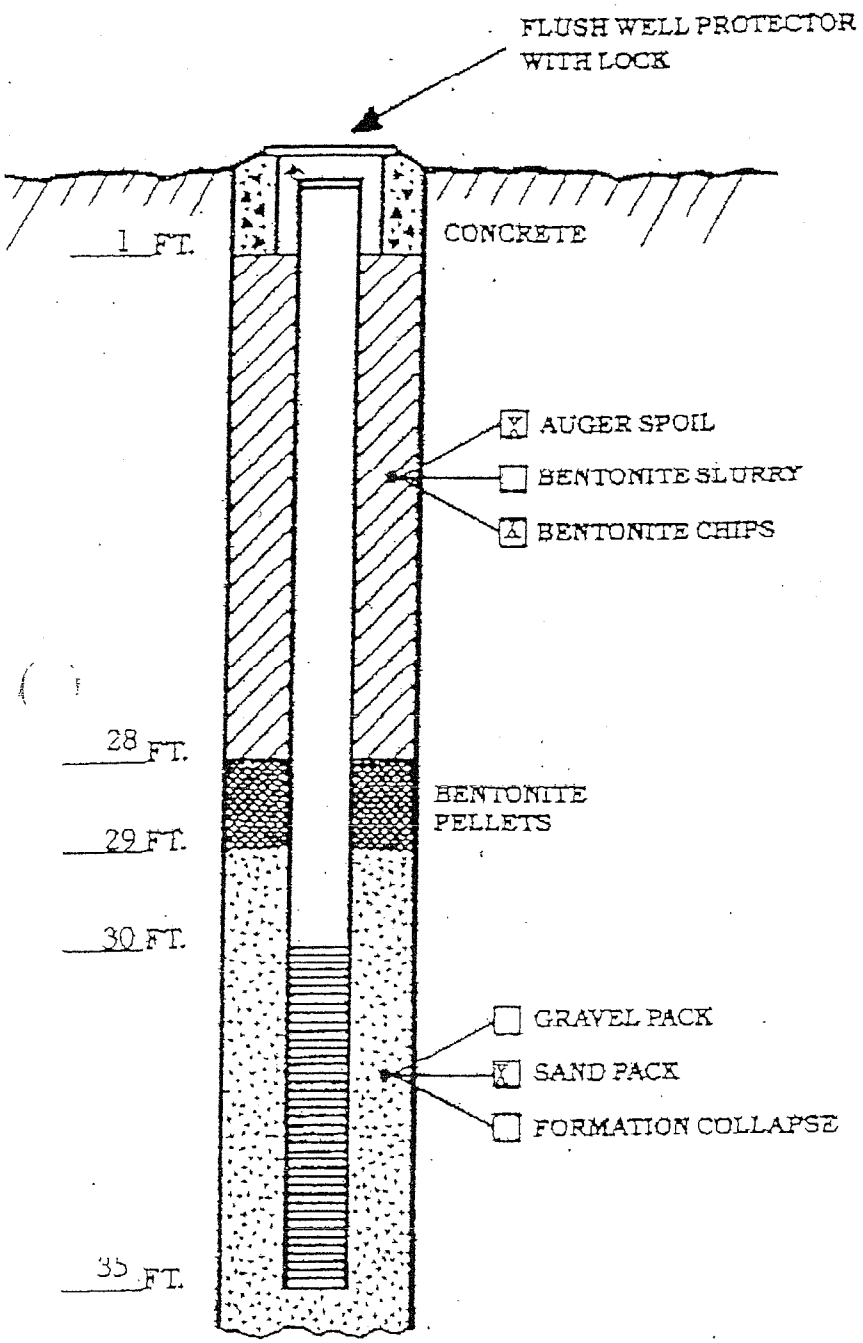
WATER LEVEL 79.02 FT.

DATE MEASURED 4 / 1 / 91

REMARKS ____

WORLD WATER CONSULTANTS

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W.Liberty St.,Wauconda,IL

WELL NO. MW -12D

INSTALLATION DATE 3 / 22 / 91

DRILLING CONTRACTOR Rock & Soil

DRILLING METHOD Hollow Stem

TYPE OF RISER PIPE Stainless Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 81.36

ELEVATION GROUND SURFACE _____

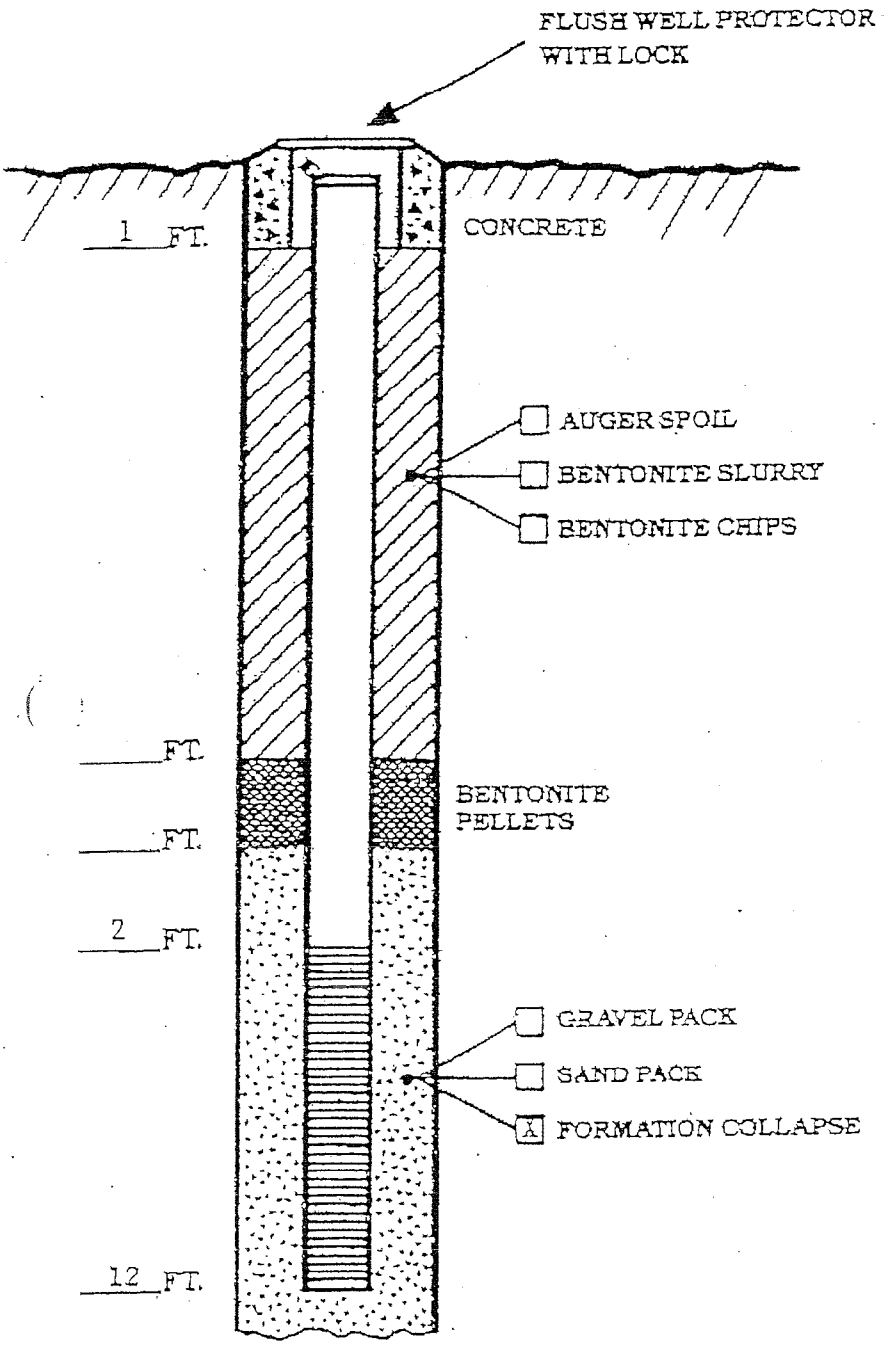
WATER LEVEL 79.15 FT.

DATE MEASURED 4 / 1 / 91

REMARKS _____

WORLD WATER CONSULTANTS

WELL CONSTRUCTION LOG



PROJECT Clark - Wauconda

LOCATION 399 W. Liberty St., Wauconda, I

WELL NO. MW - 13

INSTALLATION DATE 3 / 23 / 91

DRILLING CONTRACTOR WWC

DRILLING METHOD Hand Auger

TYPE OF RISER PIPE PVC

TYPE OF SCREEN PVC

SCREEN SLOT SIZE .010

WELL DIAMETER 2 - inch

ELEVATION OF WELL 85.91

ELEVATION GROUND SURFACE

WATER LEVEL 79.95 FT.

DATE MEASURED 4 / 1 / 91

REMARKS Installed by hand auger
No seal or gravel pack
installed

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: SB14	DATE: 6/13/91
CLIENT: CLARK OIL LOCATION: WAUCANDA, IL	JOB # 112
RIG: MOBILE	AUGER SIZE: 9" O.D.
DRILLING COMPANY: T & T	

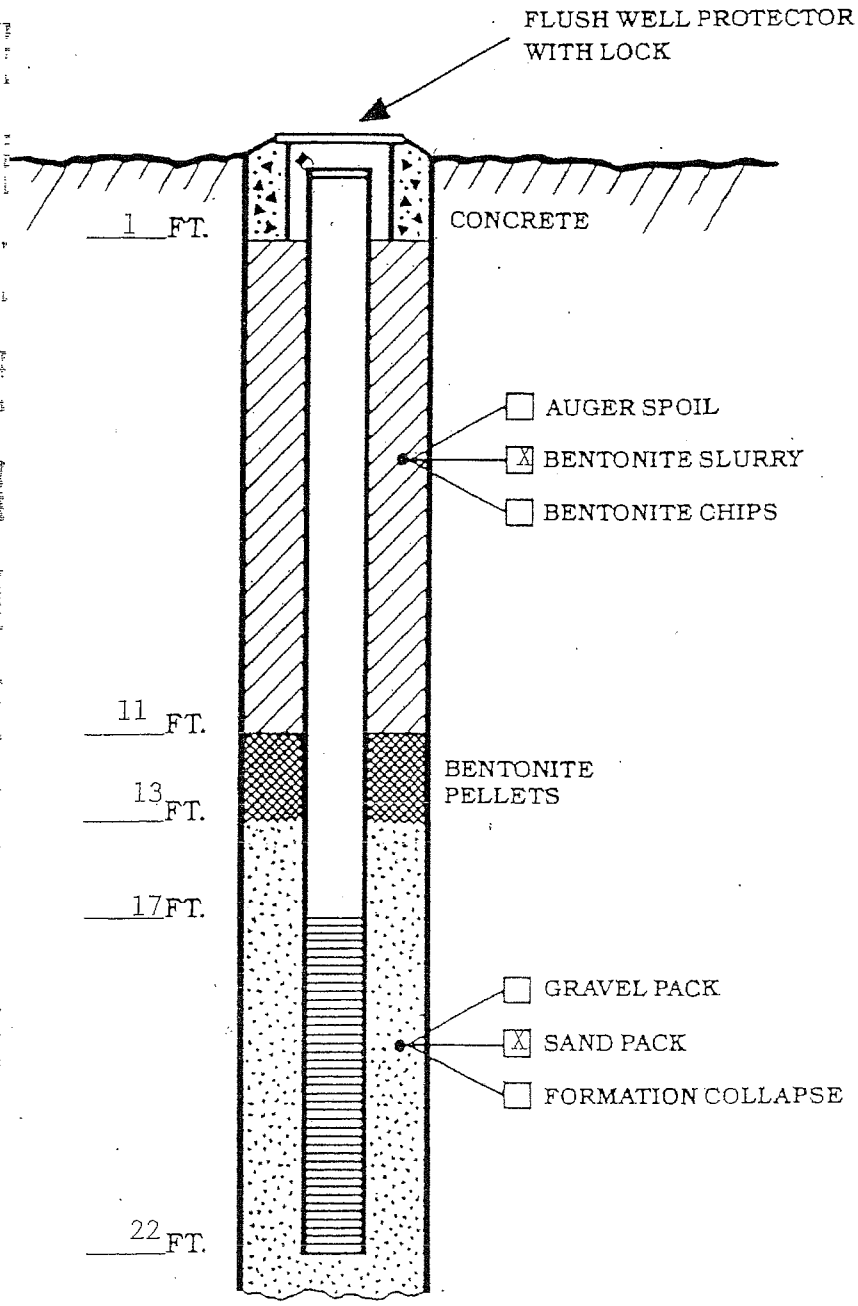
INTERVAL (ft.)	MATERIAL CLASSIFICATION
0-3	TOPSOIL: Dark brown, medium, well sorted
3-5	CLAY: Light brown, fine, well sorted
5-12	SILT: Black, very fine, highly organic with fossil gastropods, moist
12-16	SILT: Black, very fine, highly organic, moist
16-20	CLAY: Gray, very fine, well sorted, moist to wet
20-22	SILTY SAND: Gray, very fine, very well sorted, wet

NOTES:

2" well installed at 22 ft.
5' screen

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE

WELL CONSTRUCTION LOG



PROJECT Clark Oil-Wauconda

LOCATION Wauconda, IL

WELL NO. SB/MW-14

INSTALLATION DATE 6 / 13 / 91

DRILLING CONTRACTOR T & T

DRILLING METHOD Continuous Auger

TYPE OF RISER PIPE Galv. Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE #10

WELL DIAMETER 2"

ELEVATION OF WELL _____

ELEVATION GROUND SURFACE _____

WATER LEVEL _____ FT.

DATE MEASURED ___/___/___

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

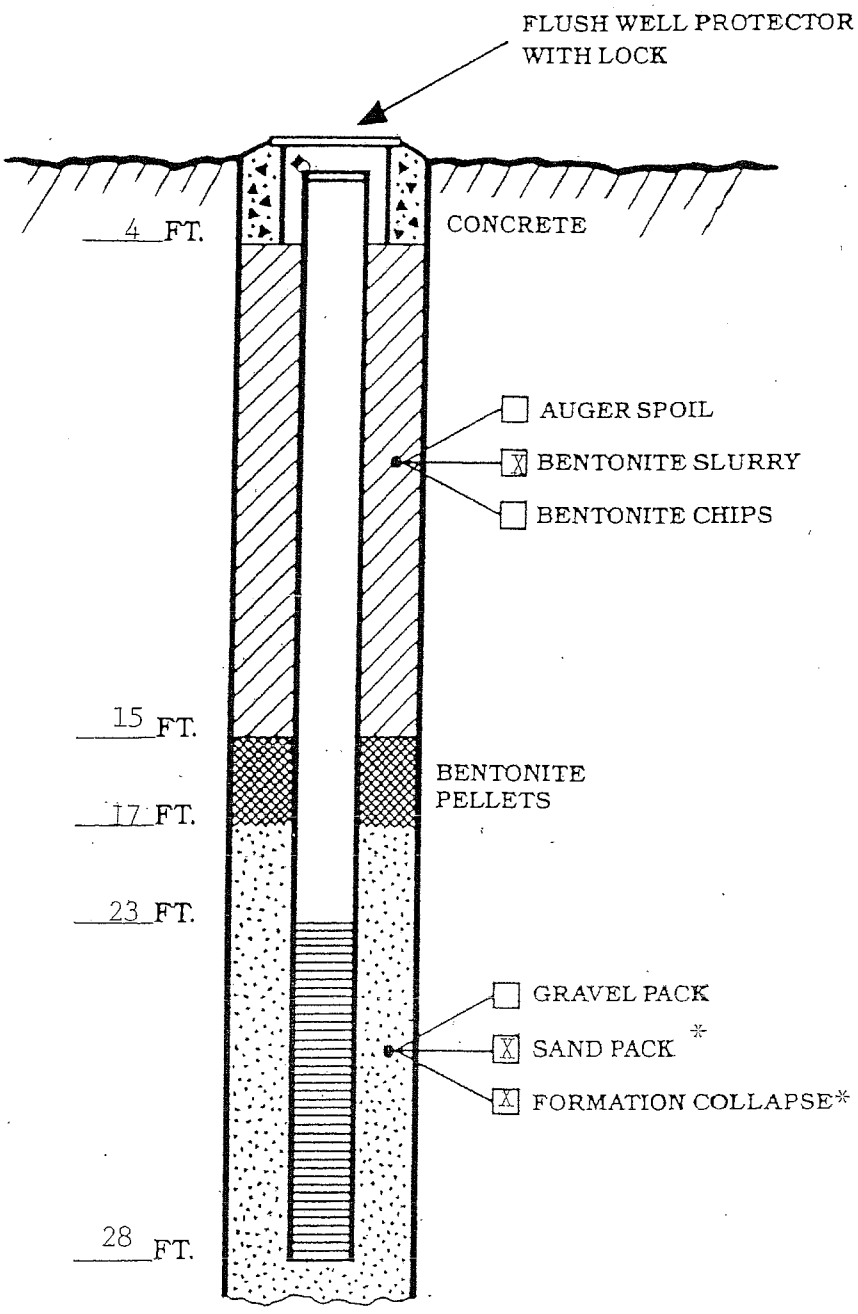
SOIL BORING NUMBER: SB/MW-15	DATE: 6/14/91
CLIENT: CLARK OIL LOCATION: WAUCANDA, IL	JOB # 112
RIG: MOBILE	AUGER SIZE: 9" O.D.
DRILLING COMPANY: T & T	

INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0-2.5	SILT:	Black, dry, no odor
2.5-4	CLAY:	Silty, brown, dry, no odor
4-4.5	CLAY:	Silty, gray, moist, slight odor (not petroleum), swampy
4.5-5	CLAY:	Silty, dry, no odor
5-11	CLAY:	Some sand and gravel, brownish gray, moist, no odor
11-21	CLAY:	Some sand, gray, moist, no odor
21-28	SAND:	Silty, gray, saturated, no odor

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
N/A		N/A

WELL CONSTRUCTION LOG



PROJECT Clark Oil-Wauconda

LOCATION Wauconda-Osage Park

WELL NO. SB/MW-15

INSTALLATION DATE 6 / 14 / 91

DRILLING CONTRACTOR T & T

DRILLING METHOD Hollow Stem Auger

TYPE OF RISER PIPE Galvanized Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE 0.010

WELL DIAMETER 2" I.D.

ELEVATION OF WELL _____

ELEVATION GROUND SURFACE _____

WATER LEVEL _____ FT.

DATE MEASURED ____/____/____

REMARKS *Some formation collapse and some sand pack

Top 3' is sand pack

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

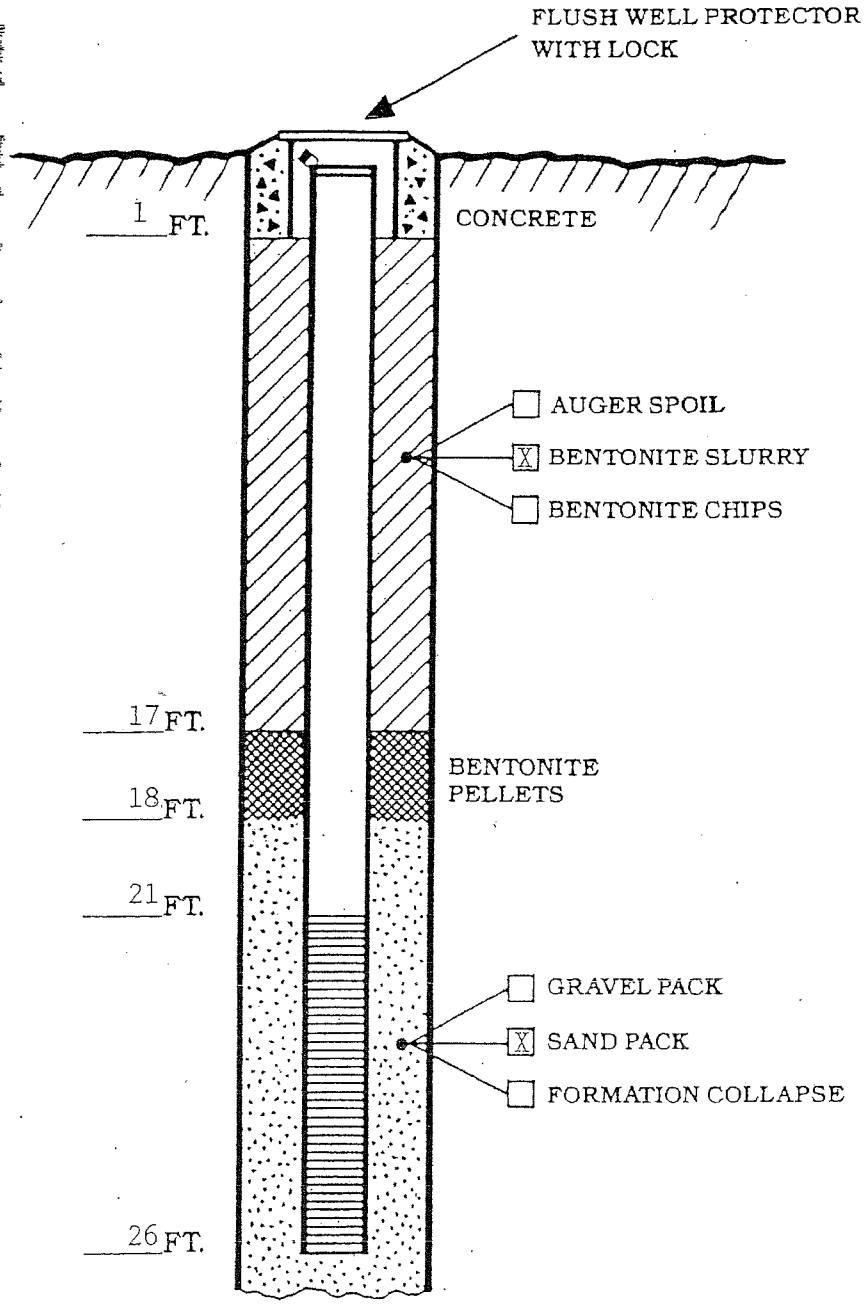
SOIL BORING NUMBER: SB/MW-16	DATE: 6/14/91
CLIENT: CLARK OIL LOCATION: WAUCANDA, IL	JOB # 112
RIG: MOBILE	AUGER SIZE: 9" O.D.
DRILLING COMPANY: T & T	

INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0-2	SILT:	Black, dry, no odor
2-3	CLAY:	Silty, brown, dry, no odor
3-4	CLAY:	Silty, black, dry, no odor
4-5	CLAY:	Brownish gray, moist, no odor
5-19	CLAY:	Some sand, gray, moist, no odor
19-26	SAND:	Very silty, gray, saturated, no odor

NOTES:

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE
N/A		N/A

WELL CONSTRUCTION LOG



PROJECT Clark Oil-Wauconda

LOCATION Wauconda-Osage Park

WELL NO. SB/MW-16

INSTALLATION DATE 6 / 14 / 91

DRILLING CONTRACTOR T & T

DRILLING METHOD Hollow Stem Auger

TYPE OF RISER PIPE Galvanized Steel

TYPE OF SCREEN Stainless Steel

SCREEN SLOT SIZE 0.010

WELL DIAMETER 2" I.D.

ELEVATION OF WELL _____

ELEVATION GROUND SURFACE _____

WATER LEVEL _____ FT.

DATE MEASURED ____/____/____

REMARKS _____

WORLD WATER CONSULTANTS

WORLD WATER CONSULTANTS, INC.

SOIL BORING LOGS

SOIL BORING NUMBER: Recovery Sump **DATE:** 6/5/92

CLIENT: Clark Oil & Refining Corporation **JOB #** 0112
LOCATION: 399 W. Liberty St., Wauconda, Illinois

RIG: Mobile **AUGER SIZE:**

DRILLING COMPANY: Rock & Soil

INTERVAL (ft.)	MATERIAL CLASSIFICATION	
0-2	TOPSOIL:	Black, fine, highly organic
2-3	CLAY:	Brown, silty, moist
3-8	SAND:	Brown, medium, moderate sorting, saturated
8-26	SAND:	Light gray/brown, fine, well sorted
26-30	SILTY:	Gray, clayed, saturated
30-35	CLAY:	Gray, very silty, wet

NOTES:

6" recovery sump set @ 35'

SAMPLE NUMBER	INTERVAL (ft.)	PID VALUE

TEST BORING RECORD

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

CLIENT ➤ CLARK REFINING	LOCATION ➤ STATION #646
BORING NO. ➤ B-1	399 WEST LIBERTY
DATE ➤ 6-14-94	WAUCONDA, ILLINOIS
LOGGED BY ➤ R. PAGE	DRILLED BY ➤ ROCK & SOIL
DRILLING METHOD ➤ HSA & HAND AUGER	SAMPLING METHOD ➤ SPLIT SPOON & HAND AUGER

COMMENTS:

HOLE DIA. 6 IN.

LAW ENGINEERING, INC. PROJECT NUMBER : 279-3078-004

TOTAL DEPTH 13 FT.

SAMPLE NO.	HNU READING (MDU'S)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
1***	0	DA	0-2			Black, clayey SILT (ML-CL) with fine sand, trace fine gravel	
2	0	DA	3		14	Stiff, brown, clayey SILT (ML-CL) with fine sand	
			4		7 8		
3*	1	DA	5		6 5		
4	1	M	6		7 3	Stiff, brown, silty CLAY (CL), little fine sand, trace fine gravel	
			7		7		
5	2	W/S	8		4 4		
			9		6 8	Stiff, gray, silty CLAY (CL), little fine sand, trace medium to coarse sand, trace fine to coarse gravel	
6	1	S	10		3 4 5		
			11		6		
7	1	S	12		6 8 8	Firm, gray, fine SAND (SM), little silt, little clay, trace medium sand	
			13		7		
			14			Boring terminated at 13 ft.	
			15			* - sample selected for laboratory onalysis	
			16			**MDU'S - meter deflection units	
			17			*** - sample taken with Hand Auger	
			18				
			19				
			20				
			21				
			22				
			23				

TEST BORING RECORD

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

CLIENT ➤ CLARK REFINING	LOCATION ➤ STATION #646
BORING NO. ➤ B-2	399 WEST LIBERTY
DATE ➤ 6-14-94	WAUCONDA, ILLINOIS
LOGGED BY ➤ R. PAGE	DRILLED BY ➤ ROCK & SOIL
DRILLING METHOD ➤ HSA & HAND AUGER	SAMPLING METHOD ➤ SPLIT SPOON & HAND AUGER

COMMENTS:

HOLE DIA. 6 IN.

LAW ENGINEERING, INC. PROJECT NUMBER : 279-3078-004

TOTAL DEPTH 11 FT.

SAMPLE NO.	HNU READING (MDU'S)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
			0				
			1			Black, clayey SILT (ML-CL) with fine sand, trace fine gravel	
1***	10	DA	2		1		3 inch seam of brown silty clay
			3		10		
2	9	DA	4		6		
					7	Firm, tan, fine SAND (SM), little silt, trace clay, trace medium sand	
			5		9		
					10		
3	6	M/S	6		7		
					5		
			7		4	▽	
					5		
4	5	S	8		5		
					8		
			9		7	Firm, gray, silty, fine SAND (SM), little medium sand, little clay	
					2		
5	1	S	10		5		
					15		
					23		
			11			Boring terminated at 11 ft.	
			12				
			13				
			14				
			15				
			16				
			17				
			18				
			19				
			20				
			21				
			22				
			23				

* - sample selected for laboratory analysis
**MDU'S - meter deflection units
*** - sample taken with Hand Auger

TEST BORING RECORD

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

CLIENT ► CLARK REFINING	LOCATION ► STATION #646
BORING NO. ► B-3	399 WEST LIBERTY
DATE ► 6-14-94	WAUCONDA, ILLINOIS
LOGGED BY ► R. PAGE	DRILLED BY ► ROCK & SOIL
DRILLING METHOD ► HSA & HAND AUGER	SAMPLING METHOD ► SPLIT SPOON & HAND AUGER

COMMENTS:

HOLE DIA. 6 IN.

LAW ENGINEERING, INC. PROJECT NUMBER : 279-3078-004

TOTAL DEPTH 11 FT.

SAMPLE NO.	HNU READING (MDU'S)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
1***	11	DA	0-2			Orange to brown, silty, clayey, fine SAND (SM), trace fine gravel	
			2-3			Brown, silty CLAY (CL) with fine to coarse gravel, little fine sand	
2	13	DA	3-4		6		
					3		
					5		
			4-5		30		
3*	60	DA/M	5-7		3, 6, 6, 7 ▽	Loose to firm, brown fine SAND (SM), little silt, trace medium sand	
4	150	S	7-9		7, 7, 8, 8	Firm, gray, fine to medium SAND (SM), little silt	
5	70	S	9-11		7, 9, 10, 6	Firm, gray, fine SAND (SM) with silt trace medium sand	
			11			Boring terminated at 11 ft.	

* - sample selected for laboratory analysis
**MDU'S - meter deflection units
*** - sample taken with Hand Auger

TEST BORING RECORD

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

CLIENT ► CLARK REFINING	LOCATION ► STATION #646
BORING NO. ► B-4	399 WEST LIBERTY
DATE ► 6-14-94	WAUCONDA, ILLINOIS
LOGGED BY ► R. PAGE	DRILLED BY ► ROCK & SOIL
DRILLING METHOD ► HSA & HAND AUGER	SAMPLING METHOD ► SPLIT SPOON & HAND AUGER

COMMENTS:

HOLE DIA. 6 IN.

LAW ENGINEERING, INC. PROJECT NUMBER : 279-3078-004

TOTAL DEPTH 11 FT.

SAMPLE NO.	HNU READING (MDU'S)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
			0				
			1				
1***	17		2			Brown, clayey SILT (ML-CL) with fine sand, trace fine gravel	
			3		19	Very stiff, brown, silty CLAY (CL), little fine sand, trace fine gravel	
2	20		4		15		
			5		12		
					12		
					7		
3*	50		6		9	Firm, brown SAND (SM) with silt, trace medium sand	
					9		
			7		10		
					6		
4	280		8		6		
					7		
			9		9		
					7	Firm, gray, fine SAND (SM), little silt, little medium sand	
5	140		10		7		
					9		
			11		6		
			12			Boring terminated at 11 ft.	
			13			* - sample selected for laboratory analysis	
						**MDU'S - meter deflection units	
			14			*** - sample taken with Hand Auger	
			15				
			16				
			17				
			18				
			19				
			20				
			21				
			22				
			23				

TEST BORING RECORD

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

CLIENT ► CLARK REFINING	LOCATION ► STATION #646
BORING NO. ► B-5	399 WEST LIBERTY
DATE ► 6-16-94	WAUCONDA, ILLINOIS
LOGGED BY ► R. PAGE	DRILLED BY ► ROCK & SOIL
DRILLING METHOD ► HSA	SAMPLING METHOD ► SPLIT SPOON

COMMENTS:

LAW ENGINEERING, INC. PROJECT NUMBER : 279-3078-004

HOLE DIA. 6 IN.

TOTAL DEPTH 10 FT.

SAMPLE NO.	HNU READING (MDU'S)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
			0		15		
A	7	D	1		16	Hard, black to brown, silty sandy CLAY (CL), little fine to coarse gravel	
					22		
			2		26		
					7		
B*	13	DA	3		9		
					7		
			4		10		
					9		
C	13	M/W	5		8	Firm, brown, fine to medium SAND (SM), trace fine to coarse gravel	
					7		
			6		9		
					6		
D	17	W/S	7		6		
					8		
			8		12	▽	
					7		
E	9	S	9		7	Firm, gray, fine to medium SAND (SM)	
					7		
			10		12		
						Boring terminated at 10 ft.	
			11				
						* - sample selected for laboratory analysis	
			12			**MDU'S - meter deflection units	
			13				
			14				
			15				
			16				
			17				
			18				
			19				
			20				
			21				
			22				
			23				

TEST BORING RECORD

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

CLIENT ► CLARK REFINING	LOCATION ► STATION #646
BORING NO. ► B-6	399 WEST LIBERTY
DATE ► 6-16-94	WAUCONDA, ILLINOIS
LOGGED BY ► R. PAGE	DRILLED BY ► ROCK & SOIL
DRILLING METHOD ► HSA	SAMPLING METHOD ► SPLIT SPOON

COMMENTS:

HOLE DIA. 6 IN.

LAW ENGINEERING, INC. PROJECT NUMBER : 279-3078-004

TOTAL DEPTH 10 FT.

SAMPLE NO.	HNU READING (MDU'S)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
			0				
A	8	D/DA	1		2 5 8 16	Stiff, brown to black, silty CLAY (CL), trace fine gravel	
			2		6		
B*	500	DA	3		11 11	Very stiff, brown to gray, silty CLAY (CL), trace fine to coarse gravel, trace fine sand	
C	200	DA	4		11 18		
			5		13 17		
			6		19		
D	100	M/S			8 50	▽	cobble encountered
			7				
			8		16		
E	200	S	9		9 9	Very stiff, gray, clayey silt (ML), trace fine sand	
			10			Boring terminated at 10 ft.	
			11			* - sample selected for laboratory analysis	
			12			**MDU'S - meter deflection units	
			13				
			14				
			15				
			16				
			17				
			18				
			19				
			20				
			21				
			22				
			23				

TEST BORING RECORD

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES

CLIENT ► CLARK REFINING	LOCATION ► STATION #646
BORING NO. ► B–7	399 WEST LIBERTY
DATE ► 6–16–94	WAUCONDA, ILLINOIS
LOGGED BY ► R. PAGE	DRILLED BY ► ROCK & SOIL
DRILLING METHOD ► HSA	SAMPLING METHOD ► SPLIT SPOON

COMMENTS:

LAW ENGINEERING, INC. PROJECT NUMBER : 279–3078–004

HOLE DIA. 6 IN.

TOTAL DEPTH 9 FT.

SAMPLE NO.	HNU READING (MDU'S)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
			0			Concrete	
			1			Limestone gravel	
A	60	D	2		6 4 7		
			3		9 6		
B	40	M	4		8 13		
			5		14	Stiff to very stiff, brown, mottled gray, silty CLAY (CL), trace fine to coarse gravel, trace fine sand	
C*	70	M	6		5 5		
			7		8 9 ▽		
D	80	S	8		6 6 7		
			9		12	Stiff, gray, clayey SILT (ML) with fine sand	
			10			Boring terminated at 9 ft.	
			11			* – sample selected for laboratory analysis **MDU'S – meter deflection units	
			12				
			13				
			14				
			15				
			16				
			17				
			18				
			19				
			20				
			21				
			22				
			23				

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
500 PARK BOULEVARD, SUITE 850
ITASCA, IL 60143
(708)773-1070 FAX (708)773-1242

TEST BORING RECORD

CLIENT ➤ CLARK OIL #646	LOCATION ➤ 399 W. LIBERTY STREET
BORING NO. ➤ SB-17	WAUCONDA, ILLINOIS
DATE ➤ 9-14-95	BETWEEN MW-15 & MW-14
LOGGED BY ➤ P. OWENS	DRILLED BY ➤ ROCK & SOIL
DRILLING METHOD ➤ HSA	SAMPLING METHOD ➤ SPLIT SPOON

COMMENTS:

HOLE DIA. 6.25 IN.

LAW PROJECT: 279-3078-004

TOTAL DEPTH 25.5 FT.

SAMPLE ID	PID READING (ppm)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
1	3	D	0-2		3, 13, 23, 23	Organic topsoil	
2	2	M	2-4		11, 10, 16, 16	Stiff, gray to brown, silty CLAY (CL); organics, trace fine gravel	
3	1	M	6-8		4, 4, 4	Organic PEAT (PT); fossilized gastropods	
4	1	M	9-10		2, 2, 1	Very soft to soft, brown, organic SILT (ML)	Easily plates
			10-11			Fossilized gastropods	
5	1	S	11-13		2, 1, 2	Very soft to gray, very fine SILT (ML); trace very fine sand	
6	1	S	14-15		2, 2, 3	Soft, gray silty CLAY (CL); trace fine gravel	Sticky & very plastic
7	1	M	16-18		4, 7, 9	Firm to stiff, gray silty CLAY (CL)	Harder less moisture
8	2	M	19-21		4, 7, 10	Firm to stiff, gray silty CLAY (CL); trace fine gravel	Higher silt content than above
9	1	S	22-23		5, 7, 16	Firm to stiff, gray, silty, very fine SAND (SM); poorly graded	
10	9	W	24-25		0, 0, 0	Very loose, brown, silty fine SAND (SM); poorly graded	
			26			Boring terminated at 25.5 ft.	

**ppm - parts per million
PID - Photoionization Detector using

TEST BORING RECORD

PAGE 1 OF 1

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
500 PARK BOULEVARD, SUITE 850
ITASCA, IL 60143
(708)773-1070 FAX (708)773-1242

CLIENT ➤ CLARK OIL #646	LOCATION ➤ 399 W. LIBERTY STREET
BORING NO. ➤ SB-18	WAUCONDA, ILLINOIS
DATE ➤ 9-14-95	CENTER OF RW-2 & RW-3
LOGGED BY ➤ K. ERICKSON	DRILLED BY ➤ ROCK & SOIL
DRILLING METHOD ➤ HSA	SAMPLING METHOD ➤ SPLIT SPOON

COMMENTS:

HOLE DIA. 6.25 IN.

LAW PROJECT: 279-3078-004

TOTAL DEPTH 25 FT.

SAMPLE ID	PID READING (ppm)**	MOISTURE CONTENT	DEPTH (FEET)	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY	REMARKS
			0				
1	11	D	1-2		8, 7, 9	Firm, black to brown, silty CLAY (CL), topsoil; organic, trace fine gravel	
			3				
2	4	D	3-5		6, 6, 6	Firm, brown to gray, medium plastic, silty CLAY (CL); some fine sand, well sorted	
			6				
3	180	S	6-7		6, 4, 4	Very loose, brown, very fine to fine, poorly sorted SAND (SP); some silt, trace clay	
			8				
4	200	S	9-10		5, 6, 9	Gray, coarsening downward	
			11				
5	40	W	12		8, 11, 16	Compact, gray, well sorted, very fine SAND (SP)	
			13				
6	50	S	14-15		9, 11, 17	Stiff, gray, SILT (ML); trace very fine sand	
			16				
7	7	W	17		10, 9, 8		
			18				No sand
8	1	W	19-20		5, 4, 7	Firm, gray, SILT (ML)	
			21				
9	4	W	22		7, 4, 5	Firm, gray, clayey SILT (ML)	Clay
			23				
10	0	S	24		7, 4, 5		
			25			Boring terminated at 25.0 ft.	
			26				

**ppm - parts per million
PID - Photoionization Detector using

SOIL BORING LOG

LUST Incident No.: 892744/093199	Boring No.: SB-19/MW-17	Page: 1 of 2
Site Name: Clark 646	Boring Location: Osage Park - South of Tennis Court (east side)	Date: Start 10/31/97
Address: 399 W. Liberty St., Wauconda, IL	in the grass	Finish 10/31/97

Sample Number	Sample Device	Lithology Symbol	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	BLOW COUNT	OVA/PID/FID/OVM	Remarks
A	Split Spoon		65%	0	Grass	M	6 8 10 20	0	
				2	Black organic topsoil				
B			95%			M	7 7 8 10	0	
				4					
C			90%			M	6 7 6 7	0	
				6					
D			50%		Gray, clayey SILT (ML); trace fine sand	W	3 2 1 3	0	
				8	Gray, silty CLAY (CL); little fine to coarse sand				
E			50%			W	2 3 3 1	0	
				10					
F*			85%			Da	2 3 5 8	0	Noted black organic silt *Sent to laboratory for analysis
				12	▼				
G			90%		- little fine gravel	W/S	3 6 8 9	0	
				14					
H			95%			M	2 4 7 11	0	
				16					
I			100%			M	5 10 12 19	0	Noted trace organics
				18					
J			100%			M	10 11 19 20	0	
				20					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
▼ Depth While Drilling appr. 12'
▽ Depth After Drilling Not Recorded

Auger Depth: 30 feet
Rotary Depth: 30 feet
Rig: Diedrich D-120
Geologist: James Lucci
Drilling Company & Drillers Name: Rock & Soil Drilling; Mike Swanson
Note: Boring backfilled unless otherwise noted.

Illinois Environmental Protection Agency

The Agency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty up t 000.00 for each day the failure continues, a fine up to $50,000.00 and imprisonment up to five years. This form has been approved by the Forms Management Center.

IL 532-2275
LPC 501 Dec-96

SOIL BORING LOG

LUST Incident No.: 892744/093199	Boring No.: SB-19/MW-17	Page: 2 of 2
e Name: Clark 646	Boring Location: Osage Park - South of Tennis Court (east side)	Date: Start 10/31/97
Site Address: 399 W. Liberty St., Wauconda, IL	in the grass	Finish 10/31/97

Sample Number	Sample Device	Lithology Symbol	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	BLOW COUNT	OVA/PID/FID/OVM	Remarks
K*	Split Spoon		100%	22	Gray silty CLAY (CL): little fine sand ▼	M	10 8 11 21	0	* Sent to laboratory for analysis
L			85%		Brown, organic SILT (ML):	W	12 14	0	
				24	Gray silty SAND, (SM); poorly sorted	S	17 19		
M			80%			S	9 10 11 12	0	
N			70%	26		S	28 21 19 20	0	
			75%	28		S	15 24 19 23	0	
				30	Boring Terminated At 30 feet below ground surface				
				32					
				34					
				36					
				38					
				40					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
▼ Depth While Drilling appr. 22'
▽ Depth After Drilling Not Recorded

Auger Depth: 30 feet Rig: Diedrich D-120
Rotary Depth: 30 feet Geologist: James Lucci
Drilling Company & Drillers Name: Rock & Soil Drilling; Mike Swanson
Note: Boring backfilled unless otherwise noted.

Illinois Environmental Protection Agency

gency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty up t
,000.00 for each day the failure continues, a fine up to $50,000.00 and imprisonment up to five years. This form has been approved by the Forms Management Center.

IL 532-2275
LPC 501 Dec-96

TYPE II MONITORING WELL INSTALLATION DIAGRAM - MANHOLE TYPE

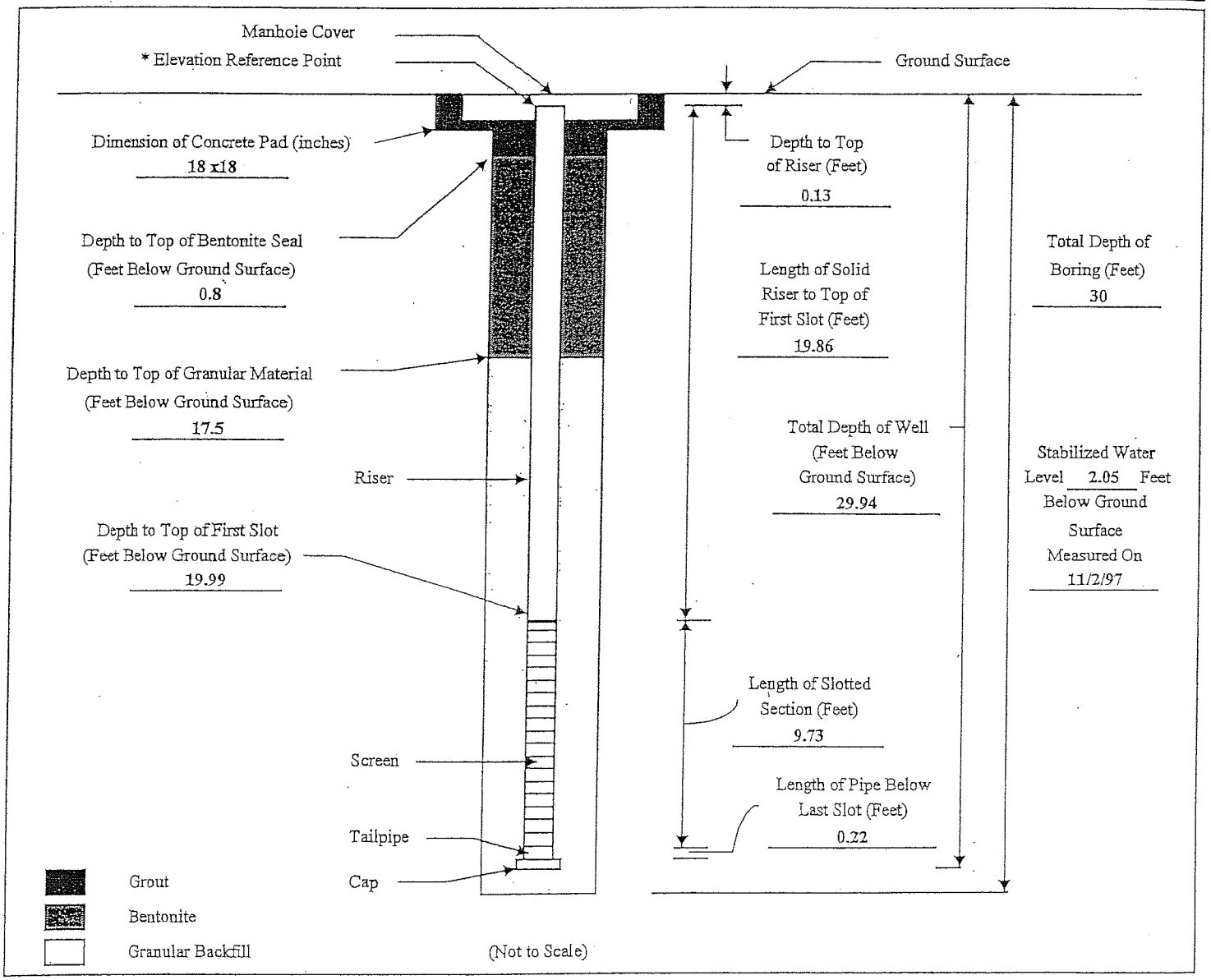
BJB Bradurne Briller & Johnson, LLC

WELL NUMBER	MW-17
JOB NUMBER	C01-7-0011
DATE INSTALLED	10/31/97
WELL LOCATION	Osage Park

GROUND SURFACE ELEVATION	101.04
TOP OF RISER ELEVATION (FT)*	100.91
ELEVATION REFERENCE	NGVD 100 SITE DATUM
DRILLING CONTRACTOR	Rock and Soil
DRILLING METHODS (Size and Type):	
0 to 30 ft.:	HSA DIA: 8.25 in.
to ft.:	DIA: in.
DRILLERS NAME:	Mike Swanson
LOGGED BY:	J. Lucci

WELL MATERIALS (size or amount, type, manufacturer):

Riser:	PVC	INSIDE DIA:	2 in.
Screen:	PVC	INSIDE DIA:	2 in.
Cement:	Portland		
Sand:	NSF Certified Standard #61 #5 Quartz (Silica Sand)		
Bentonite:	ABI Pellots and Chips		
SCREEN SLOT SIZE (in.):	0.01		
COVER:	Flush Mount/Steel		
CHECKED BY:			



GENERAL COMMENTS:

SOIL BORING LOG

LUST Incident No.: 892744/093199	Boring No.: SB-20/MW-18		
Site Name: Clark 646	Boring Location: Osage Park - South of Tennis Court (north side)	Page: 1 of 2	
Site Address: 399 W. Liberty St., Wauconda, IL	in the grass	Date: Start 10/31/97	Finish 10/31/97

Sample Number	Sample Device	Lithology Symbol	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	BLOW COUNT	OVA/PID/FID/(OVM)	Remarks
A	Split Spoon		40%	0	Grass	M	10 12 14 17	0	
				2	Black organic topsoil, color gradually changes to brown				
B			40%		dry, brown, clayey SILT(ML); little fine to coarse sand, trace fine gravel	Da	11 22 24 30	0	
				4					
C			60%		damp, gray, silty CLAY (CL); little organics, trace fine to coarse sand, trace gravel	Da	10 7 9 19	0	
				6					
D			50%		damp, black, organic PEAT	Da	6 9 8 11	0	
				8					
E			45%			Da	5 5 6 7	0	Root Noted
				10					
F			75%			Da	2 2 6 3	0	Fossilized gastropods
				12	slight change to clayey PEAT				
G*			55%			W	2 2 2 2	0	*Sent to laboratory for analysis
				14	- wet				
H			100%		saturated, gray, silty CLAY(CL); trace fine to medium sand, trace organics (roots)	S	2 2 2 2	0	
				16					
I			100%			S	1 1 2 3	0	Noted trace organics
				18					
J			80%			S	3 2 3 4	0	
				20	- saturated, gray, sandy, CLAY(CL)				

ote: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
▼ Depth While Drilling appr. 15'
▽ Depth After Drilling Not Recorded

Auger Depth: 34 feet Rig: Diedrich D-120
Rotary Depth: N/A Geologist: Seth Weis
Drilling Company & Drillers Name: Rock & Soil Drilling; Mike Swanson
Note: Boring backfilled unless otherwise noted.

Illinois Environmental Protection Agency

e Agency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty up t
5,000.00 for each day the failure continues, a fine up to $50,000.00 and imprisonment up to five years. This form has been approved by the Forms Management Center.

5
C 501 Dec-96

SOIL BORING LOG

LUST Incident No.:	Boring No.:	Page: 2 of 2
892744/093199	SB-20/MW-18	
Site Name: Clark 646	Boring Location: Osage Park - South of Tennis Court (north side)	Date: Start 10/31/97
Site Address: 399 W. Liberty St., Wauconda, IL	in the grass	Finish 10/31/97

Sample Number	Sample Device	Lithology Symbol	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	BLOW COUNT	OVA/PID/FID/QVM	Remarks
K*	Split Spoon		100%	22	damp, gray, silty CLAY (CL); little fine sand, trace gravel; trace organics	Da	5 5 6 7	0	*Sent to laboratory for analysis
L			90%	24			3 5 10 14	0	
M			100%	26			10 16 17 24	0	
N			100%	28			13 16 23 22	0	
O			80%	30			21 20 38 34	0	
P			100%	32			19 21 30 30	0	
Q			100%	34			NR	NA	
					Boring Terminated @ 34'				
					NR - No Recovery NA - Not Available				

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
Depth While Drilling appr. 15'
Depth After Drilling Not Recorded

Auger Depth: 34 feet
Rotary Depth: N/A
Rig: Diedrich D-120
Geologist: Seth Weis
Drilling Company & Drillers Name: Rock & Soil Drilling; Mike Swanson
Note: Boring backfilled unless otherwise noted.

Illinois Environmental Protection Agency

The Agency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 for each day the failure continues, a fine up to $50,000.00 and imprisonment up to five years. This form has been approved by the Forms Management Center.

IL 532-2275
LPC 501 Dec-96

TYPE II MONITORING WELL INSTALLATION DIAGRAM - MANHOLE TYPE

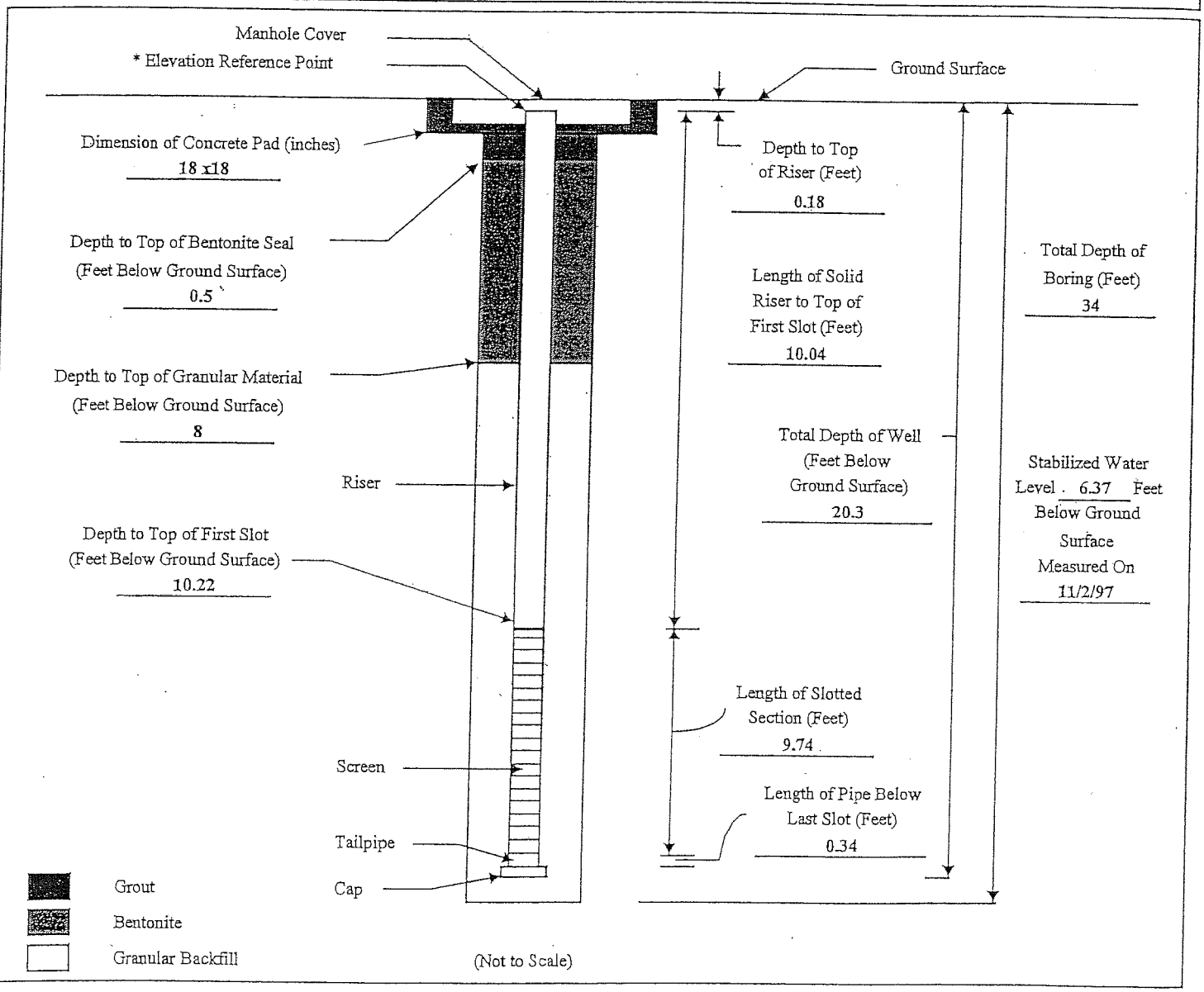
BJB Bradurne Briller & Johnson, LLC

WELL NUMBER	MW-18
JOB NUMBER	C01-7-0011
DATE INSTALLED	10/31/97
WELL LOCATION	Osage Park

GROUND SURFACE ELEVATION	99.37
TOP OF RISER ELEVATION (FT)*	99.19
ELEVATION REFERENCE	NGVD 100 SITE DATUM
DRILLING CONTRACTOR	Rock and Soil
DRILLING METHODS (Size and Type):	
0 to 34 ft.:	HSA DIA: 8.25 in.
to ft.:	DIA: in.
DRILLERS NAME:	Mike Swanson
LOGGED BY:	Seth Weis

WELL MATERIALS (size or amount, type, manufacturer):

Riser:	PVC	INSIDE DIA:	2 in.
Screen:	PVC	INSIDE DIA:	2 in.
Cement:	Portland		
Sand:	NSF Certified Standard #61 #5 Quartz (Silica Sand)		
Bentonite:	ABI Pellets and Chips		
SCREEN SLOT SIZE (in.):	0.01		
COVER:	Flush Mount/Steel		
CHECKED BY:			



GENERAL COMMENTS: The boring was backfilled with bentonite pellets from 34 feet to 22 feet below the ground surface.

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Field Boring Log

Boring No. CB-14 Monitor Well No. NA

Project No. C01-7-0011 County Lake

Surface Elevation* NR Completion Depth** 12

Project Nome Clark #646

Auger Depth NA Rotary Depth NA

Fed. ID. No. Not Applicable (NA)

Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Quodrongle Wauconda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 88 "

Boring Location Approximately 40 feet SE of Storage Shed

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike, Paramount

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLES: SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Loose, brown clayey SILT (ML), damp		1	A	G			7.4	
			2			48			
	Stiff, brown and gray mottled silty CLAY (CL), damp		3	B	G			6.6	
			4						
	Loose brown fine SAND (SW), damp		5	C	G			6.3	
			6			48			
			7	D	G			6.2	
		▽	8						
	Loose, brown fine SAND (SW), wet		9	E	G			514	Sample E Submitted for Laboratory Analysis
	Loose, gray fine SAND (SW), wet		10			48			
			11	F	G			10.7	
	Boring Terminated at 12 feet BGS		12						
			13						
			14						
			15						
			16						
			17						
			18						
			19						
			20						

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Field Boring Log

Boring No. CB-15 Monitor Well No. NA

Project No. C01-7-0011 County Lake

Surface Elevation* NR Completion Depth** 12

Project Name Clark #646

Auger Depth NA Rotary Depth NA

Fed. ID. No. Not Applicable (NA)

Date: Start 7-26-00 Finish 7-26-00

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 70 feet SE of Storage Shed

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike, Paramount

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Soft, brown clayey SILT (ML), damp		1	A	G				6.8	
			2			48				
	Stiff, brown and gray mottled silty CLAY (CL), damp		3	B	G				5.3	
	Loose brown fine SAND (SW), damp		4							
			5	C	G				4.1	
			6			48				
			7	D	G				4.2	
	Loose, brown fine SAND (SW), saturated	▽	8							
			9	E	G				18	Sample E Submitted for Laboratory Analysis
	Loose, gray fine SAND (SW), saturated		10			48				
			11	F	G				6.1	
	Boring Terminated at 12 feet BGS		12							
			13							
			14							
			15							
			16							
			17							
			18							
			19							
			20							

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Field Boring Log

Boring No. CB-16 Monitor Well No. NA

Project No. C01-7-0011 County Lake

Surface Elevation* NR Completion Depth** 28

Project Name Clark #646

Auger Depth NA Rotary Depth NA

Fed. ID. No. Not Applicable (NA)

Date: Start 7-26-00 Finish 7-26-00

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 24 feet South of Basketball Court

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Stiff, brown silty CLAY (CL), trace sand and gravel, damp		1	A	G				0.4	
			2			48				
	Stiff, brown silty CLAY (CL) with gravel, trace sand, damp		3	B	G				1.1	
	Stiff, brown silty CLAY (CL), trace sand, damp		4							
			5	C	G				2.1	
			6			40				
	Soft, black silty CLAY (CL), damp		7	D	G				2.7	Sample submitted to laborotory
			8							
			9	E	G				2.6	
			10			16				
			11	-	-				-	
	Very soft, brown PEAT (PT), moist		12							
	Very soft, brown and gray silty CLAY (CL), trace organics, moist		13	G	G				2.2	
			14			14				
			15	-	-				-	
			16							
		▽	17	I	G				1.4	
	Dense, gray fine to medium SAND (SW), wet		18			36				
	Medium stiff, gray silty CLAY (CL), damp		19	J	G				0.0	
			20							

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Field Boring Log

Boring No. CB-16 Monitor Well No. NA

Project No. C01-7-0011 County Lake

Surface Elevation* NR Completion Depth** 28

Project Name Clark #646

Auger Depth NA Rotary Depth NA

Fed. ID. No. Not Applicable (NA)

Date: Start 7-26-00 Finish 7-26-00

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 24 feet South of Basketball Court

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLES: SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Medium stiff, gray silty CLAY (CL), damp		21	K	G				0.0	
			22			48				
			23	L	G				0.6	
			24							
			25	M	G				0.0	
			26			48				
			27	N	G				0.8	
	Boring terminated at 28 feet BGS		28							
			29							
			30							
			31							
			32							
			33							
			34							
			35							
			36							
			37							
			38							
			39							
			40							

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Field Boring Log

Boring No. CB-17 Monitor Well No. NA

Project No. C01-7-0011 County Lake

Surface Elevation* NR Completion Depth** 28

Project Name Clark #646

Auger Depth NA Rotary Depth NA

Fed. ID. No. Not Applicable (NA)

Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 28 feet West of MW-16

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Loose, brown clayey SILT (ML), trace sand and gravel, damp		1	A	G				1.0	
			2			48				
			3	B	G				3.0	Sample submitted to laboratory
			4							
			5	C	G				1.2	
	Stiff, brown silty CLAY (CL), trace sand and gravel, damp		6			36				
		▽	7	D	G				1.9	
	Soft, brown silty CLAY (CL), saturated		8							
			9	E	G				1.1	
	Stiff, gray silty CLAY (CL), damp		10			36				
			11	F	G				0.2	
			12							
			13	G	G				0.8	
			14			42				
	Stiff, gray silty CLAY (CL), trace gravel, domp		15	H	G				1.2	
			16							
			17	I	G				0.0	
			18			40				
			19	J	G				0.5	
			20							

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Field Boring Log

Boring No. CB-17 Monitor Well No. NA

Surface Elevation* NR Completion Depth** 28

Auger Depth NA Rotary Depth NA

Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Project No. C01-7-0011 County Lake

Project Name Clark #646

Fed. ID. No. Not Applicable (NA)

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 28 feet West of MW-16

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Stiff, gray silty CLAY (CL), trace gravel, damp		21	K	G				0.0	
			22			42				
			23	L	G				0.0	
			24							
			25	M	G				0.8	
			26			44				
			27	N	G				0.0	
	Boring terminated at 28 feet BGS		28							
			29							
			30							
			31							
			32							
			33							
			34							
			35							
			36							
			37							
			38							
			39							
			40							

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Field Boring Log

Boring No. CB-18 Monitor Well No. NA

Surface Elevation* NR Completion Depth** 28

Auger Depth NA Rotary Depth NA

Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Project No. C01-7-0011 County Lake

Project Name Clark #646

Fed. ID. No. Not Applicable (NA)

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 64 feet Southwest of MW-16

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLES: SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Loose, brown clayey SILT (ML), some fine to coarse sand and gravel, dry		1	A	G				1.1	
			2			48				
			3	B	G				1.8	Asphalt noted
			4							
			5	C	G				11.2	
	Soft, brown PEAT (PT), moist		6			48				
			7	D	G				3.6	Sample submitted to laborotory
		▽	8							
	Loose, gray fine to medium SAND (SW), saturated		9	E	G				1.9	
	Stiff, gray silty CLAY (CL), damp		10			36				
			11	F	G				2.3	
			12							
			13	G	G				0.0	
			14			30				
			15	H	G				0.0	
			16							
			17	I	G				0.0	
			18			40				
			19	J	G				0.0	
			20							

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Field Boring Log

Boring No. CB-18 Monitor Well No. NA

Surface Elevation* NR Completion Depth** 28

Auger Depth NA Rotary Depth NA

Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Project No. C01-7-0011 County Lake

Project Name Clark #646

Fed. ID. No. Not Applicable (NA)

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 64 feet Southwest of MW-16

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLES: SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Stiff, gray silty CLAY (CL), damp		21	K	G				0.6	
			22			48				
			23	L	G				0.0	
			24							
			25	M	G				0.0	
			26			48				
			27	N	G				0.8	
	Boring terminated at 28 feet BGS		28							
			29							
			30							
			31							
			32							
			33							
			34							
			35							
			36							
			37							
			38							
			39							
			40							

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Field Boring Log

Boring No. CB-19 Monitor Well No. NA

Project No. C01-7-0011 County Lake

Surface Elevation* NR Completion Depth** 28

Project Name Clark #646 Auger Depth NA Rotary Depth NA

Fed. ID. No. Not Applicable (NA) Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Quadrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 24 feet Northwest of MW-15

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Soft, brown clayey SILT (ML), trace fine to coarse sand and gravel, damp		1	A	G				3.3	Sample submitted to laboratory
			2			48				
			3	B	G				2.6	
			4							
			5	C	G				2.0	
	Soft, brown PEAT (PT), moist		6			30				
			7	D	G				1.6	
			8							
		▽	9	E	G				1.5	
	Loose, gray fine to medium SAND (SW), saturated		10			36				
	Stiff, gray silty CLAY (CL), damp		11	F	G				0.0	
			12							
			13	G	G				0.0	
			14			48				
			15	H	G				0.6	
			16							
			17	I	G				0.0	
			18			48				
			19	J	G				0.0	
			20							

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Field Boring Log

Boring No. CB-19 Monitor Well No. NA

Surface Elevation* NR Completion Depth** 28

Auger Depth NA Rotary Depth NA

Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Project No. C01-7-0011 County Lake

Project Name Clark #646

Fed. ID. No. Not Applicable (NA)

Quodrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 24 feet Northwest of MW-15

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLES: SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Stiff, gray silty CLAY (CL), damp		21	K	G				0.6	
			22			48				
			23	L	G				1.0	
			24							
			25	M	G				0.0	
			26			48				
			27	N	G				0.0	
	Boring terminated at 28 feet BGS		28							
			29							
			30							
			31							
			32							
			33							
			34							
			35							
			36							
			37							
			38							
			39							
			40							

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Field Boring Log

Boring No. CB-20 Monitor Well No. NA

Surface Elevation* NR Completion Depth** 28

Auger Depth NA Rotary Depth NA

Date: Start 7-26-00 Finish 7-26-00

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grode Surface

Project No. C01-7-0011 County Lake

Project Nome Clark #646

Fed. ID. No. Not Applicable (NA)

Quadrangle Waucanda/Barrington Sec. 26 T. 44N R. 9E

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 28 feet West of MW-15

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Loose, brown clayey SILT (ML) with fine to coarse sand, trace gravel, damp		1	A	G				0.9	
			2			48				
			3	B	G				0.8	
			4							
			5	C	G				2.6	
	Soft, black PEAT (PT), moist	▽	6			36				
	Soft, black PEAT (PT), saturated		7	D	G				3.2	Sample submitted to loboratory
	Soft, brown PEAT (PT), some silt, moist		8							
			9	E	G				2.4	
			10			40				
			11	F	G				1.5	
			12							
	Very soft, gray silty CLAY (CL), damp		13	G	G				1.8	
			14			46				
			15	H	G				1.4	
	Stiff, gray silty CLAY (CL), damp		16							
			17	I	G				0.6	
			18			48				
			19	J	G				0.4	
			20							

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Field Boring Log

Boring No. CB-20 Monitor Well No. NA

Project No. C01-7-0011 County Lake

Surface Elevation* NR Completion Depth** 28

Project Nome Clark #646 Auger Depth NA Rotory Depth NA

Fed. ID. No. Not Applicable (NA) Date: Start 7-26-00 Finish 7-26-00

Quodrangle Wauconda/Barrington Sec. 26 T. 44N R. 9E

PID - Photoionization Detector * Feet NGVD
NR - Not Recorded ** Feet Below Grade Surface

Site Latitude 42 ° 15 ' 36 " Site Longitude 88 ° 07 ' 48 "

Boring Location Approximately 28 feet West of MW-15

Drilling Equipment Direct-Push Technology

Personnel
G - R. Garlitz, BB&J
D - Diane, Paramount
H - Mike

Elev.	DESCRIPTION OF MATERIALS	Water Depth	Depth in feet	SAMPLES: SAMPLE ID	SAMPLE TYPE	SAMPLE RECOVERY (IN)	PENETROMETER	N VALUES (BLOW COUNTS)	PID READINGS (PPM)	REMARKS
	Stiff, gray silty CLAY (CL), domp		21	K	G				0.0	
			22			48				
			23	L	G				0.0	
			24							
			25	M	G				0.2	
			26			48				
			27	N	G				0.0	
	Boring terminated at 28 feet BGS		28							
			29							
			30							
			31							
			32							
			33							
			34							
			35							
			36							
			37							
			38							
			39							
			40							

LUST Incident Number: #892744 & 903199	Boring Number: B-1	Page: 1 of 2
Site Name: Clark Store #646	Boring Location: See site map	Date: Start 8/17/2001
Address: 399 West Liberty Street, Wauconda, Illinois 60084		Finish 8/17/2001

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%----L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		100%	1-2	Topsoil/fill		1.25 1.75	0.0	
	SS		75%	3-4	Brown silty clay (CL)		3.25 3.75	0.0	
	SS		50%	5-6	Same		4.75 4.50	0.0	B-1a sample submitted for laboratory analysis of BTEX (4'-6' bgs.)
	SS		50%	7-8	Same		4.00 3.75	0.0	
	SS		0%	9-10	No recovery		NA NA	NA	
	SS		0%	11-12	No recovery		NA NA	NA	
	SS		100%	13-14	Peat		0.50 0.50	0.0	
	SS		100%	15-16	Same		<0.50 0.50	0.0	
	SS		100%	17-18	Same Light gray silty clay (CL), moist		<0.50 1.50	0.0	B-1b sample submitted for laboratory analysis of BTEX (16'-18' bgs.)
	SS		100%	19-20	Light gray silty clay (CL), moist		1.00 0.75	0.0	

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
Depth While Drilling 25.0-feet bgs.
Depth After Drilling NA

Auger Depth 30-feet bgs Rig Type H.S.A.
Rotary Depth
Driller GeoServe Geologist Scott Tira
Note: Boring backfilled unless otherwise noted.

ERS of Illinois
2270 Cornell Avenue
Montgomery, Illinois
Ph: (630) 896-4090

LUST Incident Number: #892744 & #903199	Boring Number: B-1	Page: 2 of 2
		Date: Start 8/17/2001
Site Name: Clark Store #646	Boring Location: See site map	
Address: 399 West Liberty Street, Wauconda, Illinois 60084		Finish 8/17/2001

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%---------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		100%	21-22	Light gray silty clay (CL), moist		1.00 1.00	0.0	
	SS		100%	23-24	Same		1.00 0.75	0.0	B-1c sample submitted for laboratory analysis of BTEX (22'-24' bgs.)
	SS		100%	25-26	Light gray silty sand (SM), wet at 25-feet bgs.		<0.50 <0.50	0.0	
	SS		100%	27-28	Same, wet		0.50 0.50	0.0	
	SS		100%	29-30	Same, wet		0.50 0.50	0.0	
				31	Boring terminated at 30-feet bgs. Groundwater at 25-feet bgs.				

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
▼ Depth While Drilling 25.0-feet bgs.
▽ Depth After Drilling NA

Auger Depth 30-feet bgs Rig Type H.S.A.

Rotary Depth

Driller GeoServe Geologist Scott Tira

Note: Boring backfilled unless otherwise noted.

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LUST Incident Number:	#892744 & 903199	Boring Number: B-3	Page: 1 of 2
			Date: Start 8/16/2001
Site Name:	Clark Store #646	Boring Location: See site map	
Address:	399 West Liberty Street Wauconda, Illinois 60084		Finish 8/16/2001

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%----------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		100%	1–2	Topsoil/fill, moist		0.50 0.50	0.0	
	SS		100%	3–4	Peat, moist		0.50 0.50	0.0	
	SS		100%	5–6	Same		0.50 <0.50	0.0	
	SS		100%	7–8	Peat Light gray silty clay (CL), moist		<0.50 <0.50	0.0	
	SS		50%	9–10	Light gray silty clay (CL), wet at 8.5-feet bgs.		0.75 0.75	0.0	B-3a sample submitted for laboratory analysis of BTEX (8'-10' bgs.)
	SS		100%	11–12	Same, wet		0.50 0.75	0.0	
	SS		50%	13–14	Same, wet		0.50 <0.50	0.0	
	SS		100%	15–16	Same, wet		<0.50 <0.50	0.0	
	SS		100%	17–18	Same, moist		3.50 2.75	0.0	B-3b sample submitted for laboratory analysis of BTEX (16'-18' bgs.)
	SS		50%	19–20	Same, moist		<0.50 <0.50	0.0	

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
▼ Depth While Drilling 8.5-feet bgs.
▽ Depth After Drilling NA

Auger Depth 30-feet bgs Rig Type H.S.A.

Rotary Depth

Driller GeoServe Geologist Scott Tira

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LUST Incident Number:	#892744 & #903199	Boring Number: B-3	Page: 2 of 2
			Date: Start 8/16/2001
Site Name:	Clark Store #646	Boring Location: See site map	
Address:	399 West Liberty Street Wauconda, Illinois 60084		Finish 8/16/2001

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%----------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		50%	21-22	Same, moist		1.50 2.00	0.0	
	SS		100%	23-24	Same, moist		1.75 1.75	0.0	B-3c sample submitted for laboratory analysis of BTEX (22'-24' bgs.)
	SS		50%	25-26	Same, wet		<0.50 <0.50	0.0	
	SS		100%	27-28	Gray well-graded sand/trace silt (SW), moist		0.50 0.75	0.0	
	SS		100%	29-30	Same		0.50 0.50	0.0	
				31	Boring terminated at 30-feet bgs. Groundwater at 8.5-feet bgs.				

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
Depth While Drilling
8.5-feet bgs.
Depth After Drilling
NA

Auger Depth 30-feet bgs Rig Type H.S.A.

Rotary Depth

Driller GeoServe Geologist Scott Tira

Note: Boring backfilled unless otherwise noted.

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LUST Incident Number:	#892744 & 903199	Boring Number:	B-6	Page:	1	of	2
				Date:	Start	8/16/2001	
Site Name:	Clark Store #646	Boring Location:	See site map				
Address:	399 West Liberty Street Wauconda, Illinois 60084				Finish	8/16/2001	

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L.%----------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		100%	1-2	Topsoil/fill		1.50 1.25	0.0	
	SS		100%	3-4	Brown silty clay (CL), moist		4.50 4.00	0.0	B-6a sample submitted for laboratory analysis of BTEX (2'-4' bgs.)
	SS		100%	5-6	Same Peat/fill		3.00 0.75	0.0	
	SS		50%	7-8	Peat		<0.50 <0.50	0.0	
	SS		50%	9-10	Same but wet at 8.5-feet bgs.		<0.50 <0.50	0.0	
	SS		100%	11-12	Gray silty clay (CL), wet		<0.50 <0.50	0.0	
	SS		100%	13-14	Light gray silty clay (CL), wet		0.75 0.50	0.0	
	SS		50%	15-16	Same, wet		0.50 <0.50	0.0	
	SS		50%	17-18	Same, moist		2.00 2.50	0.0	B-6b sample submitted for laboratory analysis of BTEX (16'-18' bgs.)
	SS		50%	19-20	Same, wet		1.00 0.50	0.0	

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
Depth While Drilling 8.5-feet bgs.
Depth After Drilling NA

Auger Depth 30-feet bgs Rig Type H.S.A.

Rotary Depth

Driller GeoServe Geologist Scott Tira

Note: Boring backfilled unless otherwise noted.

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LUST Incident Number:	#892744 & #903199	Boring Number: B-6	Page: 2 of 2
			Date: Start 8/16/2001
Site Name:	Clark Store #646	Boring Location: See site map	
Address:	399 West Liberty Street Wauconda, Illinois 60084		Finish 8/16/2001

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L.%----------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		100%	21-22	Light gray silty clay (CL), moist		2.00 2.25	0.0	B-6c sample submitted for laboratory analysis of BTEX (20'-22' bgs.)
	SS		100%	23-24	Light gray silty sand (SM)		1.00 0.75	0.0	
	SS		75%	25-26	Same		1.50 1.00	0.0	
	SS		100%	27-28	Same		1.00 1.25	0.0	
	SS		75%	29-30	Same		0.50 0.75	0.0	
				31	Boring terminated at 30-feet bgs. Groundwater at 8.5-feet bgs.				
				32					
				33					
				34					
				35					
				36					
				37					
				38					
				39					
				40					

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
Depth While Drilling
8.5-feet bgs.
Depth After Drilling
NA

Auger Depth 30-feet bgs Rig Type H.S.A.

Rotary Depth

Driller GeoServe Geologist Scott Tira

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LUST Incident Number:	#892744 & #903199	Boring Number:	MW-19	Page:	1	of	2
				Date:	Start	8/17/2001	
Site Name:	Clark Store #646	Boring Location:	See site map				
Address:	399 West Liberty Street Wauconda, Illinois 60084				Finish	8/17/2001	

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%----------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		100%	1	Topsoil/fill		1.50	0.0	
				2			1.25		
	SS		100%	3	Brown silty clay (CL), moist		3.25	0.0	
				4			2.25		
	SS		100%	5	Same		1.50	0.0	
				6			1.25		
	SS		100%	7	Light gray silty clay (CL), moist		1.75	0.0	
				8			1.75		
	SS		100%	9	Same		<0.50	0.0	
				10			0.75		
	SS		100%	11	Same		0.50	0.0	
				12			1.00		
	SS		100%	13	Same		<0.50	0.0	
				14			<0.50		
	SS		100%	15	Same		<0.50	0.0	
				16			0.75		
	SS		100%	17	Same		1.00	0.0	
				18			0.50		
	SS		100%	19	Same		0.50	0.0	
				20			0.75		

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
▼ Depth While Drilling 25.0-feet bgs.
▽ Depth After Drilling 5.42-feet bgs.

Auger Depth 33-feet bgs Rig Type H.S.A.

Rotary Depth

Driller GeoServe Geologist Scott Tira

Note: Boring backfilled unless otherwise noted.

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LUST Incident Number: #892744 & #903199	Boring Number: MW-19	Page: 2 of 2
		Date: Start 8/17/2001
Site Name: Clark Store #646	Boring Location: See site map	
Address: 399 W. Liberty Street, Wauconda, Illinois 60084		Finish 8/17/2001

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%----------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		100%	21-22	Same		1.00 1.00	0.0	
	SS		100%	23-24	Same		0.50 <0.50	0.0	Sample submitted for laboratory analysis of BTEX (22-24 feet bgs.)
	SS		100%	25-26	Same Light gray silty sand (SM), wet		<0.50 0.75	0.0	
	SS		100%	27-28	Light gray silty sand (SM), wet		0.50 0.50	0.0	
	SS		100%	29-30	Same		0.50 <0.50	0.0	
	SS		100%	31-32	Same		<0.50 0.75	0.0	
	SS		100%	33-34	Same Boring terminated at 33 feet bgs. Groundwater at 25 feet bgs. Well screened from 23-33 feet bgs.		0.50	0.0	

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
▼ Depth While Drilling 25.0-feet bgs.
▽ Depth After Drilling 5.42-feet bgs.

Auger Depth 33 feet bgs. Rig Type H.S.A.

Rotary Depth

Driller GeoServe Geologist Scott Tira

Note: Boring backfilled unless otherwise noted.

ENVIRONMENTAL
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LUST Incident Number:	#892744 & 903199	Boring Number:	B-2	Page:	1	of	2
				Date:	Start	8/16/2001	
Site Name:	Clark Store #646	Boring Location: See site map					
Address:	399 West Liberty Street Wauconda, Illinois 60084				Finish	8/16/2001	

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%---------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		50%	1	Topsoil/fill		1.25 1.75	0.0	
	SS		100%	2 3	Same		1.50 1.25	0.0	
	SS		100%	4 5	Brown silty clay (CL), moist		4.00 3.50	0.0	
	SS		100%	6 7	Same		3.75 3.50	0.0	
	SS		100%	8 9	Same		3.25 3.50	NA	B-2a sample submitted for laboratory analysis of BTEX (8'-10' bgs.)
	SS		100%	10 11	Same but wet at 11-feet bgs.		2.00 1.50	NA	
	SS		50%	12 13	Peat		1.00 1.00	0.0	
	SS		100%	14 15	Same		0.75 0.75	0.0	
	SS		100%	16 17	Dark gray silty clay (CL), moist		1.00 0.75	0.0	B-2b sample submitted for laboratory analysis of BTEX (16'-18' bgs.)
	SS		100%	18 19	Same		0.75 0.75	0.0	
				20					

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
▼ Depth While Drilling 25.0-feet bgs.
▽ Depth After Drilling NA

Auger Depth 30-feet bgs Rig Type H.S.A.

Rotary Depth _____

Driller GeoServe Geologist Scott Tira

Note: Boring backfilled unless otherwise noted.

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LUST Incident Number: #892744 & #903199	Boring Number: B-2	Page: 2 of 2
Site Name: Clark Store #646	Boring Location: See site map	Date: Start 8/16/2001
Address: 399 West Liberty Street, Wauconda, Illinois 60084		Finish 8/16/2001

Sample Number	Sample Type	Well Diagram	Sample Recovery	Sample Depth	Detailed Soil and Rock Description	Natural Moisture Content P.L%---------L.L% (20 / 40 / 60)	Penetrometer (TSF)	OVA/PID/FID	Remarks
	SS		75%	21-22	Light gray silty clay (CL), moist		1.00 0.75	0.0	
	SS		100%	23-24	Same		3.00 2.75	0.0	B-2c sample submitted for laboratory analysis of BTEX (22'-24' bgs.)
	SS		100%	25-26	Light gray silty sand (SM), wet at 25-feet bgs.		<0.50 <0.50	0.0	
	SS		100%	27-28	Same, wet		0.50 0.50	0.0	
	SS		100%	29-30	Same, wet		<0.50 <0.50	0.0	
				31-40	Boring terminated at 30-feet bgs. Groundwater at 25-feet bgs.				

Note: Stratification lines are approximate; insitu transition between soil types may be gradual

Groundwater Data
▼ Depth While Drilling 25.0-feet bgs.
▽ Depth After Drilling NA

Auger Depth 30-feet bgs Rig Type H.S.A.

Rotary Depth _____

Driller GeoServe Geologist Scott Tira

Note: Boring backfilled unless otherwise noted.

ERS of Illinois
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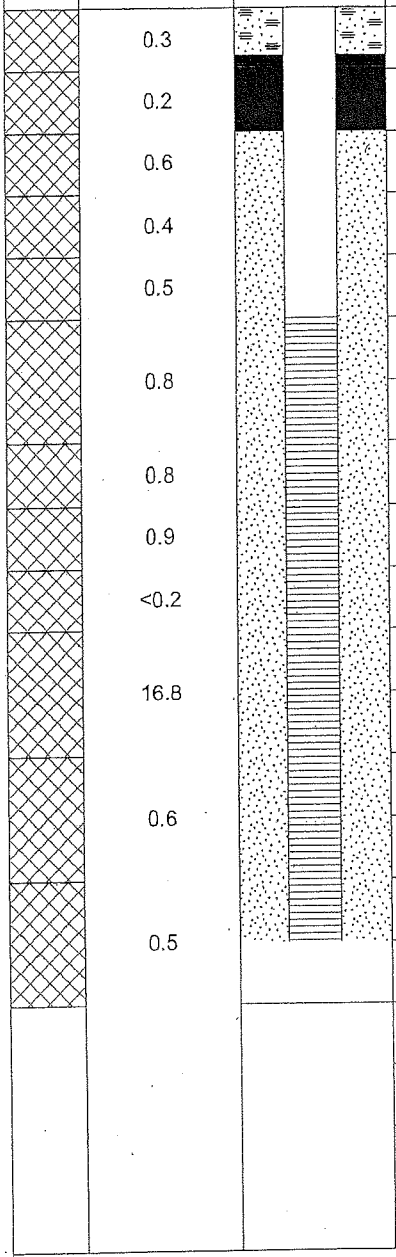
Montgomery, Illinois
Ph: (630) 896-4090

MP-1

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-11-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	7.0 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	0.3		PT	Grass roots and black clayey TOP SOIL, hard, moist
	0.2			
	0.6		CL	Brown and black silty CLAY, trace top soil, moist
	0.4		CL	Gray and brown silty CLAY, trace top soil, moist
	0.5		CL	Yellowish-brown silty CLAY, hard, moist
	0.8	5	CL	Brownish-gray silty CLAY, very hard, slightly moist
	0.8		SP	Brownish-gray fine to medium grained SAND, trace silt, saturated
	0.9		CL	Gray silty CLAY, soft, saturated
	<0.2	10		Gray fine to medium grained SAND, soft
	16.8		SP	
	0.6			
	0.5	15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

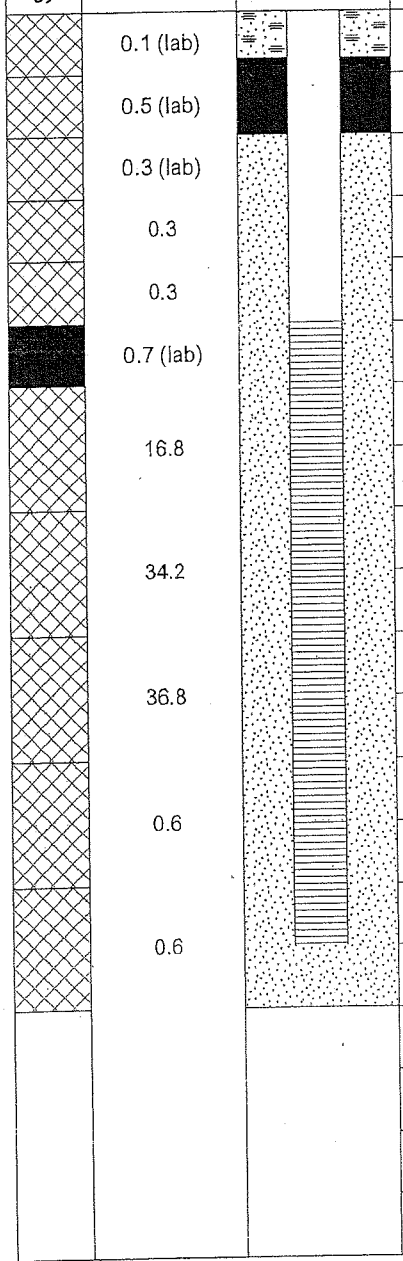
Site:
Former Clark Retail Station #646
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 892744 and 903199
LPC No.: 0971855024

Project No.: 100018

MP-2

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-18-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	6 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	0.1 (lab)		PT	Grass roots and black TOP SOIL, slightly moist
	0.5 (lab)		PT	Black TOP SOIL, trace sand and gravel, slightly moist
	0.3 (lab)		CL	Gray and reddish-brown silty CLAY, slightly moist
	0.3			
	0.3	5		
	0.7 (lab)		CL	Gray and reddish-brown silty CLAY, soft, moist to wet
	16.8			Gray silty fine grained SAND, odor, saturated
	34.2	10		
	36.8		SM	
	0.6			
	0.6	15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls.. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

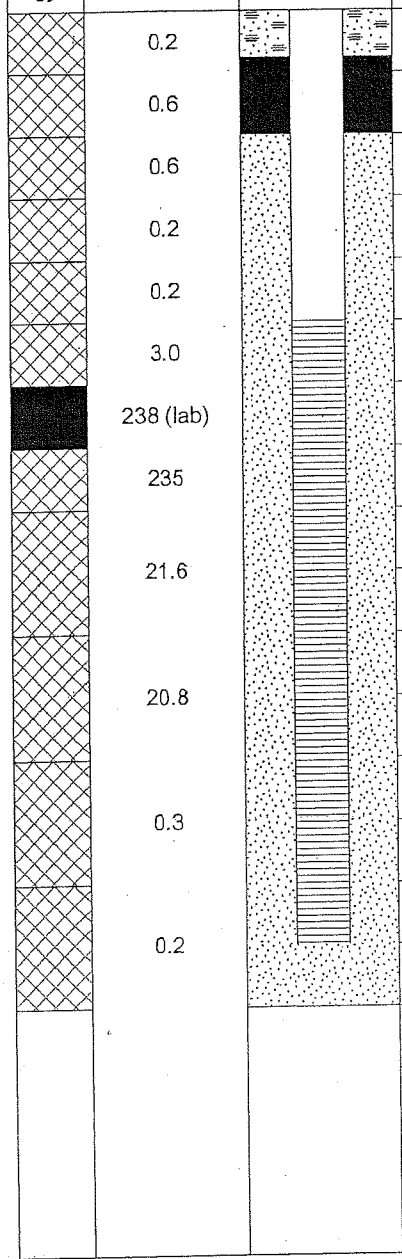
Site:
Former Clark Retail Station #646
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 892744 and 903199
LPC No.: 0971855024

Project No.: 100018

MP-3

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-18-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	8 Feet	G. Georgiew



Description
Grass roots and black TOP SOIL, moist
Gray and reddish-brown silty CLAY, trace sand and gravel, hard, slightly moist
Gray silty CLAY, little fine grained SAND, medium hard, moist
Gray and black fine to medium grained SAND, trace silty, odor
Gray fine to medium grained SAND, trace silt, saturated
Gray silty fine grained SAND, saturated

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

Site:
Former Clark Retail Station #646
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 892744 and 903199
LPC No.: 0971855024

Project No.: 100018

MP-4

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-18-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	8.0 Feet	G. Georgiew

Sample	PID (ppm)	Depth (feet)	Lithology	Description
	0.5		CL	Dark brown silty CLAY, trace top soil, soft, slightly moist
	0.4		CL	Dark brown silty CLAY, trace sand and gravel, dry
	0.1			
	NA			No sample collected
	0.5		CL	Gray and reddish-brown silty CLAY, trace sand and gravel, dry
	24.5 (lab)	5		Reddish-brown silty CLAY, strong odor, moist
	12.8		CL	
	241			Dark gray silty fine grained SAND, saturated
	224	10	SM	
	6.5			
	5.8	15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

Site:
Former Clark Retail Station #646
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 892744 and 903199
LPC No.: 0971855024

Project No.: 100018

RW-1

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-11-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	4.0 Feet	G. Georgiew

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0.1			PT	Grass roots and brown and black clayey TOP SOIL, trace gravel, moist
	0.5				
	0.5			CL	Gray and brown CLAY, trace top soil, soft, moist
	1.3 (lab)			CL	Gray and brown silty CLAY, trace top soil, sand, and gravel, soft, moist
	0.5			CL	Yellowish-brown silty CLAY, saturated
			5		
	1.2			SP	Gray fine to medium grained SAND, odor, saturated
	0.2			CL	Brown silty CLAY, very hard, moist
	0.2				
	0.2			CL	Gray silty CLAY, hard, saturated
	0.3		10		
	0.2			SP	Gray fine grained SAND, trace silty, saturated
	0.3		15		
	0.2				
	0.2			SM	Gray silty fine grained SAND, saturated
	0.1		20		
	0.1				
	0.1		25		

Completion Notes:

4" sch 40, PVC casing from 0.5' to 5' bls; 4" sch 40, 0.010" slotted PVC screen from 5' to 25' bls. Backfilled with sand from 25' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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399 West Liberty Street
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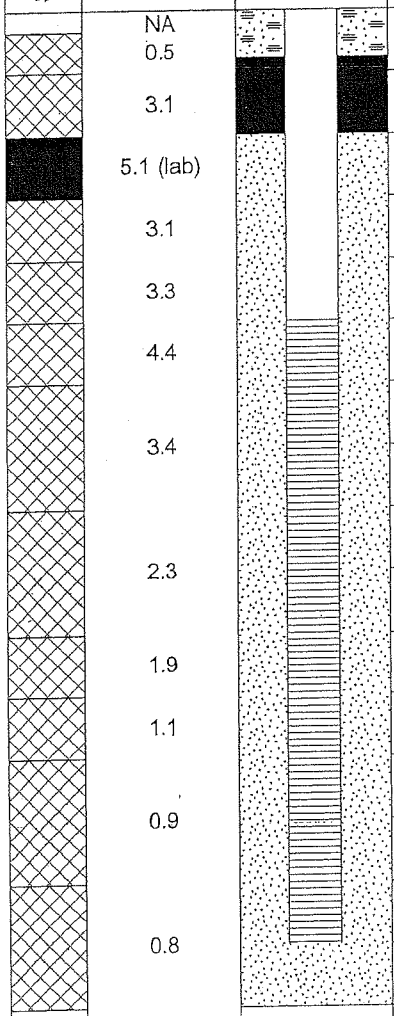
Project No.: 100018

SB-21/MW-21

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-13-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	12.0 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	NA		Asphalt	ASPHALT
	0.5		GW	GRAVEL FILL
	3.1		PT	Black TOP SOIL, moist
	5.1 (lab)		CL	Gray silty CLAY mixed with top soil
	3.1		CL	Gray silty CLAY, trace gravel, moist
	3.3	5	CL	Gray silty CLAY, moist
	4.4		CL	Gray silty CLAY, little sand, trace gravel, soft, moist to wet
	3.4		SM	Gray silty fine grained SAND, trace gravel, moist to wet
	2.3	10		
	1.9			
	1.1		ML	Light gray clayey SILT, saturated
	0.9			
	0.8	15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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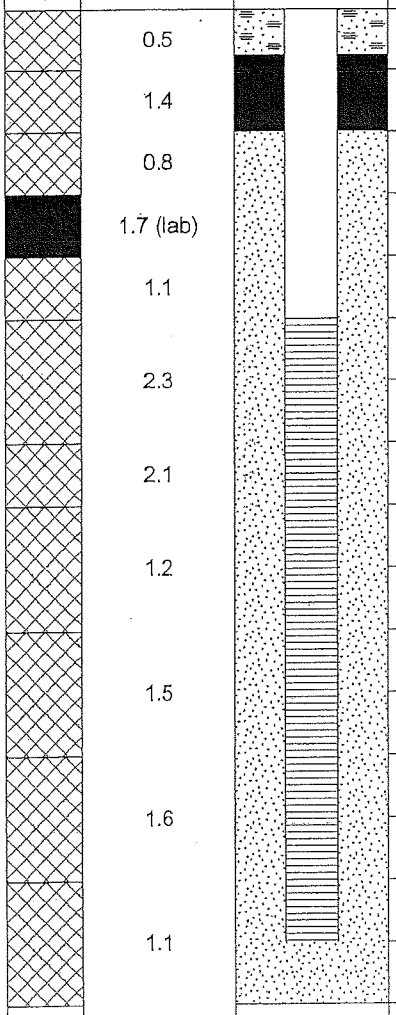
LPC No.: 0971855024

Project No.: 100018

SB-22/MW-22

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-12-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	5.0 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	0.5		PT	Grass roots mixed with TOP SOIL
	1.4		CL	Brown silty CLAY mixed with top soil
	0.8		ML	Brown clayey SILT, trace top soil, soft, moist
	1.7 (lab)		ML	Yellowish-brown clayey SILT, trace sand and fine grained gravel, soft, moist
	1.1		SM	Brown silty SAND, trace top soil
	2.3	5	SM	Gray silty fine grained SAND, saturated
	2.1		CL	Gray silty CLAY, wet
	1.2		CL	Dark gray silty CLAY, trace coarse grained gravel, hard, wet
	1.5	10		
	1.6			
	1.1	15	ML	Light gray clayey SILT, soft, saturated

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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LPC No.: 0971855024

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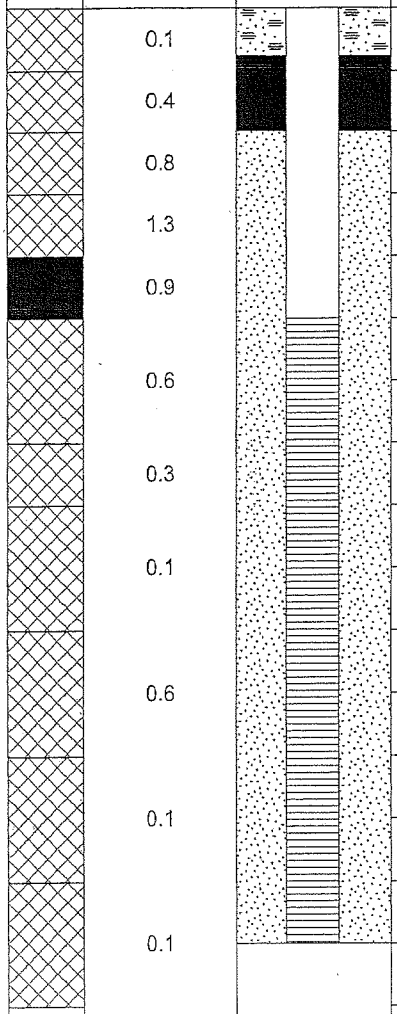
SB-23/MW-23

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-15-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	14.0 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	0.1		PT	Grass roots and black TOP SOIL
	0.4			
	0.8		CL	Reddish silty CLAY mixed with black top soil, trace fine to coarse grained sand and gravel, moist
	1.3			
	0.9		ML	Gray and brown clayey SILT, moist
		5		
	0.6		CL	Gray and black silty CLAY, trace fine to coarse grained sand and gravel
	0.3			Brown silty CLAY, medium hard, slightly moist
	0.1		CL	
		10		
	0.6			
	0.1		CL	Dark gray silty CLAY, medium hard, moist to wet
	0.1		CL	Light gray silty CLAY, soft, saturated
		15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 15' to 2'. bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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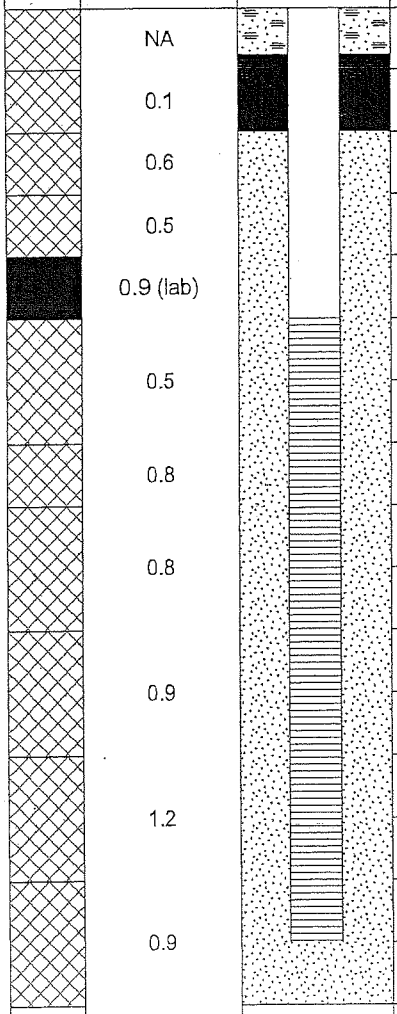
LPC No.: 0971855024

Project No.: 100018

SB-24/MW-24

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-13-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	12.0 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	NA		GP	GRAVEl and SAND FILL
	0.1		SW	Redddish-brown fine grained SAND, slightly moist
	0.6			
	0.5		CL	Dark gray silty CLAY, slightly moist
	0.9 (lab)		CL	Light gray silty CLAY, hard, moist
		5		
	0.5			Dark gray silty CLAY, very hard
	0.8			
	0.8		CL	
		10		
	0.9			
	1.2		SM	Gray silty SAND, saturated
	0.9	15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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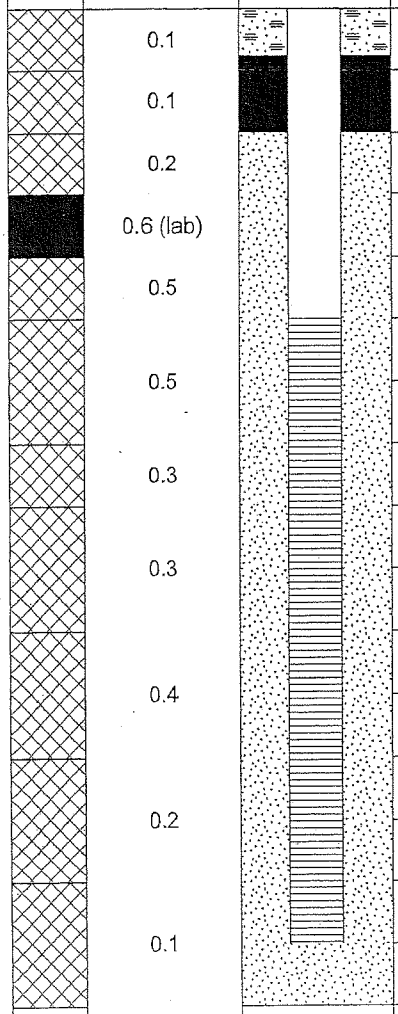
LPC No.: 0971855024

Project No.: 100018

TriCore Environmental, LLC

SB-25/MW-25

Drill Method:	HSA	Date Drilled:	04-13-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	8.0 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	0.1		PT	Grass roots and black TOP SOIL
	0.1		GP	Reddish-brown fine to coarse grained SAND and GRAVEL
	0.2		CL	Gray and brown silty CLAY, hard, slightly moist
	0.6 (lab)		CL	Brown silty CLAY, trace fine grained gravel, slightly moist
	0.5	5		
	0.5		CL	Graysih-brown silty CLAY, hard, slightly moist
	0.3			
	0.3		CL	Gray silty CLAY, soft, saturated
	0.4	10		
	0.2		SP	Gray fine to coarse grained SAND, trace silt, saturated
	0.1	15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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SB-26/MW-26

TriCore Environmental, LLC	Drill Method: HSA	Date Drilled: 04-13-05	Logged By: G. Georgiew
	Boring Dia: 8.25 Inches	DTW While Drilling: 8.0 Feet	

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	NA			Asphalt	ASPHALT
	0.9			GW	GRAVEL FILL
	5.0			CL	Reddish-brown silty CLAY, slightly moist
	3.1			CL	Light brown silty CLAY, hard, slightly moist
	4.2		5	CL	Brown silty CLAY, trace sand and gravel, soft, moist
	5.3 (lab)				
	5.8			SP	Gray fine to medium grained SAND, trace silt, strong odor, saturated
	1,043		10	SP	Black fine to medium grained SAND, odor, saturated
	981			SP	Brown fine to coarse grained SAND, saturated
	4.8			SP	Gray fine to coarse grained SAND, saturated
	3.2		15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

Site:
Former Clark Retail Station #646
399 West Liberty Street
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IEMA No.: 892744 and 903199
LPC No.: 0971855024

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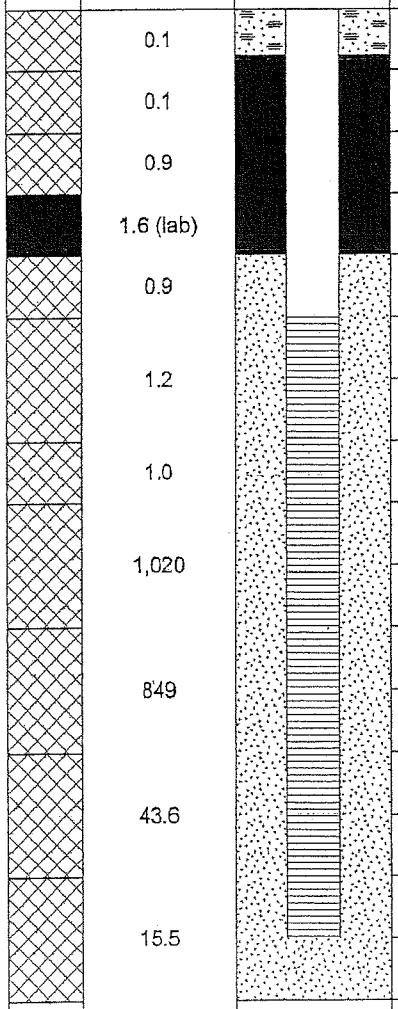
SB-27/MW-27

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-18-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	4.0 Feet	G. Georgiew



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	0.1		PT	Grass roots and black TOP SOIL
	0.1		CL	Top soil mixed with brown silty CLAY, moist
	0.9		CL	Gray and reddish-brown silty CLAY, trace gravel, moist
	1.6 (lab)		ML	Gray and brown clayey SILT, slightly moist
	0.9		SM	Brown silty fine grained SAND, saturated
	1.2	5	SW	Reddish-brown fine grained SAND, saturated
	1.0			
	1,020		SM	Gray silty fine grained SAND, strong odor, saturated
	849	10	SW	Black fine grained SAND, strong odor, saturated
	43.6		SW	Gray fine grained SAND, saturated
	15.5	15		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 15' bls. Backfilled with sand from 16' to 4' bls, hydrated bentonite from 4' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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SB-28

TriCore Environmental, LLC

Drill Method:	Direct Push	Date Drilled:	04-12-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	10.0 Feet	G. Georgiew

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0.1			PT	Grass roots mixed with TOP SOIL
	0.1			CL	Reddish-brown silty CLAY mixed with top soil, moist
	0.1				Reddish-brown silty CLAY, moist
	0.1			CL	
	0.1		5		Gray and brown silty CLAY, hard, slightly moist
	0.6 (lab)			CL	
	0.2				
	0.3			CL	Light brown silty CLAY, hard, moist
			10		Light gray silty CLAY, soft, saturated
	0.4			CL	
	0.2				Light gray silty fine grained SAND, saturated
				SM	
	0.2		15		

Completion Notes:

Backfilled with hydrated bentonite from 16' to 0.75' bls. Capped with concrete.

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SB-29

TriCore Environmental, LLC

Drill Method:	Direct Push	Date Drilled:	04-12-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	9.0 Feet	G. Georgiew

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0.1			PT	Grass roots mixed with TOP SOIL
	0.1			CL	Reddish-brown silty CLAY mixed with top soil, moist
	0.3				Gray and reddish-brown silty CLAY, slightly moist
	0.2			CL	
	0.4		5		
	0.9			CL	Light brown silty CLAY, very hard, slightly moist
	1.2 (lab)				
	0.6			CL	Light gray silty CLAY, soft, wet
	0.3		10		saturated
	0.2			CL	
	0.2				
	0.2		15	SM	Gray silty fine grained SAND, saturated

Completion Notes:

Backfilled with hydrated bentonite from 16' to 0.75' bls. Capped with concrete.

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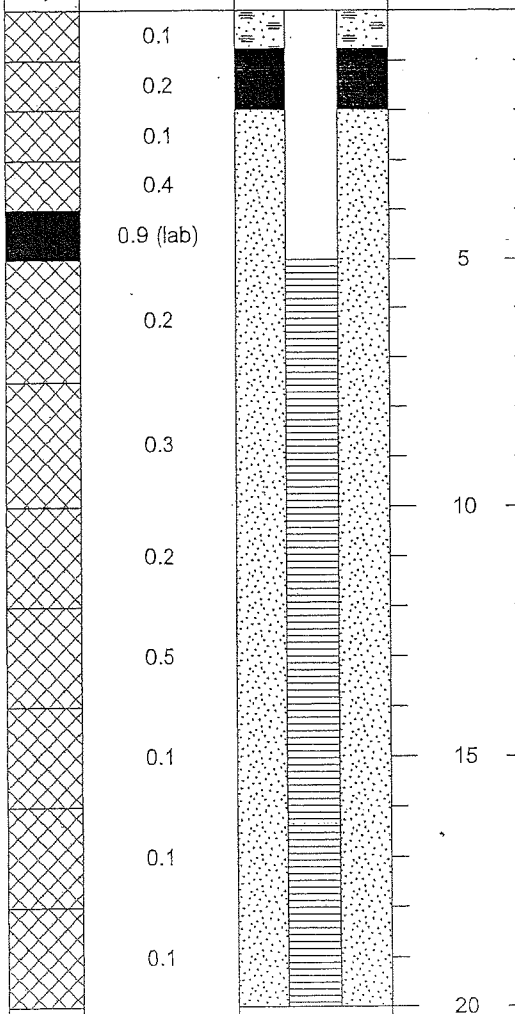
SB-30/MW-28

TriCore Environmental, LLC

Drill Method:	HSA	Date Drilled:	04-15-05	Logged By:
Boring Dia:	8.25 Inches	DTW While Drilling:	16.0 Feet	G. Georgiew



Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0.1			PT	Grass roots and black TOP SOIL
	0.2			GP	Silty fine to coarse grained SAND with red fine to coarse grained gravel
	0.1			CL	Reddish-brown silty CLAY, moist
	0.4			ML	Gray and brown clayey SILT, soft, slightly moist
	0.9 (lab)		5		
	0.2			ML	Gray and brown clayey SILT, hard, moist
	0.3				Brown silty CLAY, hard, moist
	0.2		10	CL	
	0.5				
	0.1		15	CL	Dark gray silty CLAY, hard, slightly moist
	0.1				Brown fine grained SAND, saturated
	0.1			SW	
			20		

Completion Notes:

2" sch 40, PVC casing from 0.5' to 5' bls; 2" sch 40, 0.010" slotted PVC screen from 5' to 20' bls. Backfilled with sand from 20' to 2' bls, hydrated bentonite from 2' to 0.75' bls. Capped with concrete. 8" manhole installed flush to surface.

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SB-31

TriCore Environmental, LLC

Drill Method:	Direct-push	Date Drilled:	06-01-06	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	10 Feet	P. Worrall

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	NA			Concrete	Concrete
				GP	Fill material
	0.0			CL	Gray and brown silty CLAY, trace sand and gravel, semi-stiff, moist
	0.0			CL	Gray, mottled brown silty CLAY, trace sand and gravel, semi-stiff, moist
	0.0				
	0.0			CL	Brown, mottled gray silty CLAY, trace sand and gravel, stiff, moist
			5		
	0.0			CL	Grayish brown, mottled brown and gray silty CLAY, trace sand and gravel, stiff, moist
	0.0 (lab)			CL	Gray and brown to gray silty CLAY, semi-stiff to soft, moist to very moist, vertical sand seams from 7.5' to 8'
				CL	Gray silty CLAY, trace sand and gravel
	0.0			CL	Gray silty CLAY and SAND, trace gravel
			10		
	0.0			SW	Gray SAND, saturated
			15		

Completion Notes:

Backfilled with hydrated bentonite from 11' to 0.5' bls. Capped with concrete.

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SB-32

TriCore Environmental, LLC

Drill Method:	Direct-push	Date Drilled:	06-01-06	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	9.5 Feet	P. Worrall

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	NA			PT	Grass and topsoil
	0.0			CL	Gray and brown silty CLAY, stiff, moist
	0.0			CL	Brown, mottled gray silty CLAY, semi-stiff, moist
	0.0			CL	Brown and gray silty CLAY, trace gravel, semi-stiff, moist
	0.0			CL	Brown, mottled gray silty CLAY, trace gravel, semi-stiff,
	3.2		5	CL	Gray, mottled brown silty CLAY, some sand, trace gravel, stiff, moist
	414 (lab)			SW	Brown and gray SAND, wet
	NA (lab)		10	SW	Gray SAND, saturated
	21.0				
	NA		15		
	9.5				

Completion Notes:

Backfilled with hydrated bentonite from 16' to 0.5' bls. Capped with grass and topsoil.

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SB-33

TriCore Environmental, LLC

Drill Method:	Direct-push	Date Drilled:	01-18-07	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	10 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0.2			PT	Grass and topsoil
				CL	Brown silty CLAY, no odor, dry
	1.4			CL	Brown silty CLAY, trace organics, no odor, dry
	0.9			PT	Black topsoil, trace organics, no odor, moist
	2.2			CL	Dark brown and black silty CLAY, trace sand, gravel, and organics, no odor, moist
	0.4			CL	Brown and tan silty CLAY, trace sand and gravel, no odor, dry
	2.4		5		Brown and tan silty CLAY, no odor, moist
	1.5			CL	
	9.7			CL	Tanish-gray silty CLAY, trace gravel and organics, slight odor, very moist
	31 (lab)		10	SW	Gray fine grained SAND, well sorted, odor, saturated at 10'
	2.0			SW	Gray fine grained SAND, well sorted, saturated
	2.2		15		

Completion Notes:

Backfilled with hydrated bentonite from 15.5' to 0.25' bls. Capped with grass.

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SB-34

TriCore Environmental, LLC

Drill Method: Direct-push	Date Drilled: 01-18-07	Logged By:
Boring Dia: 2.125 Inches	DTW While Drilling: 8 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				PT	Grass and topsoil
	1.2			CL	Brown silty CLAY, no odor, dry
	0.7				
	0.6				
	0.5				
	1.6		5	CL	turning reddish-brown
	2.2				
	977			SW	Brown fine grained SAND, well sorted, odor, very moist
	1,333 (lab)		10	SW	Gray fine grained SAND, well sorted, odor, saturated at 8'
	80.5				
	3.8			SW	no odor
	3.3		15		

Completion Notes:

Backfilled with hydrated bentonite from 15.5' to 0.25' bls. Capped with grass.

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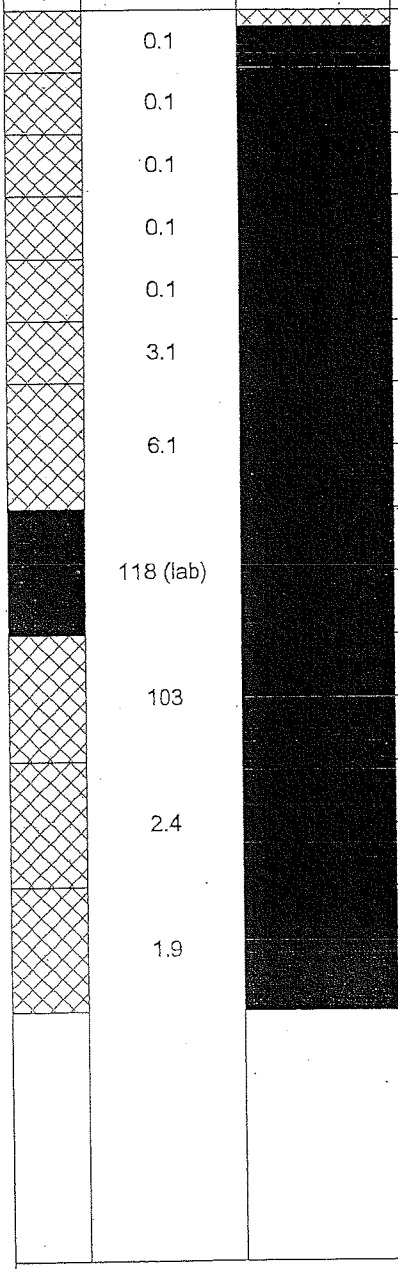
SB-35

TriCore Environmental, LLC

Drill Method:	Direct-push	Date Drilled:	01-18-07	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	8 Feet	M. Czako



Sample	PID (ppm)	Depth (feet)	Lithology	Description
			PT	Grass and topsoil
	0.1		CL	Brown silty CLAY, trace sand, no odor, dry
	0.1			
	0.1		CL	Brown silty CLAY, some sand, no odor, dry
	0.1		SC	Brown silty CLAY interbedded with brown fine grained SAND, no odor, moist
	0.1		SW	Brown fine grained SAND, well sorted, trace gravel, no odor, moist
	3.1	5	SW	odor
	6.1		SW	hydrocarbon staining at 7.75'
	118 (lab)		SW	Gray fine grained SAND, well sorted, trace gravel, odor, saturated at 8'
	103	10		
	2.4		SW	no odor
	1.9	15		

Completion Notes:

Backfilled with hydrated bentonite from 16' to 0.25' bls. Capped with grass.

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SB-36

TriCore Environmental, LLC

Drill Method: Direct-push	Date Drilled: 01-18-07	Logged By:
Boring Dia: 2.125 Inches	DTW While Drilling: 10 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	NA			Concrete	Concrete
	0.1			CL	Gray and tan silty CLAY, some medium grained brown sand, no odor, moist
	6.4				Gray and tan silty CLAY, brittle, dry, no odor
	1.5			CL	
	1.2				
	2.3		5		
	1.6			CL	Gray and tan silty CLAY, trace sand and gravel, stiff, moist
	0.1			CL	Gray silty CLAY, trace sand and gravel, moist
				CL	Gray silty CLAY, no odor, moist
	0.3 (lab)		10	CL	Gray sandy CLAY, no odor, saturated at 10'
	0.5			SW	Brown fine grained SAND, well sorted, no odor, saturated
	0.2		15		

Completion Notes:

Backfilled with hydrated bentonite from 15' to 0.5' bls. Capped with asphalt.

Site:
Former Clark Retail Station #646
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 892744 and 903199
LPC No.: 0971855024

Project No.: 100018 Page 1

SB-37

TriCore Environmental, LLC

Drill Method:	Direct-push	Date Drilled:	01-18-07	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	6 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0.1			PT	Grass and topsoil, some organics, no odor, moist
	0.1			CL	Greenish-gray silty CLAY, trace organics, no odor, moist
	0.1				Gray and tan silty CLAY, trace organics, no odor, moist
	0.2			CL	
	0.2		5		
	0.1			CL	turning stiff and very moist
	0.4 (lab)			CL	Tanish-gray silty CLAY, no odor, saturated at 6'
	0.1		10	CL	Gray silty CLAY, trace sand and gravel, stiff, no odor, saturated
	0.1			SW	Brown fine grained SAND, well sorted, no odor, saturated
			15		

Completion Notes:

Backfilled with hydrated bentonite from 12' to 0.25' bls. Capped with grass.

Site:
Former Clark Retail Station #646
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 892744 and 903199
LPC No.: 0971855024

Project No.: 100018

SB-38

TriCore Environmental, LLC

Drill Method:	HA	Date Drilled:	12-11-07	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	NA Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0.1			PT	Grass Black top soil, no odor, moist
	0.1			PT	
	0.1 (lab)			CL	Reddish-brown silty CLAY, no odor, moist
	0.1 (lab)				
			5		
			10		
			15		

Completion Notes:

Backfilled with hydrated bentonite from 4' to 0.25' bls. Capped with grass.

Site:
Former Clark Retail Station #646
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 892744 and 903199
LPC No.: 0971855024

Project No.: 100018

SB-39

TriCore Environmental, LLC

Drill Method:	Direct-Push	Date Drilled:	08-07-08	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	14.25 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				PT	Grass
	NA			PT	Brown silty clay topsoil, no odor, dry
				GP	Gravel fill material
	NA			CL	Brown silty CLAY, trace sand and gravel, slightly brittle, no odor, dry
	NA		5	PT	Black and brown silty clayey PEAT, very organic, soft, no odor, moist
	NA				
	NA		10		
	NA				
	NA				
	NA			CL	Black and brown silty CLAY, trace sand, soft, no odor, very moist
			15	CL	Gray silty CLAY, trace gravel, stiff, no odor, saturated

Completion Notes:

Backfilled with bentonite from 16' to 0.167' bls. Capped with grass.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-40

TriCore Environmental, LLC

Drill Method: Direct-Push	Date Drilled: 08-07-08	Logged By:
Boring Dia: 2.125 Inches	DTW While Drilling: 15.5 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
	0			PT	Grass
	0			PT	Brown silty clayey topsoil, some organics, trace gravel and sand, no odor, dry
				SC	Brown silty clayey SAND, trace gravel, no odor, dry
	0			CL	Brown silty CLAY, trace sand and gravel, slightly brittle, stiff, no odor, dry
	0		5	CL	Brown and tan silty CLAY, trace organics and gravel, stiff, no odor, dry
	0			CL	Dark gray silty CLAY, trace sand, slightly brittle, no odor, moist
	0		10	PT	Black and brown silty clayey PEAT, soft, slight odor, moist
	0			CL	Brown silty CLAY, some organics, soft, odor, moist
	0		15	CL	Brown silty CLAY, no odor, moist
	0			CL	Gray silty CLAY, trace gravel, semi-stiff, no odor, saturated
	0		20		
	0				

Completion Notes:

Backfilled with bentonite from 22' to 0.167' bls. Capped with grass.

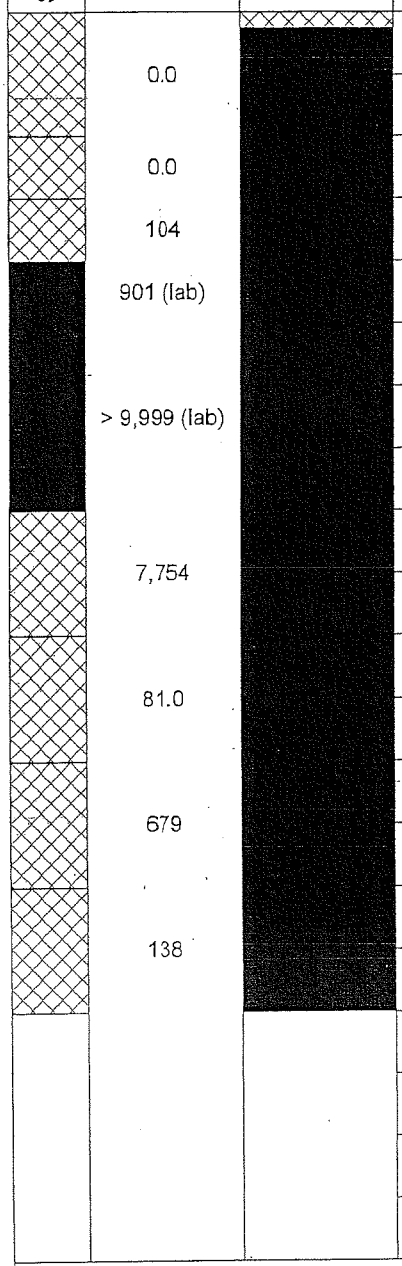
Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-41

TriCore Environmental, LLC

Drill Method:	Direct-Push	Date Drilled:	02/02/09	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	8 Feet	M. Czako



Sample	PID (ppm)	Depth (feet)	Lithology	Description
			PT	Grass and topsoil
	0.0		CL	Brown silty CLAY, some organics, no odor, slightly moist, soft
	0.0		CL	Brown silty CLAY, some organics, trace sand, no odor, slightly moist, soft
	104			
	901 (lab)		CL	Brown silty CLAY, some organics, trace sand and gravel, no odor, slightly moist, soft
		5		Brown fine grained SAND, slight odor, moist
	> 9,999 (lab)		SP	
	7,754		SP	Gray fine grained SAND, odor, saturated @ 8'
		10		Gray fine grained SAND, slight odor, saturated
	81.0			
	679		SP	
	138	15		

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with grass.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-42

TriCore Environmental, LLC

Drill Method:	Direct-Push	Date Drilled:	02/02/09	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	8 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				PT	Grass and topsoil
	0.0				Brown silty CLAY, some organics, trace sand and gravel, no odor, slightly moist, soft
	0.0 (lab)			CL	
	0.0				
	0.0		5		
	98.9			CL	Brown and gray silty CLAY, trace sand and gravel, odor, slightly moist
	629 (lab)			SP	Brown fine grained SAND, odor, slightly moist
	1,047				Gray fine grained SAND, odor, saturated @ 8'
	9.3		10		
	0.0			SP	
	0.0		15		

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with grass.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-43

TriCore Environmental, LLC	Drill Method: Direct-Push	Date Drilled: 02/02/09	Logged By: M. Czako
	Boring Dia: 2.125 Inches	DTW While Drilling: 8 Feet	

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				Concrete	Concrete
	NA			GW	Gravel fill material
	11.3			CL	Brown silty, sandy CLAY, trace gravel, no odor, slightly moist
	33.2			CL	Brown silty CLAY, trace sand and gravel, no odor, slightly moist
	33.7 (lab)			CL	Brown silty CLAY, little gray silt, trace sand, slight odor, slightly moist
	5.2		5	CL	turning semi-stiff
	70.8 (lab)			CL	Brown silty CLAY, little gray silt, trace sand, semi-stiff, odor, slightly moist
	647			SP	Brown and gray fine grained SAND, odor, saturated @ 8'
	3,224		10	SP	Gray fine grained SAND, odor, saturated
	482				
	0.4		15	SP	Gray fine grained SAND, no odor, saturated

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with concrete.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-44

TriCore Environmental, LLC

Drill Method:	Direct-Push	Date Drilled:	02/02/09	Logged By:
Boring Dia:	2.125 Inches	DTW While Drilling:	8 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				Concrete	Concrete
	NA			GW	Gravel fill material
	0.0			CL	Brown silty CLAY, trace sand and gravel, no odor, slightly moist
	38.1 (lab)			CL	Brown silty CLAY, little gray silt, trace sand and gravel, semi-stiff, slight odor, slightly moist
	24.0		5		
	427				
	9,914 (lab)			SP	Brown fine grained SAND, odor, moist
	1,021				Gray fine grained SAND, odor, saturated @ 8'
	675		10	SP	
	161				
	4.7		15	SP	Gray fine grained SAND, no odor, saturated

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with concrete.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-45

TriCore Environmental, LLC

Drill Method: Direct-Push	Date Drilled: 02/02/09	Logged By:
Boring Dia: 2.125 Inches	DTW While Drilling: 7 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				Concrete	Concrete
	NA			GW	Gravel fill material
	7.7			CL	Brown silty CLAY, trace silt, sand and gravel, stiff, no odor, slightly moist
	7.8 (lab)		5		
	16.0 (lab)				
	> 9,999			CL	Grayish-brown silty CLAY, trace silt, sand and gravel, stiff, no odor, saturated @ 7'
				SP	Brown fine grained SAND, odor, saturated
	4,530				Gray fine grained SAND, odor, saturated
			10		
	199			SP	
	476				
					Gray fine grained SAND, no odor, saturated
	5.4		15	SP	

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with concrete.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-46

TriCore Environmental, LLC

Drill Method: Direct-Push	Date Drilled: 02/02/09	Logged By: M. Czako
Boring Dia: 2.125 Inches	DTW While Drilling: 10 Feet	

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				Concrete	Concrete
	NA			GW	Gravel fill material
	11.4 (lab)			CL	Grayish-brown silty CLAY, trace sand and gravel, no odor, semi-stiff, slightly moist
	7.8			CL	Brown silty CLAY, little silt, trace sand and gravel, no odor, stiff, slightly moist
	1.7			CL	Brown CLAY and SILT, trace sand and gravel, no odor, slightly moist
	2.4		5	CL	Brown CLAY and gray SILT, trace sand and gravel, no odor, slightly moist
	314 (lab)			CL	tuning moist
	9.7			CL	Gray silty CLAY, trace sand and gravel, soft, no odor, moist, saturated @ 10'
	0.9		10		
	4.5			SP	Gray fine grained SAND, no odor saturated
	0.0		15		

Completion Notes:

Backfilled with bentonite from 15' to 0.25' bls. Capped with concrete.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-47

TriCore Environmental, LLC

Drill Method: Direct-Push	Date Drilled: 02/02/09	Logged By:
Boring Dia: 2.125 Inches	DTW While Drilling: 9 Feet	M. Czako

Sample	PID (ppm)	Completion	Depth (feet)	Lithology	Description
				Concrete	Concrete
	NA			GW	Gravel and sand fill material
	0.6			CL	Brown silty CLAY, trace sand, semi-stiff, no odor, slightly moist
	0.6 (lab)			CL	Brown silty CLAY, trace sand and gravel, semi-stiff, no odor, slightly moist
	0.0		5		
	0.6				turning moist
	6.8 (lab)			CL	
	0.6			CL	Brown and gray silty CLAY, trace sand and gravel, semi-stiff, no odor, moist
	0.0		10		Gray fine grained SAND, saturated @ 9'
	0.0			SP	
	0.0				
	0.0		15		

Completion Notes:

Backfilled with bentonite from 15' to 0.25' bls. Capped with concrete.

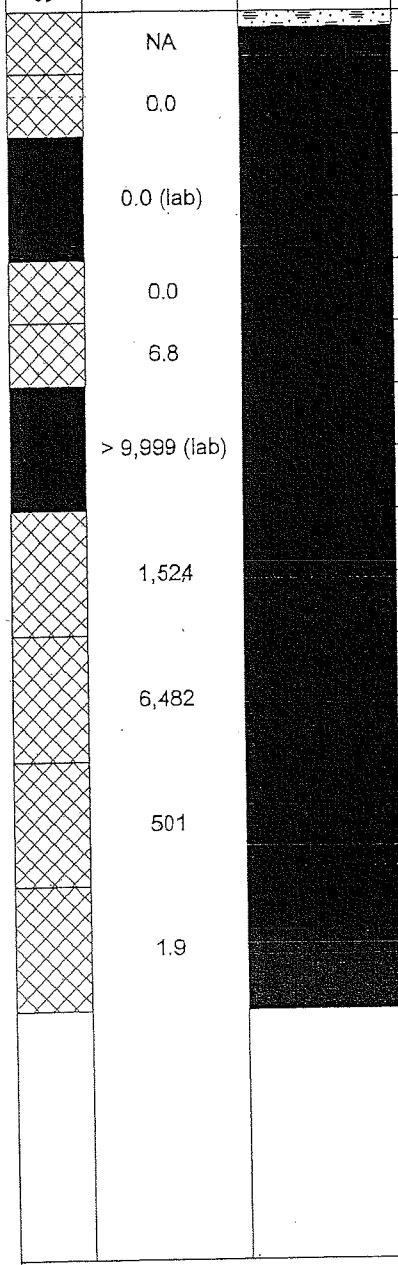
Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-48

TriCore Environmental, LLC

Drill Method: Direct-Push	Date Drilled: 02/02/09	Logged By:
Boring Dia: 2.125 Inches	DTW While Drilling: 8 Feet	M. Czako



Sample	PID (ppm)	Depth (feet)	Lithology	Description
			Concrete	Concrete
	NA		GW	Gravel fill material
	0.0		CL	Brown silty CLAY, trace sand, brittle, no odor, dry
	0.0 (lab)			Brown silty CLAY, trace sand, no odor, slightly moist
	0.0	5	CL	
	6.8			
	> 9,999 (lab)			Brown fine grained SAND, odor, moist, saturated @ 8'
	1,524		SP	
		10		hydrocarbon staining present
	6,482		SP	
				Gray fine grained SAND, odor, saturated
	501		SP	
				Gray fine grained SAND, no odor, saturated
	1.9	15	SP	

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with concrete.

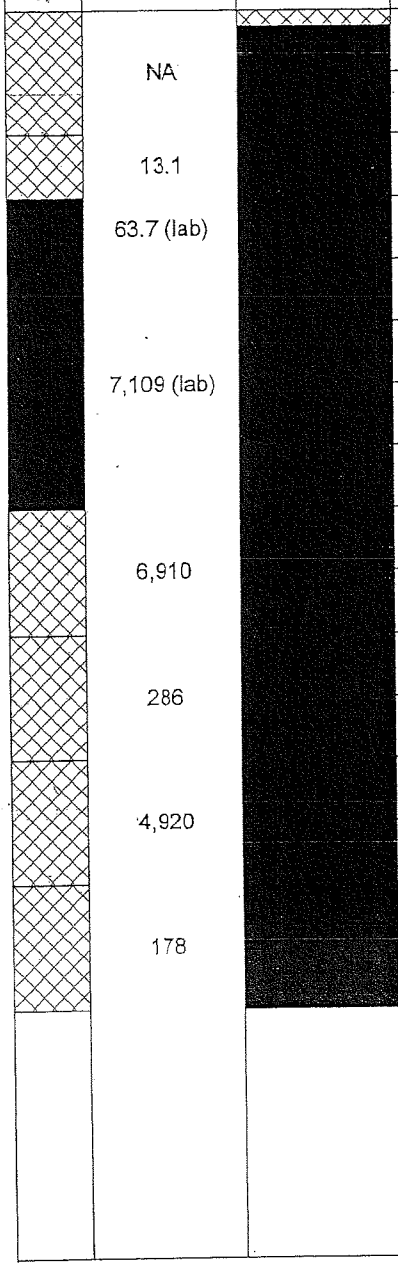
Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-49

TriCore Environmental, LLC

Drill Method: Direct-Push	Date Drilled: 02/02/09	Logged By: M. Czako
Boring Dia: 2.125 Inches	DTW While Drilling: 8 Feet	



Depth (feet)	Lithology	Description
	PT	Grass and topsoil
	CL	Brown and dark gray silty CLAY, trace sand, no odor, moist
	CL	Brown silty CLAY, little silt and sand, semi-stiff, slight odor, moist
5	SP	Brown fine grained SAND, odor, slightly moist
10	SP	Gray fine grained SAND, odor, saturated @ 8'
15		

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with grass.

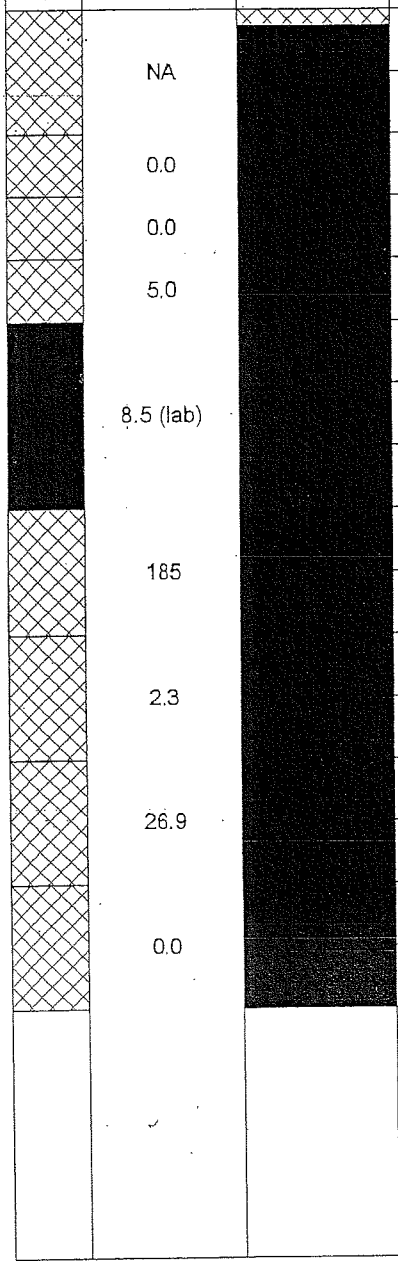
Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

SB-50

TriCore Environmental, LLC

Drill Method: Direct-Push	Date Drilled: 02/02/09	Logged By: M. Czako
Boring Dia: 2.125 Inches	DTW While Drilling: 8 Feet	



Sample	PID (ppm)	Depth (feet)	Lithology	Description
	NA		PT	Grass and topsoil
	0.0		CL	Brown and dark gray silty CLAY, trace sand and gravel, no odor, moist
	0.0			
	5.0	5	SP	Brown fine grained SAND, no odor, slightly moist
	8.5 (lab)			
	185		SP	Gray fine grained SAND, slight odor, saturated @ 8'
	2.3	10	SP	Gray fine grained SAND, no odor, saturated
	26.9			
	0.0	15		

Completion Notes:

Backfilled with bentonite from 16' to 0.25' bls. Capped with grass.

Site:
Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Illinois 60084
IEMA No.: 20081812
LPC No.: 0971855024

Project No.: 100018

APPENDIX E

ILLINOIS EMERGENCY SERVICES AND DISASTER AGENCY INCIDENT REPORTS

Illinois Environmental Protection Agency

8	9	2	7	4	4

IESDA INCIDENT ID

ERU received: 14 : 39 12 / 27 / 89
Duty Officer: Bruflag

1. Caller: Dave Dato
2. Call back phone: 708/526-2821
3. represents: Wauconda F.D.
4. Type of Incident: [ ] Fire [X] Leak or Spill
   [ ] Explosion [ ] Water involvement
   [ ] Gas or Vapor cloud [ ] Other _____
5. Incident Location
   street 399 W. Liberty
   city Wauconda [X] In [ ] Near
   county Lake
   milepost _____ [ ] RR [ ] River [ ] Hwy
   Sec. _____ Twp. _____ Range _____
6. Area Involved: [ ] Highway [ ] Rail [X] Fixed Facility
   [ ] Waterway [ ] Air [ ] Other _____
7. Material(s) involved: Gasoline
   [ ] Gas [X] Liq. [ ] Semisolid [ ] Solid
   [ ] Pesticide [ ] Radioactive
   CAS #: _____
   Placard (UN/NA) _____
   Is this a 302(a) Extremely Hazardous Substance?
   [ ] Yes [ ] No [ ] Unknown
   Is this a RCRA Hazardous Waste?
   [ ] Yes [ ] No [ ] Unknown
   If Yes, is this a RCRA regulated facility
   [ ] Yes [ ] No
8. Container: [ ] Truck [ ] RR car [ ] Drum
   [ ] Above grnd tank [ ] Pipeline
   [X] Under grnd tank [ ] Other _____
   container size: _____
9. Amount released: 1,000 - 1200 Gals
   Rate of release: _____ / min.
10. Cause of release: Hole in UST. Old age. Going to replace
11. Estimated spill extent: _____
    [ ] square feet [ ] square yards
12. [ ] Occurred: ____ : ____ ____ / ____ / ____
    [X] Discovered: ____ : pm 12 / 27 / 89
13. Local response units contacted
    [ ] Fire _____
    [ ] Sheriff _____
    [ ] Police _____
    [ ] Local ESDA _____
    [ ] Other _____
14. On Scene Contact: _____
    On scene phone: _____
15. No. injured: 0 [ ] Haz-mat related
    Where taken: _____
16. Public health risks and/or precautions taken, including # evacuated:
    None reported
17. What state assistance needed?
    None requested
18. Containment/cleanup action & plans:
    Remove tank - hire contractor
19. Weather: [ ] sunny [ ] overcast [ ] night
    [ ] ptly. cldy. [ ] rain [ ] snow
    Temp. ____ °F Wind dir. ____ speed ____ mph
20. Responsible party: Clark Oil & Refining
    Contact: Jerry Kraus / Jack Burke
    phone: 815/ 874-7811
    Mailing address:
    3416 S. Alpine Rd.
    Rockford, IL.
    61109

On scene responders:
[X] Fire Wauconda
[ ] Sheriff _____
[ ] Police _____
[ ] Local ESDA _____
[ ] Other _____

RELEASABLE
JUL 06 2006

(please PRINT and use 24 HOUR TIME)

REVIEWED MD

Incident Number 9 0 3 1 9 9

Date: 10/30/90
Time: 1421
Recv'd by: KK

Notify: ILLINOIS EMERGENCY SERVICES & DISASTER AGENCY
1-800-782-7860 or 217/782-7860

1) Caller: Gary Swanson 2) Call back number: (815) 385-3486

3) Caller represents: Omega Environmental Services

4) Type of incident: [ ] Fire [ ] Explosion [x] Leak or spill
[ ] Gas or vapor cloud [ ] Water involvement [ ] _____

5) Incident location: Street 399 W. Liberty City Wauconda [ ] In [ ] Near

County Lake Milepost _____ : [ ] R.R. [ ] River [ ] Highway

Section _____ Township _____ Range _____

6) Area involved: [ ] Highway [ ] Waterway [ ] Rail [x] Fixed facility [ ] Air [ ] Other _____

7) Material(s) involved gas

Form: [ ] Gas [x] Liquid [ ] Semi-Solid [ ] Solid [ ] Pesticide [ ] Radioactive

UN/NA # _____ CAS # _____

Is this a 302(A) Extremely Hazardous Substance? [ ] Yes [ ] No [ ] Unknown CERCLA? [ ] Yes [ ] No [ ] Unknown

Is this a RCRA Hazardous Waste? [ ] Yes [ ] No [ ] Unknown If Yes, is this a RCRA regulated facility? [ ] Yes [ ] No

8) Container: [ ] Truck [ ] RR Car [ ] Above ground tank [x] Underground tank [ ] Drum [ ] Pipeline
[ ] Other: _____ Container Size: 2-6,000 gals

9) Amount released: unk Rate of release: _____ /minute

10) Cause of release: unk

11) Extent of spill: _____ [ ] Sq. Ft. [ ] Sq. Yd.

12) Incident: [ ] Occurred Date: / / Time: _____
[x] Discovered Date: 10/28/90 Time: _____

RELEASABLE
JUL 06 2006
REVIEWER MD

13) Local emergency unit(s) contacted

		On-scene:	
[ ]	Fire _____	[ ]	Fire _____
[ ]	Sheriff _____	[ ]	Sheriff _____
[ ]	Police _____	[ ]	Police _____
[ ]	Local ESDA _____	[ ]	Local ESDA _____
[ ]	Other _____	[x]	Other ESDA

14) On-scene contact: same as #1 Phone # (same as #2

• OVER •

15) Number injured: -0- Human related? ☐ Yes ☐ No Where taken: _____

16) Public health risks and/or precautions taken; including # evacuated: no

17) Assistance needed from State Agencies: no

18) Containment/cleanup actions and plans: Quality tank and Pump was contracted

19) Weather: ☐ Sunny ☐ Rain ☐ Snow ☐ Overcast ☐ Partly Cloudy ☐ Night
Temperature: _____ F° Wind direction: _____ Wind speed: _____

20) Responsible party: Clark Oil Refining Co.

Contact person: Ray Kirschner Phone# (708)485-3355

Mailing address: 8182 Maryland

St. Louis, MO 63105 - 3721

21) Narrative/Comments:

1425 Faxed to IEPA & Reg. 3

APPENDIX F

HYDRAULIC CONDUCTIVITY, HYDRUALIC GRADIENT, AND GROUNDWATER VELOCITY CALCULATIONS

Logarithmic Average of Hydraulic Conductivity

MW-4:	1.08×10^{-3} cm/sec	=	2.13×10^{-3} ft/min
MW-6:	6.61×10^{-3} cm/sec	=	1.30×10^{-2} ft/min
MW-14:	8.37×10^{-5} cm/sec	=	1.65×10^{-4} ft/min
MW-16:	2.25×10^{-5} cm/sec	=	4.42×10^{-5} ft/min

$\log_{(\text{average value})}$ = [log (2.13×10^{-3} ft/min) + log (1.30×10^{-2} ft/min) + log (1.65×10^{-4} ft/min) + log (4.42×10^{-5} ft/min)] / 4

$\log_{(\text{average value})}$ = -3.173

Average Value = inv. Log (-3.173) = $10^{-3.268}$ = 6.72×10^{-4} ft/min

$\log_{(\text{average value})}$ = [log (2.13×10^{-3} ft/min) + log (1.30×10^{-2} ft/min] / 4

$\log_{(\text{average value})}$ = -3.173

Average Value (Service Station Area) = inv. Log (-3.173) = $10^{-3.268}$ = 5.37×10^{-3} ft/min

$\log_{(\text{average value})}$ = [log (1.65×10^{-4} ft/min) + log (4.42×10^{-5} ft/min)] / 4

$\log_{(\text{average value})}$ = -3.173

Average Value (Osage Park) = inv. Log (-3.173) = $10^{-3.268}$ = 8.60×10^{-5} ft/min

Average Linear Ground-Water Flow Velocity

Darcy's Law: $v = Q / \eta a = v/\eta = -K\Delta H / \eta \Delta L = Ki/\eta_e$

ΔH = difference in hydraulic head
ΔL = distance between well openings
K = hydraulic conductivity
η = effective porosity (assume 0.20)
i = ($\Delta H / \Delta L$); from 8/27/97 potentiometric surface figure (MW-4 and MW-16)

$v = [6.72 \times 10^{-4}$ ft/min (average of all four wells)] x (5 ft/280 ft) / 0.2

$\bar{v} = 5.21 \times 10^{-5}$ ft/min = **31.74 ft/year** (average for entire site)

$v = [5.37 \times 10^{-3}$ ft/min (average of wells MW-4 and MW-6)] x (5 ft/280 ft) / 0.2

$\bar{v} = 4.16 \times 10^{-4}$ ft/min = **254.02 ft/year** (adjusted average for flow in Service Station Area)

$v = [8.60 \times 10^{-5}$ ft/min (average of wells MW-14 and MW-16)] x (5 ft/280 ft) / 0.2

$\bar{v} = 6.69 \times 10^{-6}$ ft/min = **4.07 ft/year** (adjusted average for Osage Park)

HYDRAULIC CONDUCTIVITY (BOUWER AND RICE METHOD)

Project No: C01-7-0011
Project Name: Clark Refining & Marketing, Inc.
Location: Station #646

Well No: MW-4
Slug-in/Slug-out: SLUG-OUT
Test Date: 9/24/97
Test By: DPO

Analyzed By: DPO
Analysis Date: 9/24/97

Data Checked By: PGO
Check Date: 11-13-97

Analysis Checked By:
Check Date:

Variable	Eng. Unit		S.I. Unit		Description
Yo =	0.910	ft	27.7	cm	Drawdown at time "0"
Yt =	0.074	ft	2.3	cm	Drawdown at time "t"
t =	4.00	min	240	sec	Time
SWL =	8.35	ft	254.5	cm	Static water level before slug test
TD =	17.15	ft	522.7	cm	Total depth of well
Le =	8.80	ft	268.2	cm	Length of screen (Le=Lw if SWL is within screen interval)
H =	21.65	ft	659.9	cm	Saturated aquifer thickness
Rw =	0.34	ft	10.4	cm	Radial distance between undisturbed aquifer and well center
Rc =	0.08	ft	2.5	cm	Actual casing inside radius
n =	0.20		0.20		Porosity of sand pack (n = "0" if SWL above screen interval)
Rc.t =	0.17	ft	5.2	cm	Theoretical casing radius (if SWL is within screen interval)
Lw =	8.80	ft	268.2	cm	Total depth of water in well
Le/Rw =	25.9		25.9		Function of dimensionless coefficients
A =	2.3		2.3		Dimensionless coefficient
B =	0.4		0.4		Dimensionless coefficient
C =	1.9		1.9		Dimensionless coefficient

If Lw<H	Ln(Re/Rw) =	2.090	K =	1.08E-03	cm/sec	K = 2.13E-03 ft/min
If Lw=H	Ln(Re/Rw) =	2.438	K =	1.26E-03	cm/sec	K = 2.49E-03 ft/min

HYDRAULIC CONDUCTIVITY = 1.08E-03 cm/sec

COMMENTS:

HYDRAULIC CONDUCTIVITY CALCULATION

Clark Refining & Marketing, Inc.

Station #646

PROJECT NUMBER C01-7-0011

MW-4

SLUG-OUT

BOUWER AND RICE METHOD

(1976, 1989)

VARIABLES			
H =	859.9	cm	Saturated Aquifer Thickness
Rc =	2.5	cm	Radius of Well Casing
Rw =	10.4	cm	Radius of Well and Sand Pack
Le =	268.2	cm	Screen Length
Lw =	268.2	cm	Depth of Water to Bottom of Casing
Yo =	27.7	cm	Graph Variable
Yt =	2.3	cm	Graph Variable
t =	240	sec	Graph Variable
A =	2.3		Interpreted Constant
B =	0.4		Interpreted Constant

HYDRAULIC CONDUCTIVITY = 1.08E-03 cm/sec

Assumption: Saturated aquifer thickness measurement for hydraulic conductivity calculation is estimated at 30 feet below ground surface. Data taken from soil boring MW-8.

HYDRAULIC CONDUCTIVITY (BOUWER AND RICE METHOD)

Project No: C01-7-0011
Project Name: Clark Refining & Marketing, Inc.
Location: Station #646

Well No: MW-6
Slug-in/Slug-out: SLUG-OUT
Test Date: 9/24/97
Test By: DPO

Analyzed By: DPO
Analysis Date: 9/24/97

Data Checked By: PCO
Check Date: 11-17-97

Analysis Checked By:
Check Date:

Variable	Eng. Unit		S.I. Unit		Description
Yo =	0.670	ft	20.4	cm	Drawdown at time "0"
Yt =	0.022	ft	0.7	cm	Drawdown at time "t"
t =	1.00	min	60	sec	Time
SWL =	7.52	ft	229.2	cm	Static water level before slug test
TD =	14.68	ft	447.5	cm	Total depth of well
Le =	7.16	ft	218.2	cm	Length of sceen (Le=Lw if SWL is within screen interval)
H =	22.48	ft	685.2	cm	Saturated aquifer thickness
Rw =	0.34	ft	10.4	cm	Radial distance between undisturbed aquifer and well center
Rc =	0.08	ft	2.5	cm	Actual casing inside radius
n =	0.20		0.20		Porosity of sand pack (n = "0" if SWL above screen interval)
Rc.t =	0.17	ft	5.2	cm	Theoretical casing radius (if SWL is within screen interval)
Lw =	7.16	ft	218.2	cm	Total depth of water in well
Le/Rw =	21.1		21.1		Function of dimensionless coefficients
A =	2.2		2.2		Dimensionless coefficient
B =	0.3		0.3		Dimensionless coefficient
C =	1.7		1.7		Dimensionless coefficient

If Lw<H	Ln(Re/Rw) =	1.906	K =	6.61E-03	cm/sec	K = 1.30E-02 ft/min
If Lw=H	Ln(Re/Rw) =	2.267	K =	7.87E-03	cm/sec	K = 1.55E-02 ft/min

HYDRAULIC CONDUCTIVITY = 6.61E-03 cm/sec

COMMENTS:

HYDRAULIC CONDUCTIVITY CALCULATION

Clark Refining & Marketing, Inc.
Station #648
PROJECT NUMBER C01-7-0011
MW-8
SLUG-OUT

BOUWER AND RICE METHOD
(1976, 1989)

VARIABLES			
H =	685.2	cm	Saturated Aquifer Thickness
Rc =	2.5	cm	Radius of Well Casing
Rw =	10.4	cm	Radius of Well and Sand Pack
Le =	218.2	cm	Screen Length
Lw =	218.2	cm	Depth of Water to Bottom of Casing
Yo =	20.4	cm	Graph Variable
Yt =	0.7	cm	Graph Variable
t =	60	sec	Graph Variable
A =	2.2		Interpretad Constant
B =	0.3		Interpreted Constant

HYDRAULIC CONDUCTIVITY = 6.61E-03 cm/sec

Assumption: Saturated aquifer thickness measurement for hydraulic conductivity calculation is estimated at 30 feet below ground surface. Data taken from soil boring MW-8.

HYDRAULIC CONDUCTIVITY (BOUWER AND RICE METHOD)

Project No: C01-7-0011
Project Name: Clark Refining & Marketing, Inc.
Location: Station #646

Well No: MW-14
Slug-in/Slug-out: SLUG-OUT
Test Date: 9/24/97
Test By: DPO

Analyzed By: DPO
Analysis Date: 9/24/97

Data Checked By: PLO
Check Date: 11-13-97

Analysis Checked By:
Check Date:

Variable	Eng. Unit		S.I. Unit		Description
Yo =	1.500	ft	45.7	cm	Drawdown at time "0"
Yt =	1.050	ft	32.0	cm	Drawdown at time "t"
t =	3.00	min	180	sec	Time
SWL =	0.53	ft	16.2	cm	Static water level before slug test
TD =	23.24	ft	708.4	cm	Total depth of well
Le =	4.80	ft	146.3	cm	Length of screen (Le=Lw if SWL is within screen interval)
H =	56.00	ft	1706.9	cm	Saturated aquifer thickness
Rw =	0.38	ft	11.4	cm	Radial distance between undisturbed aquifer and well center
Rc =	0.08	ft	2.5	cm	Actual casing inside radius
n =	0.00		0.00		Porosity of sand pack (n = "0" if SWL above screen interval)
Rc.t =	0.08	ft	2.5	cm	Theoretical casing radius (if SWL is within screen interval)
Lw =	22.71	ft	692.2	cm	Total depth of water in well
Le/Rw =	12.8		12.8		Function of dimensionless coefficients
A =	1.9		1.9		Dimensionless coefficient
B =	0.3		0.3		Dimensionless coefficient
C =	1.4		1.4		Dimensionless coefficient

If Lw<H	Ln(Re/Rw)=	1.930	K= 8.37E-05	cm/sec	K= 1.65E-04 ft/min
If Lw=H	Ln(Re/Rw)=	2.665	K= 1.15E-04	cm/sec	K= 2.27E-04 ft/min

HYDRAULIC CONDUCTIVITY = 8.37E-05 cm/sec

COMMENTS:

HYDRAULIC CONDUCTIVITY CALCULATION

Clark Refining & Marketing, Inc.

Station #646

PROJECT NUMBER C01-7-0011

MW-14

SLUG-OUT

BOUWER AND RICE METHOD

(1976, 1989)

VARIABLES

H =	1706.9	cm	Saturated Aquifer Thickness
Rc =	2.5	cm	Radius of Well Casing
Rw =	11.4	cm	Radius of Well and Sand Pack
Le =	146.3	cm	Screen Length
Lw =	692.2	cm	Depth of Water to Bottom of Casing
Yo =	45.7	cm	Graph Variable
Yt =	32.0	cm	Graph Variable
t =	180	sec	Graph Variable
A =	1.9		Interpreted Constant
B =	0.3		Interpreted Constant

HYDRAULIC CONDUCTIVITY = 8.37E-05 cm/sec

Assumption: Saturated aquifer thickness measurement for hydraulic conductivity calculation is estimated at 33 feet below ground surface. Data taken from well log for Osage Park monitoring well, Wauconda, IL.

HYDRAULIC CONDUCTIVITY (BOUWER AND RICE METHOD)

Project No: C01-7-0011
Project Name: Clark Refining & Marketing, Inc.
Location: Station #646

Well No: MW-16
Slug-in/Slug-out: SLUG-OUT
Test Date: 9/24/97
Test By: DPO

Analyzed By: DPO
Analysis Date: 9/24/97

Data Checked By: DPO
Check Date: 11-13-97

Analysis Checked By:
Check Date:

Variable	Eng. Unit		S.I. Unit		Description
Yo =	1.200	ft	36.6	cm	Drawdown at time "0"
Yt =	0.600	ft	18.3	cm	Drawdown at time "t"
t =	22.00	min	1320	sec	Time
SWL =	5.86	ft	178.6	cm	Static water level before slug test
TD =	22.86	ft	696.8	cm	Total depth of well
Le =	4.80	ft	146.3	cm	Length of screen (Le=Lw if SWL is within screen interval)
H =	27.14	ft	827.2	cm	Saturated aquifer thickness
Rw =	0.38	ft	11.4	cm	Radial distance between undisturbed aquifer and well center
Rc =	0.08	ft	2.5	cm	Actual casing inside radius
n =	0.00		0.00		Porosity of sand pack (n = "0" if SWL above screen interval)
Rc.t =	0.08	ft	2.5	cm	Theoretical casing radius (if SWL is within screen interval)
Lw =	17.00	ft	518.2	cm	Total depth of water in well
Le/Rw =	12.8		12.8		Function of dimensionless coefficients
A =	1.9		1.9		Dimensionless coefficient
B =	0.3		0.3		Dimensionless coefficient
C =	1.4		1.4		Dimensionless coefficient

If Lw<H	Ln(Re/Rw) =	1.955	K =	2.25E-05	cm/sec	K = 4.42E-05 ft/min
If Lw=H	Ln(Re/Rw) =	2.528	K =	2.90E-05	cm/sec	K = 5.71E-05 ft/min

HYDRAULIC CONDUCTIVITY = 2.25E-05 cm/sec

COMMENTS:

HYDRAULIC CONDUCTIVITY CALCULATION

Clark Refining & Marketing, Inc.

Station #646

PROJECT NUMBER: C01-7-0011

MW-16

SLUG-OUT

BOUWER AND RICE METHOD

(1976, 1989)

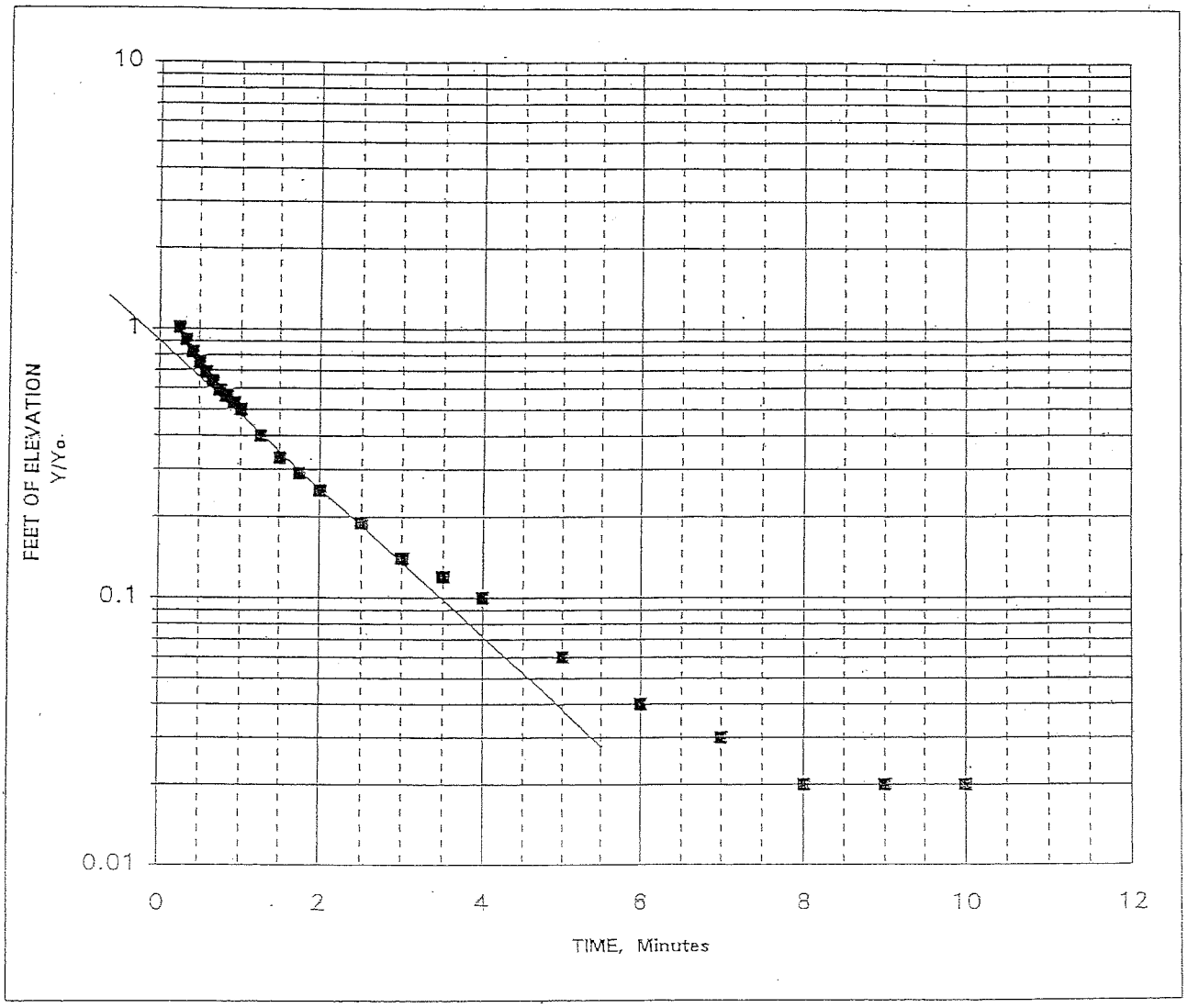
VARIABLES

H =	827.2	cm	Saturated Aquifer Thickness
Rc =	2.5	cm	Radius of Well Casing
Rw =	11.4	cm	Radius of Well and Sand Pack
Le =	146.3	cm	Screen Length
Lw =	518.2	cm	Depth of Water to Bottom of Casing
Yo =	36.6	cm	Graph Variable
Yt =	18.3	cm	Graph Variable
t =	1320	sec	Graph Variable
A =	1.9		Interpreted Constant
B =	0.3		Interpreted Constant

HYDRAULIC CONDUCTIVITY = 2.25E-05 cm/sec

Assumption: Saturated aquifer thickness measurement for hydraulic conductivity calculation is estimated at 33 feet below ground surface. Data taken from well log for Osage Park monitoring well, Wauconda, IL.

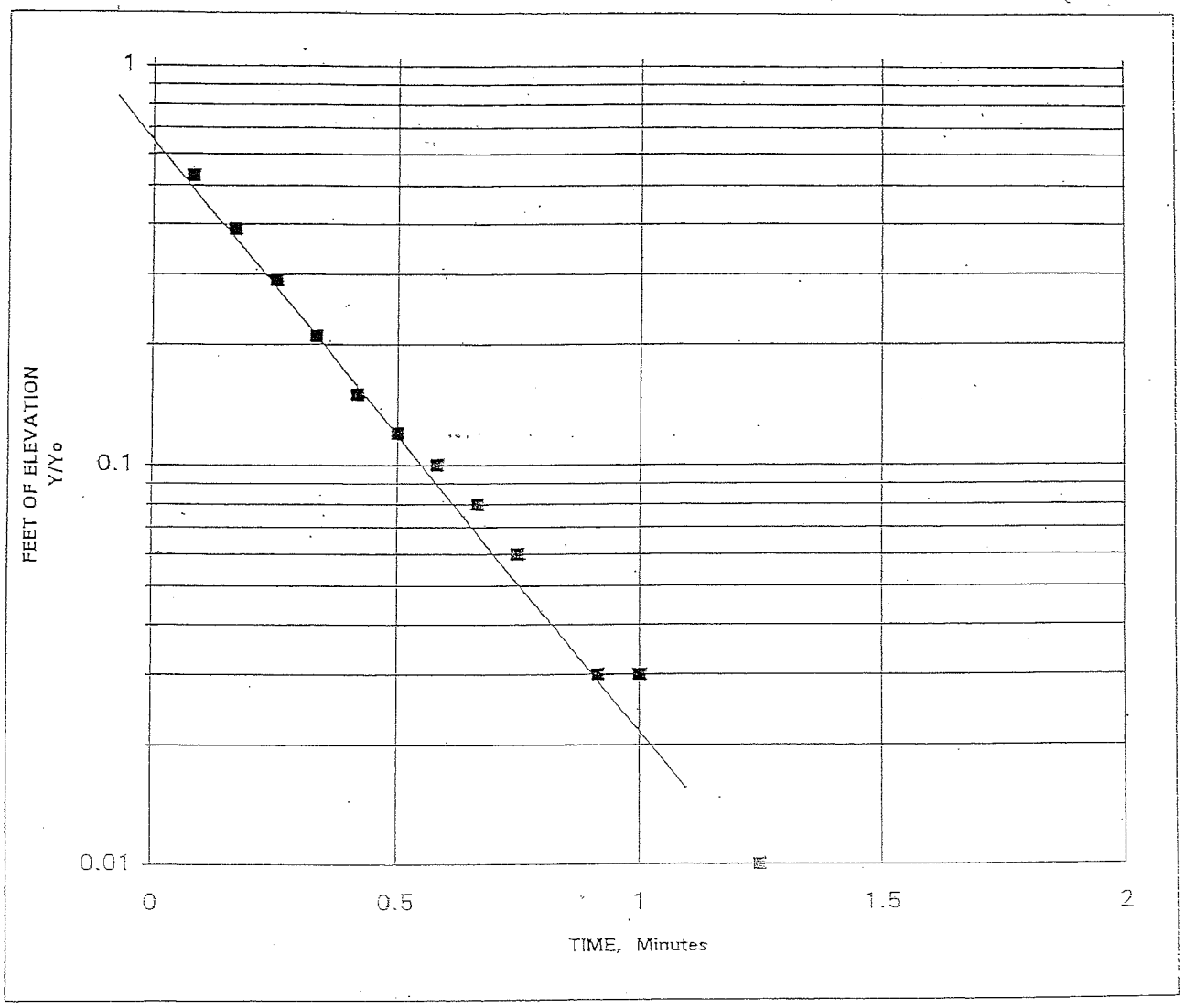
Figure 4: SLUG TEST DATA
Well MW-4
Slug Out



Time	Y
0	0.91
4	0.074

Prepared/Date: ____/_____

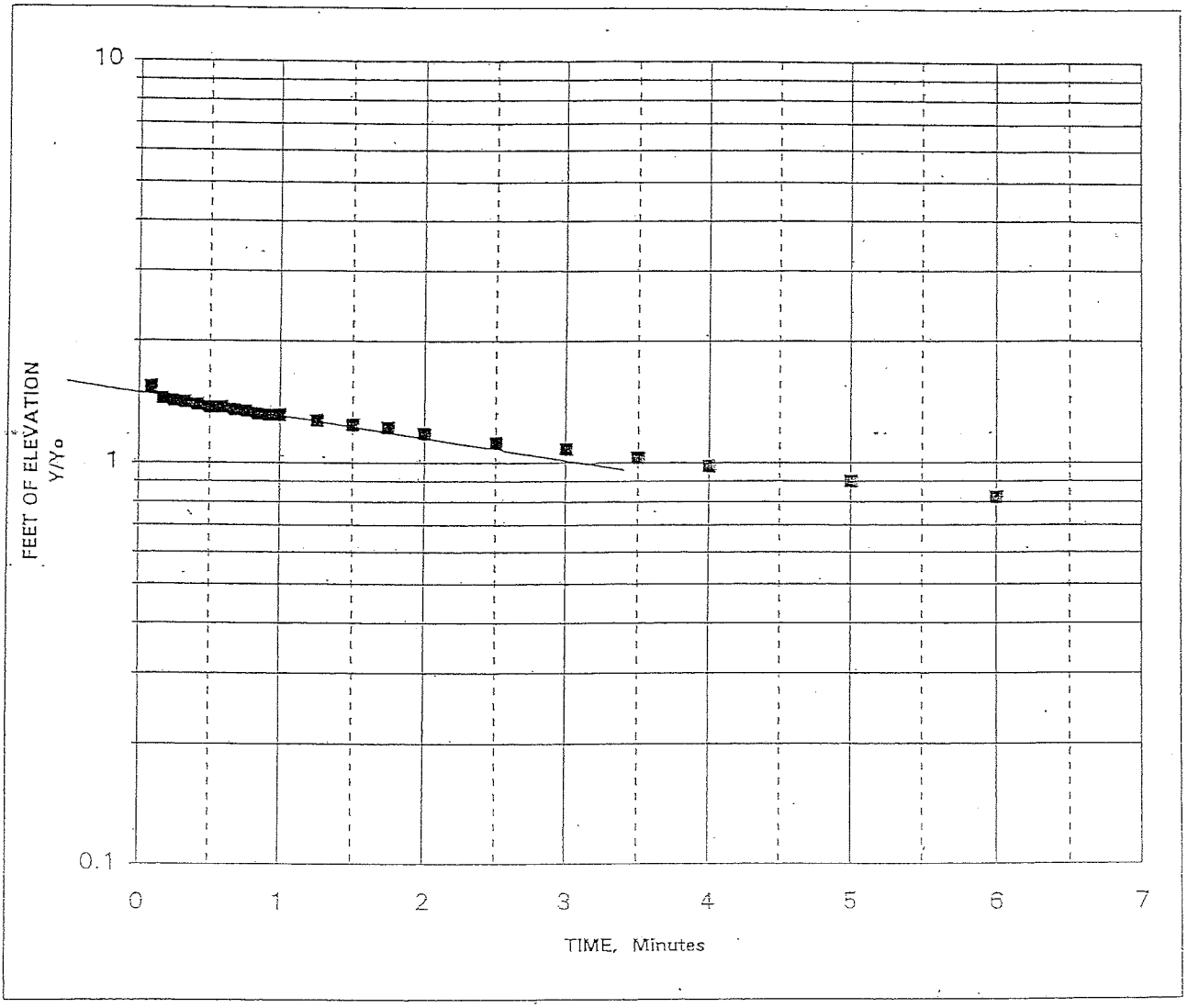
Figure 4: SLUG TEST DATA
Well MW-6
Slug Out



Time	Y
0	0.67
1	0.022

Prepared/Date: ____/_____

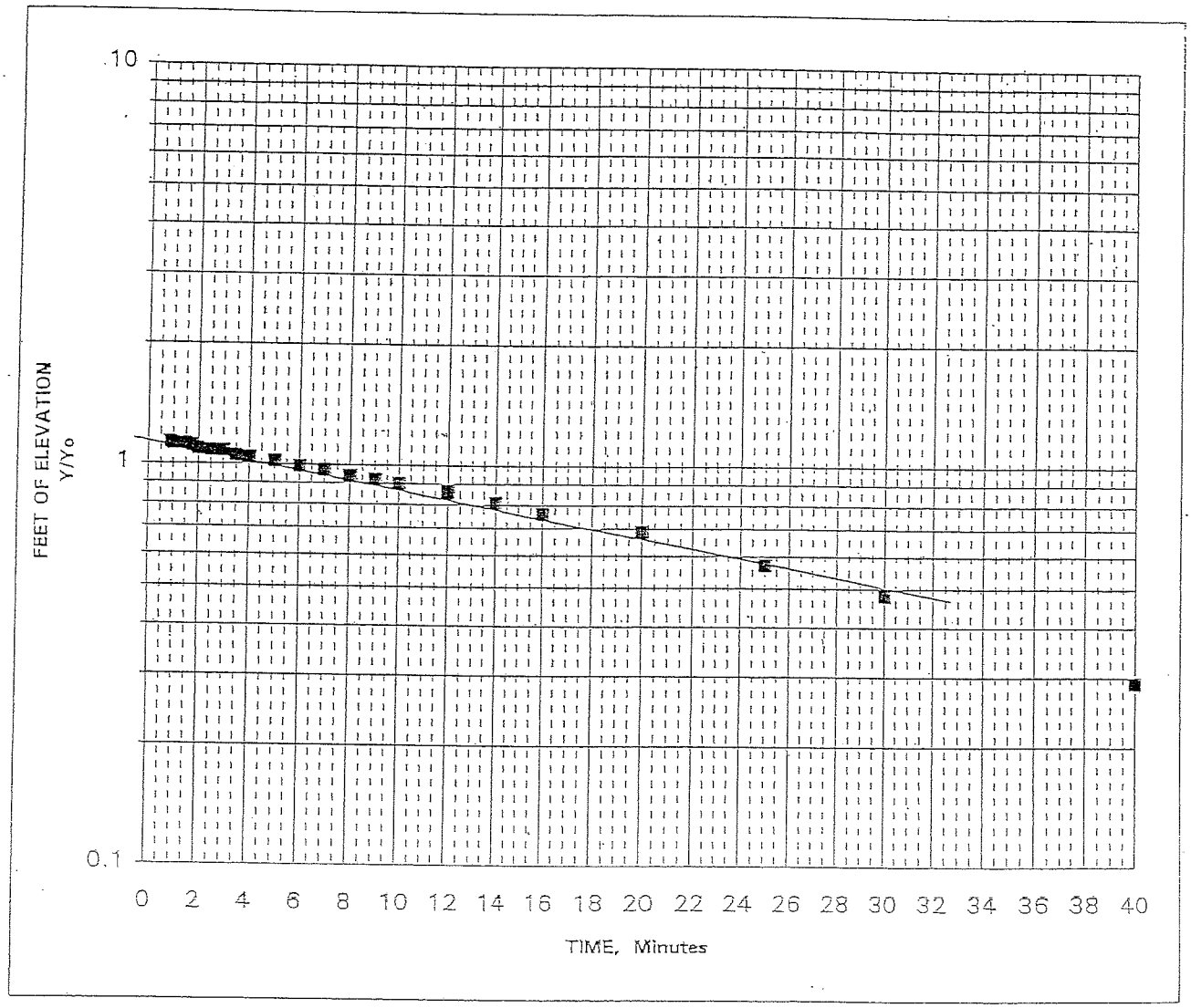
Figure 4: SLUG TEST DATA
Well MW-14
Slug Out



Time	Y
0	1.5
3	1.05

Prepared/Date:____/_____

Figure 4: SLUG TEST DATA
Well MW-16
Slug Out



Time	Y
0	1.2
22	0.6

Prepared/Date:_____/_____

HYDRAULIC GRADIENT CALCULATION

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

Gauging Date: January 5, 2009

The value for the hydraulic gradient was solved using the groundwater elevation data from MW-26 (104.15 feet), MW-15 (99.85 feet), and MW-18 (96.85 feet), and the distance between MW-26 and MW-18 (466). These values were used to solve for the true hydraulic gradient in three dimensions (USGS 1983).

$$\left[\frac{(h_1 - h_2)}{x}\right] = \left[\frac{(h_1 - h_3)}{d_1 \rightarrow d_3}\right] \qquad \text{Equation \#1}$$

Where:

h_1	=	highest head	MW-26	(104.15 feet)
h_2	=	intermediate head	MW-15	(99.85 feet)
h_3	=	lowest head	MW-18	(96.85 feet)
$d_1 \rightarrow d_3$	=	distance from h_1 to h_3		466 feet
x	=	distance between h_1 and h_3 at which the total head is equal to h_2 (value solved by equation #1)		274.49 feet

Solving the above equation for x results in a value of 274.49 feet, which is the distance from h1 where the total head is equal to that at h2 [MW-15 (99.85 feet)]

Hydraulic gradient is then calculated as: $$i = \left[\frac{(h_2 - h_3)}{x \rightarrow d_3}\right] \qquad \text{Equation \#2}$$

Where:

$x \rightarrow d_3$	=	distance from distance x to h_3 = ($d_1 \rightarrow d_3$) - x	191.51 feet
i	=	hydraulic gradient (solved by equation #2)	0.0157

SEEPAGE VELOCITY CALCULATION

Shivam Energy, Inc.
399 West Liberty Street
Wauconda, Lake County, Illinois 60084

The seepage velocity was calculated using site-specific parameters such as the hydraulic conductivity, the hydraulic gradient, and the effective porosity. These site-specific parameters and the equation used to calculate the seepage velocity are summarized below.

$$V_s = \left[\frac{K}{n_e}\right] i \qquad \text{Equation \#1}$$

Where:

K	=	hydraulic conductivity (see attached sheet for calculations)	6.100E-03 cm/sec
i	=	hydraulic gradient (see attached sheet for calculations)	0.0157 no units
n_e	=	effective porosity (Table 4)	34.4 %
V_s	=	seepage velocity (solved by Equation #1 above)	2.784E-04 cm/sec

APPENDIX G

POTABLE WATER SUPPLY WELL INFOMRATION

Illinois Environmental Protection Agency

USGS science for a changing world

Source Water Assessment Program

FACT SHEET

WAUCONDA

LAKE COUNTY

Prepared in cooperation with the U.S. Geological Survey.

Information and data used in the preparation of this Fact Sheet are provided by the Illinois EPA and are subject to revision.

IMPORTANCE OF SOURCE WATER:

The Village of Wauconda (Facility Number 0971850) utilizes five active community water supply wells. Wells #2, #3, #4, #5, and #6 (Illinois EPA #20288, #20289, #20290, #00638, and #00639, respectively) combine to produce 1,105,000 gallons per day to an estimated population of 10,030 at 3,824 service connections.

WATER SUPPLIES THAT OBTAIN SOURCE WATER FROM THIS FACILITY:

No connected water supplies existed at the time this Source Water Assessment fact sheet was completed.

SOURCE OF WATER SUPPLY:

Well #2 is 257 feet deep and located at the rear of the Police Station at 100 Main Street. Well #3 is 325 feet deep and located east of Osage Street in Osage Park. Both of these wells are located in a shallow bedrock aquifer. Well #4, located in a deep bedrock aquifer at 1,264 feet deep, is approximately 150 feet southeast of the intersection of Barbara Lane and Bonner Road. All three bedrock wells are overlain by relatively impermeable silty or clayey till. Well #5 is 175 feet deep and located 600 feet northwest of the intersection of Lake Shore Boulevard and State Route 176. Well #6 is 104 feet deep and located 300 feet northeast of the intersection of West Slocum Lake Road and Larkdale Row. Wells #5 and #6 both utilize a sand and gravel aquifer. The aquifer is overlain sand, gravel, silt, and clay of low permeability. Permeability is a measure of the ability of a soil or sediment to transmit fluids. Wauconda's active community supply wells are not considered geologically sensitive by the Illinois EPA because they are located in confined aquifers. Well #1 (Illinois EPA #20287), located at the rear of the Police Station at 100 Main Street, has been properly abandoned.

The Village of Wauconda also has three proposed wells. Wells #7, #8, and #9 (Illinois EPA #01518, #01519, and #01520, respectively) are located approximately 1.25 miles north of Wauconda between Gilmer and Gossell Roads. These wells are in a deep bedrock aquifer ranging in depth from 1,010 feet to 1,025 feet.

WELL DATA FOR THIS FACILITY:

Well ID	Well Description	Status	Depth (Feet)	Min Setback (Feet)	Aquifer Description
00638	WELL 5 LKSHORE 1000 FT N OF	A	175	200	Sand & Gravel
00639	WELL 6 97' N OF SLOCUM, 400' W	A	104	200	Sand & Gravel
20287	WELL 1 AT REAR OF POLICE STA	B	230	200	Devonian/Silurian
20288	W2 AT REAR OF POLICE STA AT	A	257	200	Devonian/Silurian
20289	WELL 3 OSAGE ST IN PARK	A	325	200	Devonian/Silurian
20290	WELL 4 BARBARA LN S OF BONN	A	1264	200	Cambrian/Ordovician

SOURCE WATER QUALITY:

Wauconda's wells were sampled for inorganic chemicals (IOC), synthetic organic compounds (SOC), and volatile organic compounds (VOC) between 1982 and 2000 as part of the Statewide Groundwater Monitoring Network.

IOC analysis indicates that concentrations of these compounds are consistent with other wells utilizing similar bedrock aquifers and sand and gravel aquifers in Illinois. It is important to note that the IOC results were below the Groundwater Quality Standards established under 35 Illinois Administrative Code Part 620.410.

Review of the IOC, SOC and VOC samples did not detect quantifiable levels of any organic or inorganic compounds.

FINISHED WATER QUALITY:

The IOC, VOC, and SOC levels sampled in Wauconda's wells were below the Groundwater Quality Standards after treatment. Further information on finished water quality data tables of monitored parameters, contaminants detected, health advisory information, drinking water standards, and maximum contaminant levels is available at http://www.epa.gov/ogwdw/. Similar information is also available in the Consumer Confidence Report supplied by the Village of Hardin to its consumers.

POTENTIAL SOURCES OF CONTAMINATION:

The sites labeled on the Wellhead Protection Planning Map and included in the following tables are considered "potential" sources of contamination. (Maps and tables are not available in the Visually Impaired Accessible version. However, the information presented in the maps and tables is summarized within the following text sections of this fact sheet.) The Illinois EPA performed a detailed Well Site Survey of Wauconda's wells in 1993 to identify potential sources of contamination. These sources are identified based on the nature of their activity, the availability of data in electronic databases, and their geographic proximity to the source water protection area. In addition, the Illinois EPA made use of information from its leaking underground storage tank database (http://epadata.epa.state.il.us/land/ust/search.asp) and site remediation program database (http://epadata.epa.state.il.us/land/srp/search.asp) to further assess potential sources of contamination to the community's source water. These databases include information from the Illinois EPA Division of Land Pollution Control (LPC) and the Illinois Emergency Management Agency (IEMA). The following is a list of facilities contained within these databases. As a result of multiple possible contamination sources, individual sites may be listed in the table more than once in relation to a well.

IEMA #	LPC #	Site Name Address City ZIP Code
20001848	0971855085	Libertyville Bank & Trust; 495 West Liberty St.; Wauconda 60084
20010060	0971855009	Schafer, Jay; 330 South Main St.; Wauconda 60084
20010497	0971855088	Arch Diocese of Chicago; 318 Bangs; Wauconda 60084
20011700		BP Products North America, Inc.; 512 Liberty St.; Wauconda 60084
20012021		Culligan Dealer Corp.; 123-127 Main St.; Wauconda 60084
20030619		Oriental Express Service; 26526 North Hwy. 12; Wauconda 60084
20030774		Lemenager, Spencer; 480 West Liberty St.; Wauconda 60084
881752	0971855019	Amoco Oil Co. #15094; 306 South Main; Wauconda 60084
892744	0971855024	Clark Oil & Refining; 399 West Liberty; Wauconda 60084
900526	0971855025	Wauconda Boat Inc.; 100 North Main St.; Wauconda 60084
900573	0971855028	Lake County Forest Preserve Dist.; Hwy. 176 & Fairmont; Wauconda 60084
901772	0971855029	Wauconda C.U.S.D. #118; Osage St; Wauconda 60084
903199	0971855024	Clark Oil & Refining; 399 West Liberty;Wauconda 60084
903324	0971855033	Industrial Gas Truck Inc.; 1301 Old Rand Rd.; Wauconda 60084
911429	0971855037	Wauconda Hwy. Dept.; 505 Bonner; Wauconda 60084
912017	0971855038	DeBoer Trucking; 398 West Liberty St.; Wauconda 60084
923012	0971855047	Frito-Lay Inc.; 481 Bonner Rd.; Wauconda 60084
923278	0971855048	Wauconda Volunteer Fire Dept.; 109 West Liberty; Wauconda 60084
931089	0971855052	Leicht Automotive Imports; 26474 North Hwy. 59; Wauconda 60084

940117 0971855053 Phillips 66; 1200 North Rand Rd.; Wauconda 60084
940358 0971855052 Leicht Automotive Imports; 26474 North Hwy. 59; Wauconda 60084
941390 0971855055 John's Automotive Repair; 221 South Main; Wauconda 60084
942691 0971855030 Ford, Victor; Rt. 12 1/2 mile north of Rt. 176; Wauconda 60084
950812 0971850006 Wauconda, Village of; 302 Slocum Lake Rd.; Wauconda 60084
960798 0971855062 Petro Chemical Transport; 205 Main St.; Wauconda 60084
971403 0971855070 Williams Park Improvement Assoc.; 26730 North Marion; Wauconda 60084
980046 0971855072 Steiner Service Station; 308 West Liberty St.; Wauconda 60084
981810 0971855074 McGinty Bros., Inc.; 27788 West Case Rd.; Wauconda 60084
982286 0971855062 Sweeney Oil Co.; 205 North Main St.; Wauconda 60084
990747 0971855077 Berger Excavating Contractors; 1205 Garland; Wauconda 60084
991139 0971850006 Wauconda, Village of; 302 Slocum Lake Rd.; Wauconda 60084
991494 0971850014 K Construction of Wauconda, Inc.; 29693 North Hwy. 12; Wauconda 60084-9044
992418 0971850005 Oriental Express Service; 26526 North Hwy. 12; Wauconda 60084

SITE DATA FOR THIS FACILITY:

Well ID	Map Code	Site Name	Site Description	Distance (Feet)
00639	07006	WAUCONDA CAR WASH	EQUIPMENT/VEHICLE WASHING	275
00639	07011	ACRES ENTERPRISES/KNOLL ST	NURSERY/GREENHOUSE	750
00639	07016	LIBERTY POOLS AND MORE	CHEMICAL HANDLING (i.e. MANUF	2300
00639	07015	BAVARO'S CLEANERS	DRY CLEANERS	1700
00639	07007	LUBE PLUS 10 MINUTE OIL CHA	AUTO REPAIR	275
00639	07028	TELEVISION LABORATORIES	MANUFACTURING PROCESS (e.g.	3350
00639	07010	MEINKE DISCOUNT MUFFLER	AUTO REPAIR	375
00639	07008	LUBE PLUS 10 MINUTE OIL CHA	BELOW GROUND STORAGE (PET	275
00639	07005	IN-A-WINK PRINTING	PRINTING	450
00639	07027	WAUCONDA JR. HIGH SCHOOL	BELOW GROUND STORAGE (PET	2175
00639	07009	ACE HARDWARE	HARDWARE STORE	525
00639	07023	CLARK SERVICE STATION	BELOW GROUND STORAGE (PET	2875
00639	07013	NEDZA AMOCO SERVICE	BELOW GROUND STORAGE (PET	1425
00639	07024	CAROUSEL CLEANERS/DEBOER	DRY CLEANERS	3100
00639	07012	ACRES ENTERPRISES/KNOLL ST	OFFICE	750
00639	07025	CAROUSEL CLEANERS/DEBOER	BELOW GROUND STORAGE (PET	3100
00639	07026	WAUCONDA GRADE SCHOOL	BELOW GROUND STORAGE (PET	2300
00639	07014	LIBERTY CLEANERS	DRY CLEANERS	1275
00639	07034	WAUCONDA PAINT AND GLASS	CHEMICAL HANDLING (i.e. MANUF	3900
00639	07020	ILLINOIS BELL TELEPHONE CO.	BELOW GROUND STORAGE (PET	2675
00639	07032	JOHN'S AUTO REPAIR	AUTO REPAIR	4275
00639	07019	SEARS PAINT AND HARDWARE	HARDWARE STORE	2475
00639	07029	STEINER SERVICE STATION	BELOW GROUND STORAGE (PET	4000
00639	07018	WAUCONDA DEPT. OF PUBLIC	BELOW GROUND STORAGE (PET	1650
00639	07033	WAUCONDA BOAT SALES	BELOW GROUND STORAGE (PET	3625
00639	07017	WAUCONDA DEPT. OF PUBLIC	DOMESTIC WASTE WATER TREA	1650
00639	07031	WAUCONDA FIRE DEPT.	BELOW GROUND STORAGE (PET	4200
00639	07030	SWEENEY CITGO	BELOW GROUND STORAGE (PET	3400
00639	07021	BOEHMER CHEVROLET SALES	AUTO REPAIR	2725
00639	07004	WAUCONDA RADIATOR REPAIR	AUTO REPAIR	700
00639	07022	BOEHMER CHEVROLET SALES	BELOW GROUND STORAGE (PET	2725
00639	16237	CAR WASH	EQUIPMENT/VEHICLE WASHING	634
00639	16238	HARDWARE STORE	HARDWARE STORE	611
20287	07023	CLARK SERVICE STATION	BELOW GROUND STORAGE (PET	1775
20287	07012	ACRES ENTERPRISES/KNOLL ST	OFFICE	3700
20287	07025	CAROUSEL CLEANERS/DEBOER	BELOW GROUND STORAGE (PET	1850
20287	07018	WAUCONDA DEPT. OF PUBLIC	BELOW GROUND STORAGE (PET	1825

Well ID	Map Code	Site Name	Site Description	Distance (Feet)
20287	07020	ILLINOIS BELL TELEPHONE CO.	BELOW GROUND STORAGE (PET	2150
20287	07013	NEDZA AMOCO SERVICE	BELOW GROUND STORAGE (PET	3000
20287	07022	BOEHMER CHEVROLET SALES	BELOW GROUND STORAGE (PET	1975
20287	07021	BOEHMER CHEVROLET SALES	AUTO REPAIR	1975
20287	07017	WAUCONDA DEPT. OF PUBLIC	DOMESTIC WASTE WATER TREA	1825
20287	07014	LIBERTY CLEANERS	DRY CLEANERS	2700
20287	07015	BAVARO'S CLEANERS	DRY CLEANERS	2500
20287	07016	LIBERTY POOLS AND MORE	CHEMICAL HANDLING (i.e. MANUF	2600
20287	07024	CAROUSEL CLEANERS/DEBOER	DRY CLEANERS	1850
20287	07033	WAUCONDA BOAT SALES	BELOW GROUND STORAGE (PET	175
20287	07004	WAUCONDA RADIATOR REPAIR	AUTO REPAIR	3700
20287	07030	SWEENEY CITGO	BELOW GROUND STORAGE (PET	400
20287	07005	IN-A-WINK PRINTING	PRINTING	4325
20287	07009	ACE HARDWARE	HARDWARE STORE	4150
20287	07032	JOHN'S AUTO REPAIR	AUTO REPAIR	850
20287	07029	STEINER SERVICE STATION	BELOW GROUND STORAGE (PET	1500
20287	07031	WAUCONDA FIRE DEPT.	BELOW GROUND STORAGE (PET	875
20287	07007	LUBE PLUS 10 MINUTE OIL CHA	AUTO REPAIR	3900
20287	07006	WAUCONDA CAR WASH	EQUIPMENT/VEHICLE WASHING	4050
20287	07008	LUBE PLUS 10 MINUTE OIL CHA	BELOW GROUND STORAGE (PET	3900
20287	07034	WAUCONDA PAINT AND GLASS	CHEMICAL HANDLING (i.e. MANUF	175
20287	07027	WAUCONDA JR. HIGH SCHOOL	BELOW GROUND STORAGE (PET	1250
20287	07019	SEARS PAINT AND HARDWARE	HARDWARE STORE	2250
20287	07010	MEINKE DISCOUNT MUFFLER	AUTO REPAIR	3750
20287	07026	WAUCONDA GRADE SCHOOL	BELOW GROUND STORAGE (PET	1200
20287	07011	ACRES ENTERPRISES/KNOLL ST	NURSERY/GREENHOUSE	3700
20287	07028	TELEVISION LABORATORIES	MANUFACTURING PROCESS (e.g.	1200
20288	07034	WAUCONDA PAINT AND GLASS	CHEMICAL HANDLING (i.e. MANUF	200
20288	07033	WAUCONDA BOAT SALES	BELOW GROUND STORAGE (PET	200
20288	07032	JOHN'S AUTO REPAIR	AUTO REPAIR	850
20288	07020	ILLINOIS BELL TELEPHONE CO.	BELOW GROUND STORAGE (PET	2200
20288	07031	WAUCONDA FIRE DEPT.	BELOW GROUND STORAGE (PET	875
20288	07021	BOEHMER CHEVROLET SALES	AUTO REPAIR	2050
20288	07030	SWEENEY CITGO	BELOW GROUND STORAGE (PET	400
20288	07023	CLARK SERVICE STATION	BELOW GROUND STORAGE (PET	1825
20288	07026	WAUCONDA GRADE SCHOOL	BELOW GROUND STORAGE (PET	1350
20288	07029	STEINER SERVICE STATION	BELOW GROUND STORAGE (PET	1475
20288	07028	TELEVISION LABORATORIES	MANUFACTURING PROCESS (e.g.	1225
20288	07027	WAUCONDA JR. HIGH SCHOOL	BELOW GROUND STORAGE (PET	1250
20288	07024	CAROUSEL CLEANERS/DEBOER	DRY CLEANERS	1875
20288	07025	CAROUSEL CLEANERS/DEBOER	BELOW GROUND STORAGE (PET	1875
20288	07022	BOEHMER CHEVROLET SALES	BELOW GROUND STORAGE (PET	2050
20288	07005	IN-A-WINK PRINTING	PRINTING	4350
20288	07009	ACE HARDWARE	HARDWARE STORE	4200
20288	07008	LUBE PLUS 10 MINUTE OIL CHA	BELOW GROUND STORAGE (PET	3925
20288	07011	ACRES ENTERPRISES/KNOLL ST	NURSERY/GREENHOUSE	3725
20288	07012	ACRES ENTERPRISES/KNOLL ST	OFFICE	3725
20288	07007	LUBE PLUS 10 MINUTE OIL CHA	AUTO REPAIR	3925
20288	07006	WAUCONDA CAR WASH	EQUIPMENT/VEHICLE WASHING	4050
20288	07013	NEDZA AMOCO SERVICE	BELOW GROUND STORAGE (PET	3025
20288	07010	MEINKE DISCOUNT MUFFLER	AUTO REPAIR	3775
20288	07014	LIBERTY CLEANERS	DRY CLEANERS	2750

Well ID	Map Code	Site Name	Site Description	Distance (Feet)
20288	07004	WAUCONDA RADIATOR REPAIR	AUTO REPAIR	3750
20288	07015	BAVARO'S CLEANERS	DRY CLEANERS	2550
20288	07019	SEARS PAINT AND HARDWARE	HARDWARE STORE	2300
20288	07016	LIBERTY POOLS AND MORE	CHEMICAL HANDLING (i.e. MANUF	2600
20288	07017	WAUCONDA DEPT. OF PUBLIC	DOMESTIC WASTE WATER TREA	1850
20288	07018	WAUCONDA DEPT. OF PUBLIC	BELOW GROUND STORAGE (PET	1850
20289	07028	TELEVISION LABORATORIES	MANUFACTURING PROCESS (e.g.	625
20289	07034	WAUCONDA PAINT AND GLASS	CHEMICAL HANDLING (i.e. MANUF	1425
20289	07009	ACE HARDWARE	HARDWARE STORE	2950
20289	07027	WAUCONDA JR. HIGH SCHOOL	BELOW GROUND STORAGE (PET	1000
20289	07033	WAUCONDA BOAT SALES	BELOW GROUND STORAGE (PET	1325
20289	07008	LUBE PLUS 10 MINUTE OIL CHA	BELOW GROUND STORAGE (PET	2750
20289	07007	LUBE PLUS 10 MINUTE OIL CHA	AUTO REPAIR	2750
20289	07029	STEINER SERVICE STATION	BELOW GROUND STORAGE (PET	1250
20289	07031	WAUCONDA FIRE DEPT.	BELOW GROUND STORAGE (PET	1450
20289	07005	IN-A-WINK PRINTING	PRINTING	3200
20289	07006	WAUCONDA CAR WASH	EQUIPMENT/VEHICLE WASHING	2900
20289	07004	WAUCONDA RADIATOR REPAIR	AUTO REPAIR	2850
20289	07023	CLARK SERVICE STATION	BELOW GROUND STORAGE (PET	450
20289	07030	SWEENEY CITGO	BELOW GROUND STORAGE (PET	1175
20289	07032	JOHN'S AUTO REPAIR	AUTO REPAIR	1550
20289	07020	ILLINOIS BELL TELEPHONE CO.	BELOW GROUND STORAGE (PET	700
20289	07021	BOEHMER CHEVROLET SALES	AUTO REPAIR	625
20289	07016	LIBERTY POOLS AND MORE	CHEMICAL HANDLING (i.e. MANUF	1100
20289	07015	BAVARO'S CLEANERS	DRY CLEANERS	1125
20289	07022	BOEHMER CHEVROLET SALES	BELOW GROUND STORAGE (PET	625
20289	07018	WAUCONDA DEPT. OF PUBLIC	BELOW GROUND STORAGE (PET	850
20289	07014	LIBERTY CLEANERS	DRY CLEANERS	1475
20289	07024	CAROUSEL CLEANERS/DEBOER	DRY CLEANERS	625
20289	07013	NEDZA AMOCO SERVICE	BELOW GROUND STORAGE (PET	1600
20289	07025	CAROUSEL CLEANERS/DEBOER	BELOW GROUND STORAGE (PET	625
20289	07012	ACRES ENTERPRISES/KNOLL ST	OFFICE	2400
20289	07017	WAUCONDA DEPT. OF PUBLIC	DOMESTIC WASTE WATER TREA	850
20289	07011	ACRES ENTERPRISES/KNOLL ST	NURSERY/GREENHOUSE	2400
20289	07019	SEARS PAINT AND HARDWARE	HARDWARE STORE	800
20289	07010	MEINKE DISCOUNT MUFFLER	AUTO REPAIR	2575
20289	07026	WAUCONDA GRADE SCHOOL	BELOW GROUND STORAGE (PET	400
20289	16234	STRAND SEPTIC	MULTIPLE SEPTIC SYSTEMS	3020
20289	16235	MOTEL SEPTIC	MULTIPLE SEPTIC SYSTEMS	2743
20290	07035	HERITAGE LANDFIELD	WAREHOUSE	1475
20290	07036	BERGER EXCAVATING CONTRA	BELOW GROUND STORAGE (PET	800
20290	07037	WAUCONDA LANDFILL	LANDFILL WASTE	1000
20290	16786	MANU PLANT	MANUFACTURING PROCESS (e.g.	2785

OTHER IDENTIFIED POTENTIAL SOURCES:

For this community water supply, no additional potential sources of contamination have been identified beyond those in Illinois EPA databases.

SUSCEPTIBILITY TO CONTAMINATION:

To determine Wauconda's susceptibility to groundwater contamination, a Well Site Survey, published in 1993 by the Illinois EPA, was reviewed. During the survey of Wauconda's source water protection area, the Illinois EPA staff recorded one potential source, route or problem site within the 200 foot setback of well #2 and an additional four more within the1,000 foot survey radius. Ten potential sources, routes or problem sites were recorded within

the 1,000 foot survey radius of well #3. One potential source, route or problem site was recorded within the 1,000 foot survey radius of well #4. No potential sources, routes or problem sites were recorded within the 1,000 foot survey radius of well #5. Eleven potential sources, routes or problem sites were recorded within the 1,000 foot survey radius of well #6.

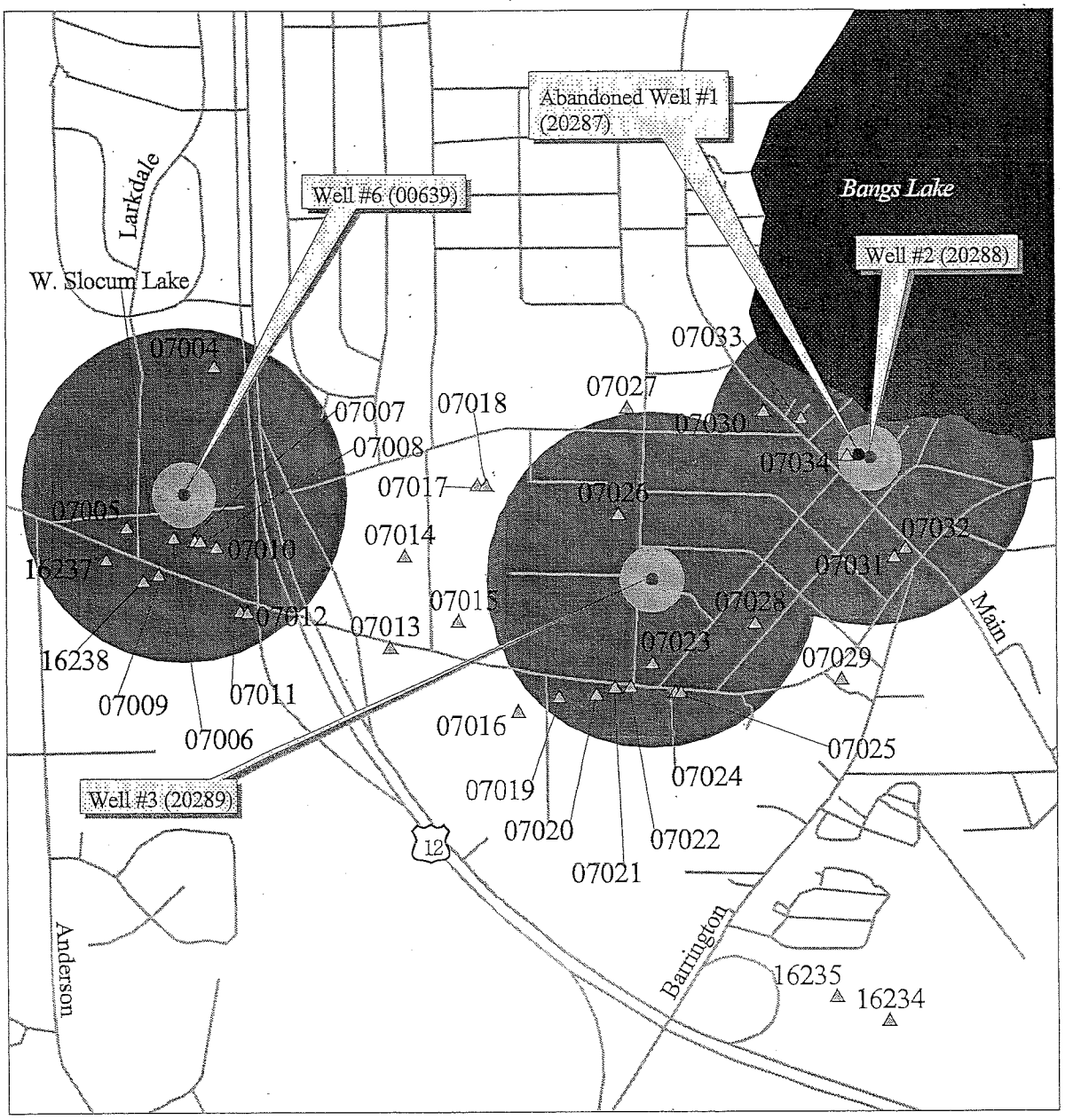
The Illinois EPA has determined that the Wauconda Community Water Supply's source water is not susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells.

SOURCE WATER PROTECTION EFFORTS:

The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Wauconda's wells. Minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to source water, the facility has implemented a wellhead protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA which allows a reduction in monitoring. The outcome of this monitoring reduction has saved the facility considerable laboratory analysis costs.

To further minimize the risk to Wauconda's groundwater supply, the Illinois EPA recommends that four additional activities be assessed. First, the community may wish to enact a "maximum setback zone" ordinance to further protect their water supply. These ordinances are authorized by the Illinois Environmental Protection Act and allow county and municipal officials the opportunity to provide additional protection up to a fixed distance, normally 1,000 feet, from their wells. Second, the water supply staff may wish to revisit their contingency planning documents, if available. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a community will minimize their risk of being without safe and adequate water. Third, the water supply staff is encouraged to review their cross connection control program to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the community. Finally, the Illinois EPA recommends that the community continue to evaluate additional source water protection management options including the approaches of land use activities within the community wellhead protection areas. Specifically, these management options should include potential effects from non-point sources related to agricultural land uses.

FIGURE 1: WELLHEAD PROTECTION PLANNING MAP FOR WAUCONDA (FACILITY #0971850)



Legend

- CWS Wells
- Potential Sources Of Contamination
- Rails
- Roads
- Streams
- Minimum Setback Zone
- Existing or Potential Maximum Setback Zone

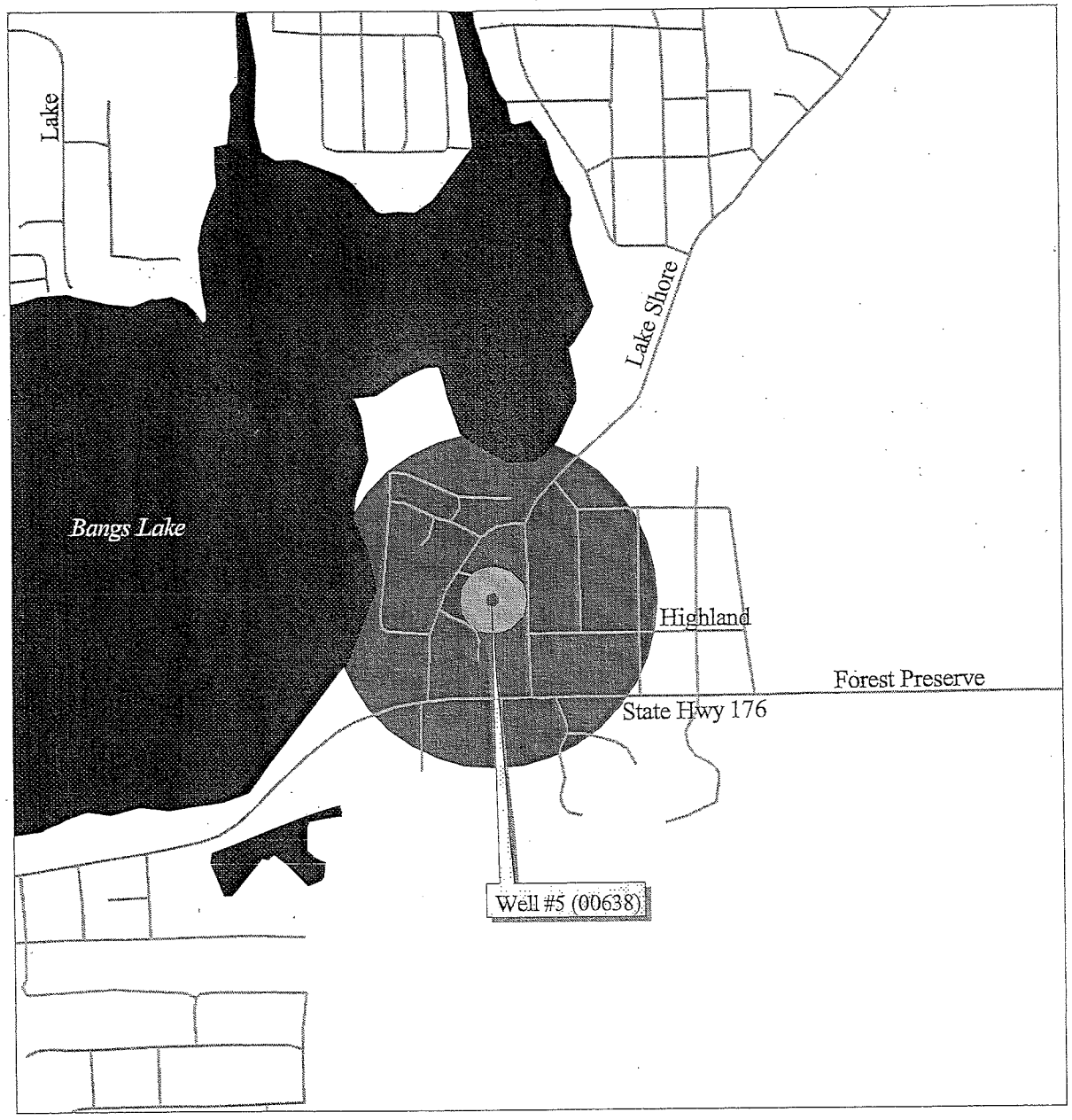
500 0 500 1000 1500 Feet

FOR MORE INFORMATION CONTACT:

Groundwater Section, Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794-9276
Ph# (217)785-4787

Source Information
Roads, Rails, and Streams from Illinois DNR.
CWS Wells and Potential Sources from Illinois EPA.
Map compiled by Groundwater Section, Illinois EPA.

FIGURE 2: WELLHEAD PROTECTION PLANNING MAP FOR WAUCONDA (FACILITY #0971850)



Legend

- CWS Wells
- Potential Sources Of Contamination
- Rails
- Roads
- Streams
- Minimum Setback Zone
- Existing or Potential Maximum Setback Zone

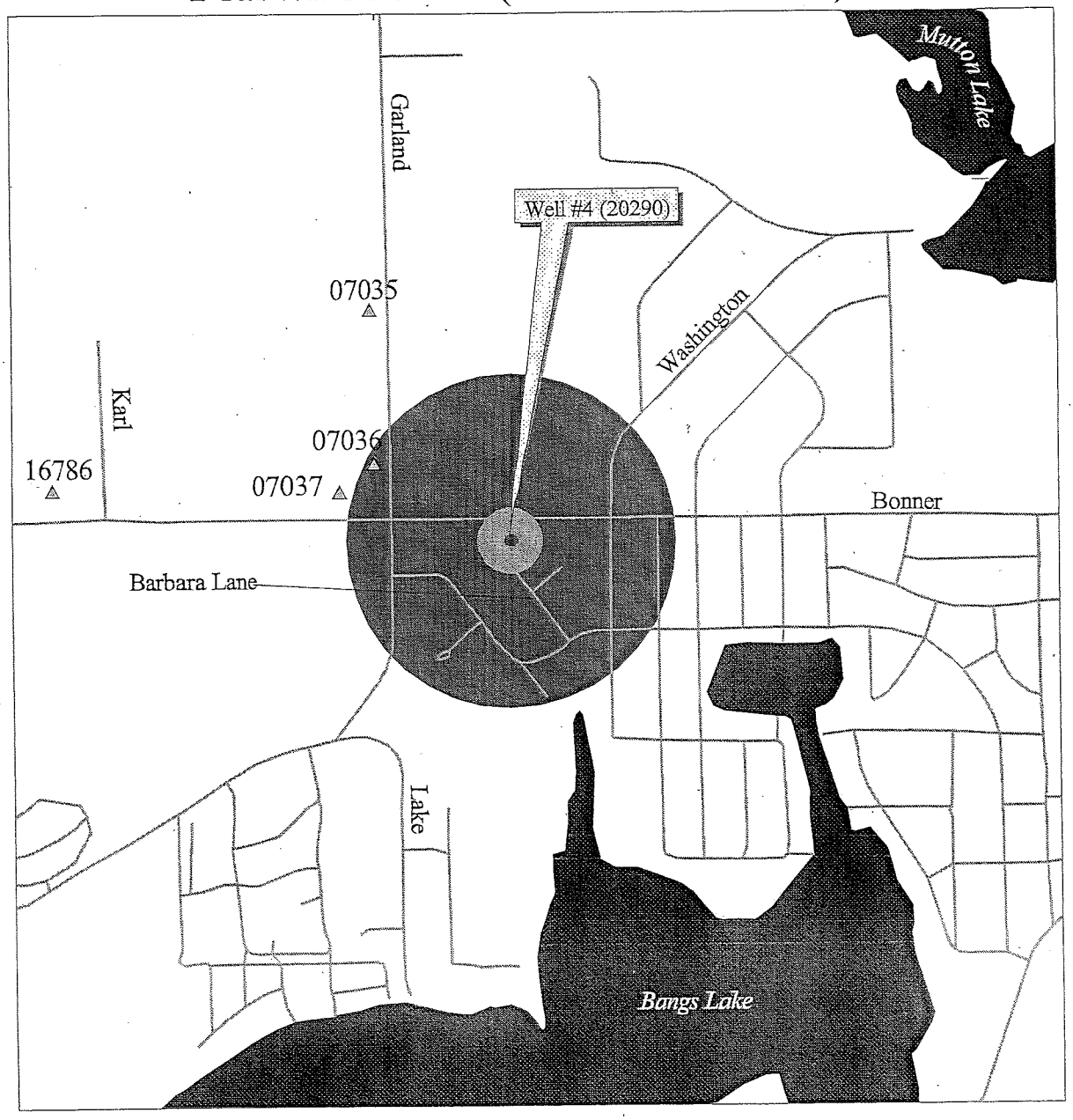
500 0 500 1000 1500 Feet

FOR MORE INFORMATION CONTACT:

Groundwater Section, Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794-9276
Ph# (217)785-4787

Source Information
Roads, Rails, and Streams from Illinois DNR.
CWS Wells and Potential Sources from Illinois EPA.
Map compiled by Groundwater Section, Illinois EPA.

FIGURE 3: WELLHEAD PROTECTION PLANNING MAP FOR WAUCONDA (FACILITY #0971850)



500 0 500 1000 1500 Feet

Legend

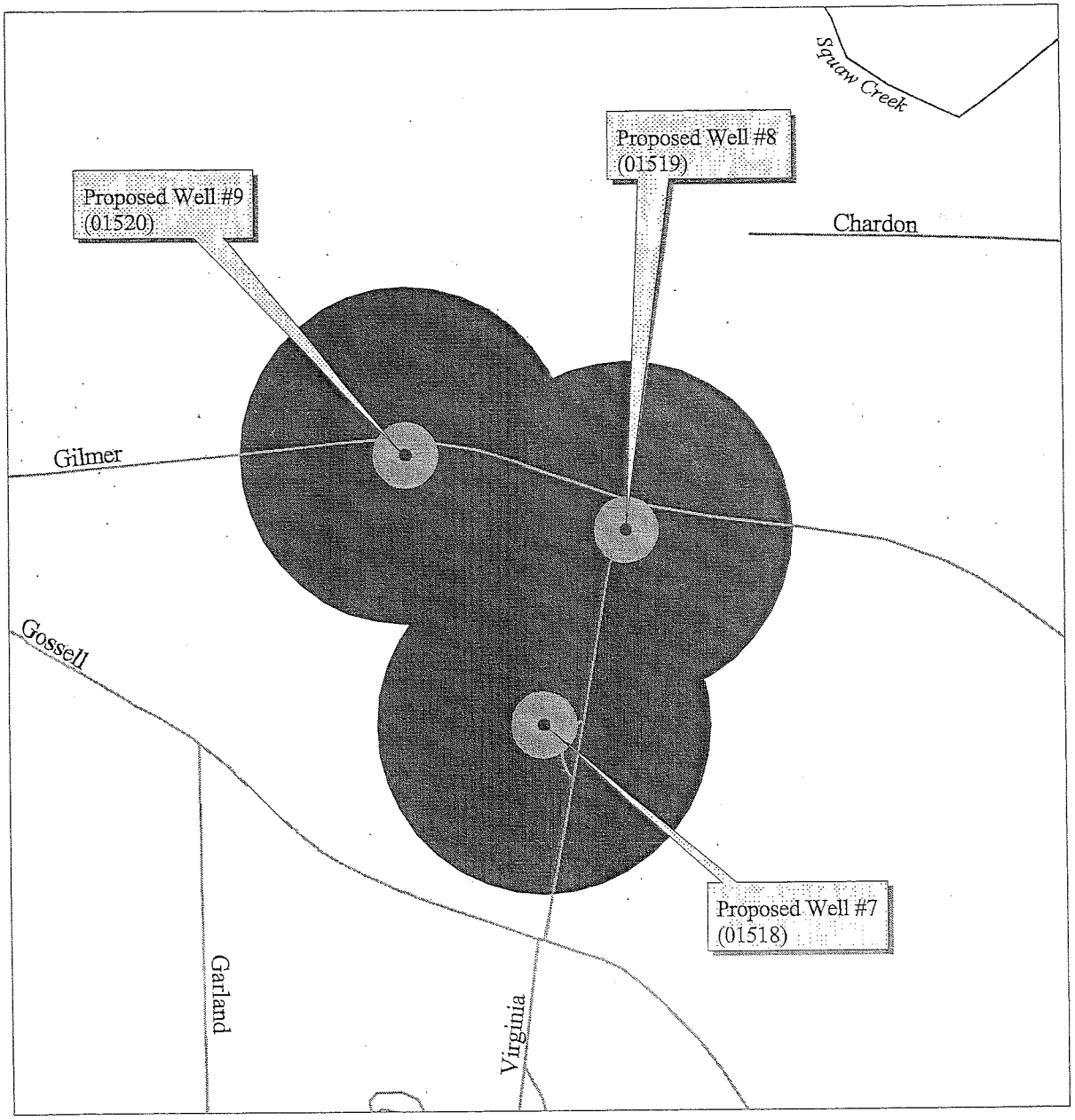
- CWS Wells
- Potential Sources Of Contamination
- Rails
- Roads
- Streams
- Minimum Setback Zone
- Existing or Potential Maximum Setback Zone

FOR MORE INFORMATION CONTACT:

Groundwater Section, Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794-9276
Ph# (217)785-4787

Source Information
Roads, Rails, and Streams from Illinois DNR.
CWS Wells and Potential Sources from Illinois EPA.
Map compiled by Groundwater Section, Illinois EPA.

FIGURE 4: WELLHEAD PROTECTION PLANNING MAP FOR WAUCONDA (FACILITY #0971850)



500 0 500 1000 1500 Feet

Legend

- Proposed CWS Wells
- Potential Sources Of Contamination
- Rails
- Roads
- Streams
- Minimum Setback Zone
- Existing or Potential Maximum Setback Zone

FOR MORE INFORMATION CONTACT:

Groundwater Section, Bureau of Water
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794-9276
Ph# (217)785-4787

Source Information
Roads, Rails, and Streams from Illinois DNR.
CWS Wells and Potential Sources from Illinois EPA.
Map compiled by Groundwater Section, Illinois EPA.

ILLINOIS STATE GEOLOGICAL SURVEY

	Top	Bottom
black topsoil	0	1
yellow sandy clay	1	20
soft blue clay	20	90
silty fine sand & clay, reddish	90	148
mixed sand, clay & gravel	148	154
fine muddy sand	154	165
red hardpan	165	180
brown hardpan	180	190
brown limestone,hard	190	220
gray limestone,very hard	220	225
limestone with shale	225	235
linestone with shale (bluish)	235	240
gray limestone	240	275
gray-blue limestone	275	290
mixed limestone & shale	290	324
blue Makquoketa shale	324	325
dm silty clay loam calc brown to dark brown 10YR4/3	0	50
sand waterlain fine and silt calc brown 10YR5/3	50	60
dm silty clay calc dark grayish brown 10YR4/2	60	70
silty clay waterlain brown to dark brown 10YR4/3	70	90
silt waterlain calc grayish brown 10YR5/2	90	96
Permit Date: Permit #:	0	

COMPANY Hoover Water Well Servic

FARM Wauconda, Village of

DATE DRILLED March 1, 1957 NO. 3

ELEVATION 780 COUNTY NO. 02366

LOCATION 1000'S line, 1600'E line of section

LATITUDE 42.258381 LONGITUDE - 88.146070

COUNTY Lake API 120970236600 26 - 44N - 9E

ILLINOIS STATE GEOLOGICAL SURVEY

sand coarse and v. coarse,some dm clasts dirty calc light gray 10YR7/1.5	90	100
sand fine calc light gray 10YR7/2	100	110
sand fine with some gravel	111	117
sand coarse to very coarse	110	120
gravel fine and very coarse sand	117	122
gravel fine	122	127
sand very fine to medium	120	130
sand coarse to very coarse, some fine gvl	127	130
gravel very coarse sand	130	135
sand fine to medium, some coarse clasts	135	140
sand fine to med, some sdy dm clasts	140	143
gravel fine, some crs- v.crs sand	142	154
sand medium to coarse, fine gravel	149	155
gravel w/some dm clasts, sandy loam brown 10YR5/3	155	165
silt & v. fine sand calc white 10YR8/1	160	165
gravel mstly fractured dol w/few ign clasts	165	170
gravel and dolomite	170	175
gravel to coarse sand, dolomite	175	180
Total Depth		325

Driller's Log filed
Sample set # 27628 (0' - 325')

Additional location info: Lot , subdivision.

Address of well:

Location source: Location from the driller

APPENDIX H

STAGE 1 SITE INVESTIGATION ACTUAL COSTS BUDGET

General Information for the Budget and Billing Forms

LPC #: 0971855024 County: Lake

City: Wauconda Site Name: Shivam Energy, Inc.

Site Address: 399 West Liberty Street

IEMA Incident No.: 903199

IEMA Notification Date: Oct 30, 1990

Date this form was prepared: Apr 7, 2009

This form is being submitted as a (check one, if applicable):

- ☒ Budget Proposal
- ☐ Budget Amendment (Budget amendments must include only the costs over the previous budget.)
- ☐ Billing Package

  Please provide the name(s) and date(s) of report(s) documenting the costs requested:

  Name(s):

  Date(s):

This package is being submitted for the site activities indicated below:

35 Ill. Adm. Code 734:

- ☐ Early Action
- ☐ Free Product Removal after Early Action
- ☒ Site Investigation . . . . . Stage 1: ☒ Stage 2: ☐ Stage 3: ☐
  Actual Costs
- ☐ Corrective Action

35 Ill. Adm. Code 732:

- ☐ Early Action
- ☐ Free Product Removal after Early Action
- ☐ Site Classification
- ☐ Low Priority Corrective Action
- ☐ High Priority Corrective Action

35 Ill. Adm. Code 731:

- ☐ Site Investigation
- ☐ Corrective Action

General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: Shivam Energy, Inc.

Send in care of: Shawn Rodeck

Address: P.O. Box 825

City: Warrenville State: IL Zip: 60555-0825

The payee is the: Owner ☒ Operator ☒ (Check one or both.)

Rajeni Patel

Signature of the owner or operator of the UST(s) (required)

If you have a change of address, click here to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: ☒ 101 or more: ☐

Number of USTs at the site: 4 (Number of USTs includes USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA for this site: 3

Incident Numbers assigned to the site due to releases from USTs: 892744 903199

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
Gasoline	6,000	Yes ☒ No ☐	892744 & 903199	Tank Leak
Gasoline	6,000	Yes ☒ No ☐	892744 & 903199	Tank Leak
Gasoline	10,000	Yes ☐ No ☒		
Gasoline	10,000	Yes ☐ No ☒		
		Yes ☐ No ☐		
		Yes ☐ No ☐		
		Yes ☐ No ☐		
		Yes ☐ No ☐		
		Yes ☐ No ☐		

Add More Rows Undo Last Add

Budget Summary

Choose the applicable regulation: (•) 734 ( ) 732

734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
		Actual			
Drilling and Monitoring Well Costs Form	$	$ 3,100.00	$	$	$
Analytical Costs Form	$	$ 725.00	$	$	$
Remediation and Disposal Costs Form	$	$ .00	$	$	$
UST Removal and Abandonment Costs Form	$	$ .00	$	$	$
Paving, Demolition, and Well Abandonment Costs Form	$	$ .00	$	$	$
Consulting Personnel Costs Form	$	$ 4,520.53	$	$	$
Consultant's Materials Costs Form	$	$ 536.60	$	$	$
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable handling charges will be determined in accordance with the Handling Charges Form.				
Total	$	$ 8,882.13	$	$	$

Drilling and Monitoring Well Costs Form

1. Drilling

Number of Borings to Be Drilled	Type HSA/PUSH/ Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
8	PUSH	16.00	128.00	Stage 1 Soil Borings (SB-41 to SB-45, SB-48, -49, -50)
2	PUSH	15.00	30.00	Stage 1 Soil Borings (SB-46 and SB-47)

☐ Subpart H minimum payment amount applies.

	Total Feet	Rate per Foot ($)	Total Cost ($)
Total Feet via HSA:			
Total Feet via PUSH:	158.00	19.62	3,100.00
Total Feet for Injection via PUSH:			
		Total Drilling Costs:	3,100.00

2. Monitoring / Recovery Wells

Number of Wells	Type of Well HSA / PUSH / 4" or 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be Installed ($)

Well Installation	Total Feet	Rate per Foot ($)	Total Cost ($)
Total Feet via HSA:			
Total Feet via PUSH:			
Total Feet of 4" or 6" Recovery:			
Total Feet of 8" or Greater Recovery:			
		Total Well Costs:	

Total Drilling and Monitoring Well Costs:	$3,100.00

Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost ($) per Analysis		Total per Parameter
Chemical Analysis					
BETX Soil with MTBE EPA 8260	19	X	35.00	=	$665.00
BETX Water with MTBE EPA 8260		X		=	
COD (Chemical Oxygen Demand)		X		=	
Corrosivity		X		=	
Flash Point or Ignitability Analysis EPA 1010		X		=	
Fraction Organic Carbon Content (f_{oc}) ASTM-D 2974-00		X		=	
Fat, Oil, & Grease (FOG)		X		=	
LUST Pollutants Soil - analysis must include volatile, base/ neutral, polynuclear aromatics and metals list in Section 732. Appendix B and 734.Appendix B		X		=	
Dissolved Oxygen (DO)		X		=	
Paint Filter (Free Liquids)		X		=	
PCB / Pesticides (combination)		X		=	
PCBs		X		=	
Pesticides		X		=	
pH		X		=	
Phenol		X		=	
Polynuclear Aromatics PNA, or PAH SOIL EPA 8270		X		=	
Polynuclear Aromatics PNA, or PAH WATER EPA 8270		X		=	
Reactivity		X		=	
SVOC - Soil (Semi-Volatile Organic Compounds)		X		=	
SVOC - Water (Semi-Volatile Organic Compounds)		X		=	
TKN (Total Kjeldahl) "nitrogen"		X		=	
TPH (Total Petroleum Hydrocarbons)		X		=	
VOC (Volatile Organic Compounds) - Soil (Non-Aqueous)		X		=	
VOC (Volatile Organic Compounds) - Water		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
Geo-Technical Analysis					
Soil Bulk Density (p_b) ASTM D2937-94		X		=	
Ex-situ Hydraulic Conductivity / Permeability		X		=	
Moisture Content (w) ASTM D2216-92 / D4643-93		X		=	
Porosity		X		=	
Rock Hydraulic Conductivity Ex-situ		X		=	
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		X		=	
Soil Classification ASTM D2488-90 / D2487-90		X		=	
Soil Particle Density (p_s) ASTM D854-92		X		=	
		X		=	
		X		=	
		X		=	

Analytical Costs Form

Metals Analysis					
Soil preparation fee for Metals TCLP Soil (one fee per soil sample)		X		=	
Soil preparation fee for Metals Total Soil (one fee per soil sample)		X		=	
Water preparation fee for Metals Water (one fee per water sample)		X		=	
Arsenic TCLP Soil		X		=	
Arsenic Total Soil		X		=	
Arsenic Water		X		=	
Barium TCLP Soil		X		=	
Barium Total Soil		X		=	
Barium Water		X		=	
Cadmium TCLP Soil		X		=	
Cadmium Total Soil		X		=	
Cadmium Water		X		=	
Chromium TCLP Soil		X		=	
Chromium Total Soil		X		=	
Chromium Water		X		=	
Cyanide TCLP Soil		X		=	
Cyanide Total Soil		X		=	
Cyanide Water		X		=	
Iron TCLP Soil		X		=	
Iron Total Soil		X		=	
Iron Water		X		=	
Lead TCLP Soil		X		=	
Lead Total Soil		X		=	
Lead Water		X		=	
Mercury TCLP Soil		X		=	
Mercury Total Soil		X		=	
Mercury Water		X		=	
Selenium TCLP Soil		X		=	
Selenium Total Soil		X		=	
Selenium Water		X		=	
Silver TCLP Soil		X		=	
Silver Total Soil		X		=	
Silver Water		X		=	
Metals TCLP Soil (a combination of all metals) RCRA		X		=	
Metals Total Soil (a combination of all metals) RCRA		X		=	
Metals Water (a combination of all metals) RCRA		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
Other					
EnCore® Sampler, purge-and-trap sampler, or equivalent sampling device	20	X	3.00	=	$60.00
Sample Shipping per sampling event[1]		X		=	

[1]A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs: $ 725.00

Remediation and Disposal Costs Form

A. Conventional Technology

Excavation, Transportation, and Disposal of contaminated soil and/or the 4-foot backfill material removal during early action activities:

Number of Cubic Yards	Cost per Cubic Yard ($)	Total Cost

Backfilling the Excavation:

Number of Cubic Yards	Cost per Cubic Yard ($)	Total Cost

Overburden Removal and Return:

Number of Cubic Yards	Cost per Cubic Yard ($)	Total Cost

B. Alternative Technology

Alternative Technology Selected:	
Number of Cubic Yards of Soil to Be Remediated	
Total Non-Consulting Personnel Costs Summary Sheet ($)	
Total Remediation Materials Costs Summary Sheet ($)	
Total Cost of the System	

Remediation and Disposal Costs Form

C. Groundwater Remediation and/or Free Product Removal System

Total Non-Consulting Personnel Costs Summary Sheet ($)	
Total Remediation Materials Costs Summary Sheet ($)	
Total Cost of the System	

D. Groundwater and/or Free Product Removal and Disposal

Number of Gallons	Cost per Gallon ($)	Total Cost

E. Drum Disposal

Number of Drums of Solid Waste	Cost per Drum ($)	Total Cost
Number of Drums of Liquid Waste	**Cost per Drum ($)**	**Total Cost**
Total Drum Disposal Costs		

Total Remediation and Disposal Costs:	

UST Removal and Abandonment Costs Form

Product Stored in UST	Size (gallons)	Abandoned or Removed	Cost ($)	Did UST have a release?
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐

Total UST Removal and Abandonment Costs: _____

Paving, Demolition, and Well Abandonment Costs Form

A. Concrete and Asphalt Placement/Replacement

Number of Square Feet	Asphalt or Concrete	Thickness (inches)	Cost ($) per Square Foot	Replacement or Placement for an Engineered Barrier	Total Cost

Total Concrete and Asphalt Placement/Replacement Costs:	

B. Building Destruction or Dismantling and Canopy Removal

Item to Be Destroyed, Dismantled, or Removed	Unit Cost ($)	Total Cost ($)

Total Building Destruction or Dismantling and Canopy Removal Costs:	

Paving, Demolition, and Well Abandonment Costs Form

C. Well Abandonment

Monitoring Well ID #	Type of Well (HSA / PUSH / Recovery)	Depth of Well (feet)	Cost ($) per Foot	Total Cost

Total Monitoring Well Abandonment Costs:	

Total Paving, Demolition, and Well Abandonment Costs:	

Consulting Personnel Costs Form

Employee Name	Personnel Title	Hours	Rate* ($)	Total Cost
Remediation Category	**Task**			
Pat Worrall	Geologist III	11.00	95.96	$1,055.56
Stage 1-Field	Soil Boring installation			
Marcos Czako	Project Manager	10.00	98.14	$981.40
Stage 1-Field	Soil Boring installation			
Shawn Rodeck	Senior Project Manager	.75	109.05	$81.79
Stage 1-Field	Field Prep			
Shawn Rodeck	Senior Project Manager	1.25	109.05	$136.31
Stage 1-Results	Stage 1 Results Prep			
Marcos Czako	Project Manager	12.25	98.14	$1,202.21
Stage 1-Results	Stage 1 Results Prep			
Shawn Rodeck	Senior Acct. Technician	3.00	59.98	$179.94
Stage 1-Pay	Actual Budget			
Marcos Czako	Senior Acct. Technician	1.00	59.98	$59.98
Stage 1-Pay	Reimbursement Prep			
Kimberly Henkel	Senior Acct. Technician	8.00	59.98	$479.84
Stage 1-Pay	Reimbursement Prep			
Shawn Rodeck	Senior Prof. Engineer	2.00	141.76	$283.52
Stage 1-Pay	Reimbursement Review and Certification			

Employee Name	Personnel Title	Hours	Rate* ($)	Total Cost
Remediation Category	**Task**			
Kimberly Henkel	Senior Acct. Technician	1.00	59.98	$59.98
Stage 1-Pay	Reimbursement package copying and mailing			

*Refer to the applicable Maximum Payment Amounts document.

Total of Consulting Personnel Costs	$4,520.53

Consultant's Materials Costs Form

Materials, Equipment, or Field Purchase	Time or Amount Used	Rate ($)	Unit	Total Cost
Remediation Category	**Description/Justification**			
Measuring Wheel	1.00	5.00	day	$5.00
Stage 1-Field	Used to measure distance for soil boring activities			
Nitrile Gloves	116.00	.50	pair	$58.00
Stage 1-Field	Used to protect hands during soil sampling activities			
PID	1.00	75.00	day	$75.00
Stage 1-Field	Used to screen samples during soil boring and installation activities			
Baggies	96.00	.35	each	$33.60
Stage 1-Field	Used to collect soil samples in for head space screening			
Truck	1.00	95.00	day	$95.00
Stage 1-Field	Used for consultant transportation to and from the site			
USPS	1.00	15.00	each	$15.00
Stage 1-Pay	Postage for mailing reimbursement claim			
Lucky Locators, Inc.	1.00	255.00	site	$255.00
Stage 1-Field	Subcontractor hired to locate utilities for soil boring			

Total of Consultant Materials Costs	$536.60

APPENDIX I

STAGE 2 AND 3 SITE INVESTIGATION BUDGET

General Information for the Budget and Billing Forms

LPC #: 0971855024 County: Lake

City: Wauconda Site Name: Shivam Energy, Inc.

Site Address: 399 West Liberty Street

IEMA Incident No.: 903199

IEMA Notification Date: Oct 30, 1990

Date this form was prepared: Apr 7, 2009

This form is being submitted as a (check one, if applicable):

- ☒ Budget Proposal
- ☐ Budget Amendment (Budget amendments must include only the costs over the previous budget.)
- ☐ Billing Package

  Please provide the name(s) and date(s) of report(s) documenting the costs requested:

  Name(s):

  Date(s):

This package is being submitted for the site activities indicated below:

35 Ill. Adm. Code 734:

- ☐ Early Action
- ☐ Free Product Removal after Early Action
- ☒ Site Investigation . . . . . Stage 1: ☐ Actual Costs Stage 2: ☒ Proposed Stage 3: ☒ Proposed
- ☐ Corrective Action

35 Ill. Adm. Code 732:

- ☐ Early Action
- ☐ Free Product Removal after Early Action
- ☐ Site Classification
- ☐ Low Priority Corrective Action
- ☐ High Priority Corrective Action

35 Ill. Adm. Code 731:

- ☐ Site Investigation
- ☐ Corrective Action

General Information for the Budget and Billing Forms

The following address will be used as the mailing address for checks and any final determination letters regarding payment from the Fund.

Pay to the order of: Shivam Energy, Inc.

Send in care of: Shawn Rodeck

Address: P.O. Box 825

City: Warrenville State: IL Zip: 60555-0825

The payee is the: Owner ☒ Operator ☒ (Check one or both.)

Rajeni Patel

Signature of the owner or operator of the UST(s) (required)

If you have a change of address, click here to print off a W-9 Form.

Number of petroleum USTs in Illinois presently owned or operated by the owner or operator; any subsidiary, parent or joint stock company of the owner or operator; and any company owned by any parent, subsidiary or joint stock company of the owner or operator:

Fewer than 101: ☒ 101 or more: ☐

Number of USTs at the site: 4 (Number of USTs includes USTs presently at the site and USTs that have been removed.)

Number of incidents reported to IEMA for this site: 3

Incident Numbers assigned to the site due to releases from USTs: 892744 903199

Please list all tanks that have ever been located at the site and tanks that are presently located at the site.

Product Stored in UST	Size (gallons)	Did UST have a release?	Incident No.	Type of Release Tank Leak / Overfill / Piping Leak
Gasoline	6,000	Yes ☒ No ☐	892744 & 903199	Tank Leak
Gasoline	6,000	Yes ☒ No ☐	892744 & 903199	Tank Leak
Gasoline	10,000	Yes ☐ No ☒		
Gasoline	10,000	Yes ☐ No ☒		
		Yes ☐ No ☐		
		Yes ☐ No ☐		
		Yes ☐ No ☐		
		Yes ☐ No ☐		
		Yes ☐ No ☐		

Add More Rows Undo Last Add

Budget Summary

Choose the applicable regulation: (•) 734 ( ) 732

734	Free Product	Stage 1 Site Investigation	Stage 2 Site Investigation	Stage 3 Site Investigation	Corrective Action
	N/A	N/A	Proposed	N/A	N/A
Drilling and Monitoring Well Costs Form	$	$	$ 3,926.00	$	$
Analytical Costs Form	$	$	$ 1,144.94	$	$
Remediation and Disposal Costs Form	$	$	$ 545.24	$	$
UST Removal and Abandonment Costs Form	$	$	$ .00	$	$
Paving, Demolition, and Well Abandonment Costs Form	$	$	$ .00	$	$
Consulting Personnel Costs Form	$	$	$ 15,091.92	$	$
Consultant's Materials Costs Form	$	$	$ 1,961.50	$	$
Handling Charges Form	Handling charges will be determined at the time a billing package is submitted to the Illinois EPA. The amount of allowable handling charges will be determined in accordance with the Handling Charges Form.				
Total	$	$	$ 22,669.60	$	$

Drilling and Monitoring Well Costs Form

1. Drilling

Number of Borings to Be Drilled	Type HSA/PUSH/ Injection	Depth (feet) of Each Boring	Total Feet Drilled	Reason for Drilling
7	PUSH	20.00	140.00	SB-58 through SB-64
3	PUSH	20.00	60.00	SB-65 through SB-67

☐ Subpart H minimum payment amount applies.

	Total Feet	Rate per Foot ($)	Total Cost ($)
Total Feet via HSA:			
Total Feet via PUSH:	200.00	19.63	3,926.00
Total Feet for Injection via PUSH:			
		Total Drilling Costs:	3,926.00

2. Monitoring / Recovery Wells

Number of Wells	Type of Well HSA / PUSH / 4" or 6" Recovery / 8" Recovery	Diameter of Well (inches)	Depth of Well (feet)	Total Feet of Wells to Be Installed ($)

Well Installation	Total Feet	Rate per Foot ($)	Total Cost ($)
Total Feet via HSA:			
Total Feet via PUSH:			
Total Feet of 4" or 6" Recovery:			
Total Feet of 8" or Greater Recovery:			
		Total Well Costs:	

Total Drilling and Monitoring Well Costs:	$3,926.00

Analytical Costs Form

Laboratory Analysis	Number of Samples		Cost ($) per Analysis		Total per Parameter
Chemical Analysis					
BETX Soil with MTBE EPA 8260	10	X	92.69	=	$926.90
BETX Water with MTBE EPA 8260		X		=	
COD (Chemical Oxygen Demand)		X		=	
Corrosivity		X		=	
Flash Point or Ignitability Analysis EPA 1010		X		=	
Fraction Organic Carbon Content (f_{oc}) ASTM-D 2974-00		X		=	
Fat, Oil, & Grease (FOG)		X		=	
LUST Pollutants Soil - analysis must include volatile, base/ neutral, polynuclear aromatics and metals list in Section 732. Appendix B and 734.Appendix B		X		=	
Dissolved Oxygen (DO)		X		=	
Paint Filter (Free Liquids)		X		=	
PCB / Pesticides (combination)		X		=	
PCBs		X		=	
Pesticides		X		=	
pH		X		=	
Phenol		X		=	
Polynuclear Aromatics PNA, or PAH SOIL EPA 8270		X		=	
Polynuclear Aromatics PNA, or PAH WATER EPA 8270		X		=	
Reactivity		X		=	
SVOC - Soil (Semi-Volatile Organic Compounds)		X		=	
SVOC - Water (Semi-Volatile Organic Compounds)		X		=	
TKN (Total Kjeldahl) "nitrogen"		X		=	
TPH (Total Petroleum Hydrocarbons)		X		=	
VOC (Volatile Organic Compounds) - Soil (Non-Aqueous)		X		=	
VOC (Volatile Organic Compounds) - Water		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
Geo-Technical Analysis					
Soil Bulk Density (p_b) ASTM D2937-94		X		=	
Ex-situ Hydraulic Conductivity / Permeability		X		=	
Moisture Content (w) ASTM D2216-92 / D4643-93		X		=	
Porosity		X		=	
Rock Hydraulic Conductivity Ex-situ		X		=	
Sieve / Particle Size Analysis ASTM D422-63 / D1140-54		X		=	
Soil Classification ASTM D2488-90 / D2487-90		X		=	
Soil Particle Density (p_s) ASTM D854-92		X		=	
		X		=	
		X		=	
		X		=	

Analytical Costs Form

Metals Analysis					
Soil preparation fee for Metals TCLP Soil (one fee per soil sample)		X		=	
Soil preparation fee for Metals Total Soil (one fee per soil sample)		X		=	
Water preparation fee for Metals Water (one fee per water sample)		X		=	
Arsenic TCLP Soil		X		=	
Arsenic Total Soil		X		=	
Arsenic Water		X		=	
Barium TCLP Soil		X		=	
Barium Total Soil		X		=	
Barium Water		X		=	
Cadmium TCLP Soil		X		=	
Cadmium Total Soil		X		=	
Cadmium Water		X		=	
Chromium TCLP Soil		X		=	
Chromium Total Soil		X		=	
Chromium Water		X		=	
Cyanide TCLP Soil		X		=	
Cyanide Total Soil		X		=	
Cyanide Water		X		=	
Iron TCLP Soil		X		=	
Iron Total Soil		X		=	
Iron Water		X		=	
Lead TCLP Soil		X		=	
Lead Total Soil		X		=	
Lead Water		X		=	
Mercury TCLP Soil		X		=	
Mercury Total Soil		X		=	
Mercury Water		X		=	
Selenium TCLP Soil		X		=	
Selenium Total Soil		X		=	
Selenium Water		X		=	
Silver TCLP Soil		X		=	
Silver Total Soil		X		=	
Silver Water		X		=	
Metals TCLP Soil (a combination of all metals) RCRA		X		=	
Metals Total Soil (a combination of all metals) RCRA		X		=	
Metals Water (a combination of all metals) RCRA		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
Other					
EnCore® Sampler, purge-and-trap sampler, or equivalent sampling device	10	X	10.90	=	$109.00
Sample Shipping per sampling event[1]	2	X	54.52	=	$109.04

[1]A sampling event, at a minimum, is all samples (soil and groundwater) collected in a calendar day.

Total Analytical Costs: $ 1,144.94

Remediation and Disposal Costs Form

A. Conventional Technology

Excavation, Transportation, and Disposal of contaminated soil and/or the 4-foot backfill material removal during early action activities:

Number of Cubic Yards	Cost per Cubic Yard ($)	Total Cost

Backfilling the Excavation:

Number of Cubic Yards	Cost per Cubic Yard ($)	Total Cost

Overburden Removal and Return:

Number of Cubic Yards	Cost per Cubic Yard ($)	Total Cost

B. Alternative Technology

Alternative Technology Selected:	
Number of Cubic Yards of Soil to Be Remediated	
Total Non-Consulting Personnel Costs Summary Sheet ($)	
Total Remediation Materials Costs Summary Sheet ($)	
Total Cost of the System	

Remediation and Disposal Costs Form

C. Groundwater Remediation and/or Free Product Removal System

Total Non-Consulting Personnel Costs Summary Sheet ($)	
Total Remediation Materials Costs Summary Sheet ($)	
Total Cost of the System	

D. Groundwater and/or Free Product Removal and Disposal

Number of Gallons	Cost per Gallon ($)	Total Cost

E. Drum Disposal

Number of Drums of Solid Waste	Cost per Drum ($)	Total Cost
2	272.62	$545.24
Number of Drums of Liquid Waste	**Cost per Drum ($)**	**Total Cost**
Total Drum Disposal Costs		$545.24

Total Remediation and Disposal Costs:	$545.24

UST Removal and Abandonment Costs Form

Product Stored in UST	Size (gallons)	Abandoned or Removed	Cost ($)	Did UST have a release?
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐

Total UST Removal and Abandonment Costs: _____

Paving, Demolition, and Well Abandonment Costs Form

A. Concrete and Asphalt Placement/Replacement

Number of Square Feet	Asphalt or Concrete	Thickness (inches)	Cost ($) per Square Foot	Replacement or Placement for an Engineered Barrier	Total Cost

Total Concrete and Asphalt Placement/Replacement Costs:	

B. Building Destruction or Dismantling and Canopy Removal

Item to Be Destroyed, Dismantled, or Removed	Unit Cost ($)	Total Cost ($)

Total Building Destruction or Dismantling and Canopy Removal Costs:	

Paving, Demolition, and Well Abandonment Costs Form

C. Well Abandonment

Monitoring Well ID #	Type of Well (HSA / PUSH / Recovery)	Depth of Well (feet)	Cost ($) per Foot	Total Cost

Total Monitoring Well Abandonment Costs:	

Total Paving, Demolition, and Well Abandonment Costs:	

Consulting Personnel Costs Form

Employee Name	Personnel Title	Hours	Rate* ($)	Total Cost
Remediation Category	**Task**			
Marcos Czako	Project Manager	20.00	98.14	$1,962.80
Stage 2-Field	SB installation; soil sampling			
Patrick Worrall	Geologist III	10.00	95.96	$959.60
Stage 2-Field	SB installation; soil sampling			
Marcos Czako	Project Manager	40.00	98.14	$3,925.60
Stage 2-Plan	Stage 2 and 3 SIP preparation; project management and coordination; off-site access preparation			
Shawn Rodeck	Senior Prof. Engineer	2.00	141.76	$283.52
Stage 2-Plan	Stage 2 and 3 SIP review and certification			
Kimberly Henkel	Senior Admin. Assistant	2.00	49.07	$98.14
Stage 2-Plan	Stage 2 and 3 SIP correspondence, copying, and mailing			
Marcos Czako	Project Manager	10.00	98.14	$981.40
Stage 2-Budget	Stage 2 and 3 SI Budget preparation			
Shawn Rodeck	Senior Prof. Engineer	2.00	141.76	$283.52
Stage 2-Budget	Stage 2 and 3 SI Budget review and certification			
Kimberly Henkel	Senior Acct. Technician	16.00	59.98	$959.68
Stage 2-Pay	Reimbursement package preparation; Stage 2 and 3 actual costs budget preparation			
Shawn Rodeck	Senior Prof. Engineer	2.00	141.76	$283.52
Stage 2-Pay	Reimbursement package review and certification			

Employee Name	Personnel Title	Hours	Rate* ($)	Total Cost
Remediation Category	**Task**			
Marcos Czako	Project Manager	40.00	98.14	$3,925.60
SICR	SICR preparation			
Shawn Rodeck	Senior Prof. Engineer	2.00	141.76	$283.52
SICR	SICR review and certification			
Kimberly Henkel	Senior Admin. Assistant	2.00	49.07	$98.14
SICR	SICR correspondence, copying, and mailing			
Senior Draftperson/CAD Subcontractor	Senior Draftperson/CAD	8.00	65.43	$523.44
Stage 2-Plan	Figures preparation			
Senior Draftperson/CAD Subcontractor	Senior Draftperson/CAD	8.00	65.43	$523.44
SICR	Figures preparation			

*Refer to the applicable Maximum Payment Amounts document.

Total of Consulting Personnel Costs	**$15,091.92**

Consultant's Materials Costs Form

Materials, Equipment, or Field Purchase	Time or Amount Used	Rate ($)	Unit	Total Cost
Remediation Category	**Description/Justification**			
Truck	2.00	100.00	day	$200.00
Stage 2-Field	Used for consultant transportation to and from the site			
PID	2.00	85.00	day	$170.00
Stage 2-Field	Used to screen samples during soil boring installation activities			
Nitrile Gloves	140.00	.50	pair	$70.00
Stage 2-Field	Used to protect hands during soil sampling activities			
Baggies	130.00	.25	baggie	$32.50
Stage 2-Field	Used to collect soil samples in for head space screening			
Measuring Wheel	2.00	10.00	day	$20.00
Stage 2-Field	Used to measure the locations of the soil borings			
IDOT Permit Shipping	1.00	8.00	permit	$8.00
Stage 2-Field	IDOT permit shipping			
Village of Wauconda Permit Shipping	2.00	8.00	permit	$16.00
Stage 2-Field	Village of Wauconda permit shipping			
Stage 2 and 3 SIP Shipping	1.00	15.00	plan	$15.00
Stage 2-Plan	Stage 2 and 3 SIP shipping			
SICR Shipping	1.00	15.00	report	$15.00
SICR	SICR shipping			

Materials, Equipment, or Field Purchase	Time or Amount Used	Rate ($)	Unit	Total Cost
Remediation Category	**Description/Justification**			
Reimbursement Package Shipping	1.00	15.00	package	$15.00
Stage 2-Pay	Reimbursement package shipping			
IDOT Permit Bond	1.00	400.00	bond	$400.00
Stage 2-Field	IDOT permit bond			
Village of Wauconda Permit Fees	2.00	500.00	fees	$1,000.00
Stage 2-Field	Village of Wauconda permit fees			

Total of Consultant Materials Costs	**$1,961.50**

APPENDIX J

OWNER/OPERATOR AND LICENSED PROFESSIONAL ENGINEER/GEOLOGIST BUDGET CERTIFICATION FORM

Owner/Operator and Licensed Professional Engineer/Geologist Budget Certification Form

I hereby certify that I intend to seek payment from the UST Fund for costs incurred while performing corrective action activities for Leaking UST incident 903199 . I further certify that the costs set forth in this budget are for necessary activities and are reasonable and accurate to the best of my knowledge and belief. I also certify that the costs included in this budget are not for corrective action in excess of the minimum requirements of 415 ILCS 5/57, no costs are included in this budget that are not described in the corrective action plan, and no costs exceed Subpart H: Maximum Payment Amounts, Appendix D Sample Handling and Analysis amounts, and Appendix E Personnel Titles and Rates of 35 Ill. Adm. Code 732 or 734. I further certify that costs ineligible for payment from the Fund pursuant to 35 Ill. Adm. Code 732.606 or 734.630 are not included in the budget proposal or amendment. Such ineligible costs include but are not limited to:

Costs associated with ineligible tanks.
Costs associated with site restoration (e.g., pump islands, canopies).
Costs associated with utility replacement (e.g., sewers, electrical, telephone, etc.).
Costs incurred prior to IEMA notification.
Costs associated with planned tank pulls.
Legal fees or costs.
Costs incurred prior to July 28, 1989.
Costs associated with installation of new USTs or the repair of existing USTs.

Owner/Operator: Shivam Energy, Inc.

Authorized Representative: Rajani Patel Title: Owner

Signature: Rajani Patel Date: 03/29/09

Subscribed and sworn to before me the 29th day of March, 2009.

Sandra L. Rodeck (Notary Public) Seal: OFFICIAL SEAL SANDRA L. RODECK NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 12-26-2011

In addition, I certify under penalty of law that all activities that are the subject of this plan, budget, or report were conducted under my supervision or were conducted under the supervision of another Licensed Professional Engineer or Licensed Professional Geologist and reviewed by me; that this plan, budget, or report and all attachments were prepared under my supervision; that, to the best of my knowledge and belief, the work described in the plan, budget, or report has been completed in accordance with the Environmental Protection Act [415 ILCS 5], 35 Ill. Adm. Code 732 or 734, and generally accepted standards and practices of my profession; and that the information presented is accurate and complete. I am aware there are significant penalties for submitting false statements or representations to the Illinois EPA, including but not limited to fines, imprisonment, or both as provided in Sections 44 and 57.17 of the Environmental Protection Act [415 ILCS 5/44 and 57.17].

L.P.E./L.P.G.: Shawn Rodeck L.P.E./L.P.G. Seal: REGISTERED PROFESSIONAL ENGINEER SHAWN A. RODECK 062-052879 STATE OF ILLINOIS

L.P.E./L.P.G. Signature: Shawn Rodeck Date: 03/28/09

Subscribed and sworn to before me the 28th day of March, 2009.

Sandra L. Rodeck (Notary Public) Seal: OFFICIAL SEAL SANDRA L. RODECK NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 12-26-2011

The Illinois EPA is authorized to require this information under 415 ILCS 5/1. Disclosure of this information is required. Failure to do so may result in the delay or denial of any budget or payment requested hereunder.

APPENDIX K

OFFICE OF THE STATE FIRE MARSHAL ELIGIBILITY AND DEDUCTIBLE DETERMINATION LETTER

Office of the Illinois
State Fire Marshal
"Partnering With the Fire Service to Protect Illinois"

CERTIFIED MAIL - RECEIPT REQUESTED #7008 2810 0000 2103 5290

April 28, 2009

Shivam Energy, Inc.
399 W. Liberty Street
Wauconda, IL 60084

In Re: Facility No. 2-010129
IEMA Incident No. 90-3199
Liberty Clark
399 Liberty Street
Wauconda, Lake Co., IL

Dear Applicant:

The Reimbursement Eligibility and Deductible Application received on April 24, 2009 for the above referenced occurrence has been reviewed. The following determinations have been made based upon this review.

You have filed an "Election to Proceed as Owner" and have received acceptance from the Illinois Environmental Protection Agency. It has been determined that you are eligible to seek payment of costs in excess of **$10,000**. The costs must be in response to the occurrence referenced above and associated with the following tanks:

Eligible Tanks

Tank 1 6,000 gallon Gasoline
Tank 2 6,000 gallon Gasoline

You must contact the Illinois Environmental Protection Agency to receive a packet of Agency billing forms for submitting your request for payment.

An owner or operator is eligible to access the Underground Storage Tank Fund if the eligibility requirements are satisfied:

1. Neither the owner nor the operator is the United States Government,

2. The tank does not contain fuel which is exempt from the Motor Fuel Tax Law,

3. The costs were incurred as a result of a confirmed release of any of the following substances:

   "Fuel", as defined in Section 1.19 of the Motor Fuel Tax Law

   Aviation fuel

   Heating oil

Kerosene

Used oil, which has been refined from crude oil used in a motor vehicle, as defined in Section 1.3 of the Motor Fuel Tax Law.

4. The owner or operator registered the tank and paid all fees in accordance with the statutory and regulatory requirements of the Gasoline Storage Act.

5. The owner or operator notified the Illinois Emergency Management Agency of a confirmed release, the costs were incurred after the notification and the costs were a result of a release of a substance listed in this Section. Costs of corrective action or indemnification incurred before providing that notification shall not be eligible for payment.

6. The costs have not already been paid to the owner or operator under a private insurance policy, other written agreement, or court order.

7. The costs were associated with "corrective action".

This constitutes the final decision as it relates to your eligibility and deductibility. We reserve the right to change the deductible determination should additional information that would change the determination become available. An underground storage tank owner or operator may appeal the decision to the Illinois Pollution Control Board (Board), pursuant to Section 57.9 (c) (2). An owner or operator who seeks to appeal the decision shall file a petition for a hearing before the Board within 35 days of the date of mailing of the final decision, (35 Illinois Administrative Code 105.102(a) (2)).

For information regarding the filing of an appeal, please contact:

Dorothy Gunn, Clerk
Illinois Pollution Control Board
State of Illinois Center
100 West Randolph, Suite 11-500
Chicago, Illinois 60601
(312) 814-3620

The following tanks are also listed for this site:

Tank 3 10,000 gallon Gasoline
Tank 4 10,000 gallon Gasoline

Your application indicates that there has not been a release from these tanks under this incident number. You may be eligible to seek payment of corrective action costs associated with these tanks if it is determined that there has been a release from one or more of these tanks. Once it is determined that there has been a release from one or more of these tanks you may submit a separate application for an eligibility determination to seek corrective action costs associated with this/these tanks.

If you have any questions, please contact our Office at (217) 785-1020 or (217) 785-5878.

Sincerely,

Deanne Lock
Administrative Assistant
Division of Petroleum and Chemical Safety

cc: IEPA
Facility File