TETRA TECH

April 25, 2016

Mr. Kevin Larson
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

Subject: **Removal Assessment Report**
Citizen's Gas and Electric Site, Council Bluffs, Iowa
EPA CERCLIS ID No.: IAD984589093
U.S. EPA Region 7 START 4, Contract No. EP-S7-13-06, Task Order No. 0112
Task Monitor: Kevin Larson, On-Scene Coordinator

Dear Mr. Larson:

Tetra Tech, Inc. is submitting the attached Removal Assessment (RA) Report regarding the Citizen's Gas and Electric site. If you have any questions or comments, please contact the Project Manager at (913) 707-1459.

Sincerely,

[redacted]

START Project Manager

[redacted]

START Program Manager

Enclosures

cc: Debra Dorsey, START Project Officer (cover letter only)

X9025.16.0112.000

415 Oak Street, Kansas City, MO 64106
Tel 816.412.1741 Fax 816.410.1748 www.tetratech.com

REMOVAL ASSESSMENT REPORT

CITIZEN'S GAS AND ELECTRIC SITE
COUNCIL BLUFFS, IOWA

Superfund Technical Assessment and Response Team (START) 4
Contract No. EP-S7-13-06, Task Order 0112

Prepared For:

U.S. Environmental Protection Agency
Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

April 25, 2016

Prepared By:

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106
(816) 412-1741

CONTENTS

Section **Page**

1.0 INTRODUCTION 1

2.0 BACKGROUND INFORMATION 2

2.1 SITE LOCATION AND DESCRIPTION 2
2.2 OPERATIONAL HISTORY 2
2.3 PREVIOUS INVESTIGATIONS 3

2.3.1 Iowa Department of Transportation Borings 3
2.3.2 Phase I Investigation 4
2.3.3 Preliminary Assessment 4
2.3.4 Administrative Order on Consent 4
2.3.5 Phase II Investigation 5
2.3.6 Phase II Environmental Site Assessment (Nearby Property) 5

3.0 REMOVAL ASSESSMENT ACTIVITIES 6

3.1 DPT SOIL SAMPLING 6
3.2 DPT GROUNDWATER SAMPLING 7
3.3 MONITORING WELL SAMPLING 7
3.4 INVESTIGATION-DERIVED WASTE SAMPLING 8
3.5 BACKGROUND AND QUALITY CONTROL SAMPLING 8

4.0 ANALYTICAL DATA SUMMARY 9

4.1 DPT SOIL SAMPLES 9
4.2 DPT GROUNDWATER SAMPLES 10
4.3 MONITORING WELL SAMPLES 13
4.4 INVESTIGATION-DERIVED WASTE SAMPLE 14
4.5 QUALITY CONTROL SAMPLES 15
4.6 DEVIATIONS FROM THE QUALITY ASSURANCE PROJECT PLAN 15

5.0 SUMMARY 16

5.1 REMOVAL CONSIDERATIONS 18
5.2 PRE-REMEDIAL CONSIDERATIONS 19

6.0 REFERENCES 20

CONTENTS (Continued)

APPENDICES

Appendix

A FIGURES

B PHOTOGRAPHIC DOCUMENTATION

C SITE LOGBOOK

D FIELD SHEETS

E ANALYTICAL SUMMARY TABLES

F CHAIN-OF-CUSTODY RECORDS AND ANALYTICAL DATA PACKAGES

ED_005352_00000649-00004

1.0 INTRODUCTION

The Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) was tasked by the U.S. Environmental Protection Agency (EPA) Region 7 Superfund Division, under contract number EP-S7-13-06, to support a removal assessment at the Citizen's Gas and Electric site, a former manufactured gas plant (FMGP) in Council Bluffs, Iowa. The purpose of the investigation was to determine the impact of historical gas manufacturing practices on soil and groundwater at the site. This investigation proceeded under authority of the Comprehensive Environmental Response, Compensation, and Liability act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization act of 1986 (SARA).

Removal assessment tasks included, but were not limited to:

- Site reconnaissance to document current site conditions and uses
- Collection of subsurface soil samples by use of Geoprobe direct-push technology (DPT) for analytical determination of concentrations of chemicals of concern (COC)
- Collection of groundwater samples from DPT temporary monitoring wells for analytical determination of concentrations of COCs
- Collection of groundwater samples from existing monitoring wells for analytical determination of concentrations of COCs.

Keith Brown was the START Project Manager for removal assessment activities. The EPA On-Scene Coordinator (OSC) for the project was Kevin Larson.

ED_005352_00000649-00005

2.0 BACKGROUND INFORMATION

Information regarding the site's location and description, operational history, and relevant investigation history is discussed in this section.

2.1 SITE LOCATION AND DESCRIPTION

The Citizen's Gas and Electric site occupies two blocks east (Block 11) and west (Block 12) of South 7th Street, between 10th Avenue and a Chicago, Burlington, and Quincy (CB&Q) rail line in Council Bluffs, Pottawattamie County, Iowa (see Appendix A, Figure 1). The site is in the southwest ¼ of Section 36, Township 75 North, Range 44 West (U.S. Geological Survey [USGS] 1994). Geographic coordinates at the approximate center of the site are 41.251890 degrees (°) north latitude and 95.855405° west longitude.

The site encompasses approximately 4.75 acres. Block 12 currently consists of a vacant, grass-covered lot (north portion) and a fenced gravel lot (south portion). No structures are present within this block. Block 11 currently consists of a vacant commercial building (south portion) and a Black Hills Energy facility (north portion). RCI Roofing Supply Company, Inc. (RCI) operates east of South Expressway Street, immediately east of Block 11.

The City of Council Bluffs obtains most of its drinking water from the Missouri River. A review of the Iowa Department of Natural Resources (IDNR) database of registered wells indicated about 481 water wells within a 4-mile target distance limit (TDL) of the site (see Figure 3 in Appendix A). Of these, 447 are private wells and 34 are public wells. One public well and 11 private wells are within 1 mile of the site; 30 private wells are within 1 to 2 miles of the site; 7 public wells and 180 private wells are within 2 to 3 miles of the site; and 26 public wells and 226 private wells are within 3 to 4 miles of the site.

2.2 OPERATIONAL HISTORY

The Citizen's Gas and Electric site operated as a gas manufacturer from 1870 to 1930. Coal carbonization was the implemented gasification method at the site from 1870 to 1882. Oil replaced coal in the gasification process in 1882; however, coal gas equipment was maintained at the facility until at least 1949 (Dames and Moore 1990). Contaminants and wastes typically associated with gas production include oxide waste, tar residues, sludge, wastewater, ash, and phenolic and ammonia compounds. By-product tars produced during gasification at the site were refined into products (i.e., creosote, road tars, and fuels) or disposed of on site (EPA 1993). By 1930, Council Bluffs had converted to natural gas, relegating the plant to operational status for emergency use only. In 1952, a propane air plant began

ED_005352_00000649-00006

operating at the site (Barr Engineering Company [Barr] 1995). A majority of structures associated with the former manufactured gas plant (FMGP) have since been demolished.

Review of the IDNR Storage Tanks database identified multiple leaking underground storage tank (LUST) sites in the general site vicinity (IDNR 2015). Table 1 summarizes LUST sites in the area. Former LUST sites west and south of the site (1020 and 1205 S. 8th Street, and 1218 S. 6th Street) are shown in Appendix A on Figure 2.

TABLE 1

SUMMARY OF LUST SITES IN GENERAL VICINITY
CITIZEN'S GAS AND ELECTRIC SITE

Address	Site Name	Leak Number	Fuel Type	NFA Letter Issued
1020 South 8th Street	Former Farm Service Coop	7LTM14	Gasoline/Diesel	Unknown*
503 9th Avenue	Eddy's	7LT039	Gasoline	Yes (3/21/2000)
		9LTL56	Gasoline	Unknown
822 South Main Street	Former SAPP Petroleum	8LTN74	Gasoline/Diesel	Yes (6/26/2002)
		9LTK73	Gasoline	Yes (12/6/2004)
1205 South 8th Street	Oil Products Company	7LTG97	Kerosene	Yes (9/15/2003)
1218 South 6th Street	Tri Valley Seed Company	7LTN34	Gasoline	Yes (6/21/2001)

Notes:

* Free product has been recovered multiple times during investigations of the site. The most recent recovery occurred on March 10, 2014.

LUST Leaking underground storage tank
NFA No further action

2.3 PREVIOUS INVESTIGATIONS

The site has been assigned EPA identification number IAD984589093. The following subsections describe relevant previous site investigations.

2.3.1 Iowa Department of Transportation Borings

The Iowa Department of Transportation (IDOT) conducted a highway commission investigation of the area directly east of the site in 1969. The purpose of the investigation was to evaluate foundation conditions for a proposed highway construction project. The investigation identified an oil/gasoline underground storage tank (UST) in that area. Also, IDOT documented a petroleum odor from nearby soils and observed "scum" (Dames and Moore 1990). IDOT subsequently constructed Highway 192 (South Expressway Street) through that area during the mid-1970s.

ED_005352_00000649-00007

2.3.2 Phase I Investigation

Dames & Moore completed a Phase I Investigation of the site (then referred to as Peoples Natural Gas [PNG]) in April 1990. The purpose of the investigation was to characterize site contamination associated with the FMGP operation. The Phase I Investigation included advancing 14 soil borings and installing 4 permanent monitoring wells. Eleven soil samples were collected from the borings, and one groundwater sample was collected from each monitoring well.

Field observations of cores collected from the borings indicated presence of fill materials (clay with wood, bricks, and slag) up to 27 feet below ground surface (bgs) near a former tar pit/gasometer (see Appendix A, Figure 2). Observations and screening of soils by use of a photoionization detector (PID) indicated the highest levels of contamination were in soils collected from the western parcel (Block 12), specifically from borings advanced near the former tar pit. Analytical data indicated elevated concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) and lead in soil samples collected from the western parcel (Block 12) borings.

In addition, elevated concentrations of BTEX, lead, and polynuclear aromatic hydrocarbons (PAH) were identified in groundwater samples from the site. The highest concentrations were reported in samples collected near the former tar pit. The most frequently identified PAHs were naphthalene, phenanthrene, pyrene, acenaphthylene, and fluoranthene (Dames and Moore 1990).

2.3.3 Preliminary Assessment

Ecology and Environment, Inc. (E&E), on behalf of EPA Region 7, completed a Preliminary Assessment (PA) of the site in November 1990. The PA recommended a medium priority site investigation to determine impact(s) on soils and groundwater from historical site operations (E&E 1990).

2.3.4 Administrative Order on Consent

On September 30, 1993, PNG and EPA entered into an Administrative Order on Consent (AOC), Docket No. VII-93-F-0033, regarding the Citizen's Gas and Electric site. The AOC specified that PNG complete a Phase II Investigation to delineate the extent of a release if found to have occurred, or if not, to assess: (1) the threat of release; (2) the source and nature of any hazardous substances, pollutants, or contaminants involved; and (3) any danger to public health and welfare, and the environment (EPA 1993).

ED_005352_00000649-00008

2.3.5 Phase II Investigation

Barr completed a Phase II Investigation of the site in October 1995. The purpose of the investigation was to build upon the site-specific information acquired during the 1990 Phase I Investigation. During the investigation, 14 soil borings were advanced, and 3 permanent monitoring wells were installed. In addition, a 1-foot-thick non-aqueous phase liquid (NAPL) layer identified at the bottom of MW-3 was sampled for laboratory analysis.

The Phase II Investigation confirmed presence of groundwater contamination within the western site parcel (Block 12), and concluded that elevated concentrations of BTEX and PAHs at the site were related to coal tar contamination. Moreover, presence of NAPL was confirmed at the bottom of MW-3, with PAHs constituting approximately 18 percent of the material. Barr recommended further groundwater investigation and risk assessment of the site (Barr 1995).

2.3.6 Phase II Environmental Site Assessment (Nearby Property)

In 2003, Thiele Geotech, Inc. conducted a Phase II Environmental Site Assessment (ESA) at 1001 South 6th Street, approximately one block east of the site. The ESA included advancing one boring to 75.5 feet bgs. The Phase II ESA concluded that soils had been adversely impacted by coal tar constituents from approximately 64 to 75.5 feet bgs, and that coal tar contamination in the form of free-phase non-aqueous product existed at approximately 68 to 73 feet bgs, within the immediate vicinity of the boring. Analytical results from a soil sample collected within 69 to 70.5 feet bgs indicated total extractable hydrocarbons (TEH) as diesel at 28,880,000 micrograms per kilogram (µg/kg), naphthalene at 8,900 µg/kg, 2-methylnaphthalene at 2,270 µg/kg, and phenanthrene at 1,740 µg/kg. Analytical results from a groundwater sample collected from a temporary monitoring well installed in the boring indicated TEH as diesel at 2,206,000 micrograms per liter (µg/L) and naphthalene at 638,200 µg/L (Thiele Geotech, Inc. 2003).

ED_005352_00000649-00009

3.0 REMOVAL ASSESSMENT ACTIVITIES

Removal assessment field activities occurred from December 1 to 14, 2015, and included collection of soil and groundwater samples by use of Geoprobe DPT on site and at adjacent commercial properties, and collection of groundwater samples from existing monitoring wells (see Appendix A, Figure 2). Standard operating procedures (SOP) and chain-of-custody procedures were followed throughout the sampling activities as outlined in the site-specific Quality Assurance Project Plan (QAPP) (Tetra Tech 2015) to verify the integrity of the samples from time of collection until submittal for laboratory analysis.

Sampling totals for the project were as follows: 31 soil boring locations at the site and adjacent properties, with 2 soil samples collected per boring (except at two locations [SB-28 and SB-31] where only 1 sample was collected, as described in Section 4.6); collection of 31 groundwater samples collocated with the soil borings; and collection of 6 groundwater samples from existing monitoring wells (5 on site and 1 off site). Sample locations are depicted on Figure 2 in Appendix A.

Removal assessment field activities were documented photographically (see Appendix B) and in a site logbook (see Appendix C). Pertinent data, including analyses to be performed and exact sample locations, were recorded on field sheets for each sample (see Appendix D). All samples were stored in coolers maintained at or below a temperature of 4 degrees Celsius (°C) pending submittal to the EPA Region 7 laboratory. The following sections detail field activities.

3.1 DPT SOIL SAMPLING

To assess distribution of COCs in subsurface soils, START collected discrete soil samples from borings at 31 locations (15 on site and 16 off site), including 1 background location (SB-1). Each boring was advanced to refusal. On-site boring locations were chosen to represent areas where presence of contamination was most likely based on available historical analytical data. Off-site boring locations were chosen to assist with delineation of the extent of contamination upgradient (north) and downgradient (south and west) of the site.

At each sampling location, continuous soil borings were advanced by use of a Geoprobe DPT rig equipped with a Macro-Core sampler containing disposable liners. Upon retrieving the Macro-Core sampler from each 4-foot depth interval, START visually inspected and screened collected soils for volatile organic compounds (VOC) by use of a hand-held PID. One soil sample was submitted for laboratory analysis from the 2-foot interval of each boring that induced the highest PID readings, or where other indications of impact were evident (odors or staining). If no visual anomalies, odors, or

ED_005352_00000649-00010

elevated PID readings were indicated, a sample was collected from just above the soil-groundwater interface. An additional sample was collected at each boring from the bottom 2-foot interval (within the saturated zone). PID readings, observed staining, and static water levels were recorded in the field logbook (see Appendix C).

At each sampling interval, grab samples of the soil core were collected and placed in 40-milliliter vials, following EPA Method 5035 guidelines for analysis for VOCs, and EPA Region 7 SOP 4230.03 for total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) analysis. The remaining soil was removed from the sample liner and placed in a disposable aluminum pie pan or plastic bag for homogenization, and then transferred to 8-ounce jars. These containers were submitted for analyses for semivolatile organic compounds (SVOC), TPH-diesel range organics (DRO), cyanide, and Target Analyte List (TAL) metals.

3.2 DPT GROUNDWATER SAMPLING

Groundwater samples were collected at 31 locations (including 1 background location) just below the soil-groundwater interface by use of a Geoprobe Screen Point 16 sampling apparatus containing a reusable stainless steel screen. At each sampling location, the Screen Point 16 sampler was advanced to just below the water table, and the screen was exposed to the aquifer at depths ranging from 16 to 26 feet bgs. Groundwater samples were collected through disposable polyethylene tubing by use of a peristaltic pump. Approximately 1 gallon of water was purged at each sampling location prior to sample collection. Groundwater samples were collected directly into laboratory-provided sample containers.

Groundwater samples to be submitted for analysis for VOCs were collected in two 40-milliliter vials and preserved with hydrochloric acid (HCl) to a pH <2. Samples collected for TPH-GRO analysis were collected in two unpreserved 40-milliliter vials. Samples to be analyzed for SVOCs and TPH-DRO were collected in 80-ounce amber glass jugs. Samples to be analyzed for total TAL metals were collected in 1-liter plastic bottles and preserved with nitric acid (HNO_3) to a pH <2. Samples to be submitted for cyanide analysis were collected in 1-liter plastic bottles and preserved with sodium hydroxide (NaOH) to a pH >12.

3.3 MONITORING WELL SAMPLING

To assist with assessment of COC distribution in groundwater, START sampled groundwater from six monitoring wells (one off site and five on site). The monitoring wells had been installed during previous investigations (Phase I and II Investigations) at the site. Prior to sampling, the monitoring wells were

ED_005352_00000649-00011

inspected to document overall integrity. Static water levels and total well depths were measured by use of an electronic water level meter. Depth to water was measured from surveyed reference points or from the north edges of the tops of the well casings, and recorded to the nearest 0.01 foot. Three well casing volumes of groundwater were purged from each well. Furthermore, field water quality parameters (temperature, conductivity, and pH) were recorded during purging until readings stabilized (a difference of less than 0.2 pH units and less than a 10-percent change in temperature and conductivity among three consecutive readings).

After completion of purging, groundwater samples were withdrawn through disposable polyethylene tubing by use of a peristaltic pump and collected directly into laboratory-provided sample containers. Groundwater samples were collected for analyses for VOCs, SVOCs, TPH-GRO, TPH-DRO, cyanide, and total TAL metals. Samples for analysis were collected in the same containers described in Section 3.2.

3.4 INVESTIGATION-DERIVED WASTE SAMPLING

Purged groundwater was collected in two 55-gallon drums and stored near MW-3 pending analytical results. One 55-gallon drum contained purge water from MW-1, MW-2, MW-3, MW-4, and MW-6. The second 55-gallon drum contained purge water from MW-8. A sample of the purge water was collected from one drum to assess proper disposal options for the investigation-derived waste (IDW). The IDW sample was submitted to the EPA Region 7 laboratory and analyzed for VOCs, SVOCs, TPH-GRO, TPH-DRO, cyanide, and total TAL metals. The same containers and preservation techniques used for the environmental samples from the groundwater wells were employed to collect the IDW sample.

3.5 BACKGROUND AND QUALITY CONTROL SAMPLING

One off-site, upgradient location was selected (SB-1/GW-1, north of the site) for collecting background soil and groundwater samples. Soil and groundwater sampling at the background location was performed by application of the same processes described above for DPT soil and groundwater sampling.

For quality control (QC) purposes, field blank, trip blank, and equipment rinsate blank samples were collected, as specified in the QAPP (Tetra Tech 2015). Analytical accuracy and precision would be determined via analysis of laboratory-prepared spikes and duplicates.

ED_005352_00000649-00012

4.0 ANALYTICAL DATA SUMMARY

This section summarizes analytical data from soil, groundwater, IDW, and QC samples collected during RA activities. Analytical data from soil samples were compared to EPA Regional Screening Levels (RSL) for industrial soil, and groundwater sample results were compared to RSLs for tap water and Maximum Contaminant Levels (MCL). Analytical data summary tables are in Appendix E. Chain-of-custody records and analytical data packages are in Appendix F.

4.1 DPT SOIL SAMPLES

During this RA, 60 soil samples from 31 soil boring locations were collected and submitted for laboratory analysis (including background samples). A summary of laboratory results from those samples follows:

VOCs – Benzene (0.023 to 44 milligrams per kilogram [mg/kg]) was detected in 11 subsurface soil samples, exceeding its RSL for industrial soil of 5.1 mg/kg in two samples: SB-9 (12-14') (5.4 mg/kg), and SB-29 (6-8') (44 mg/kg). Ethylbenzene (0.0053 to 110 mg/kg) was also detected in 11 samples, exceeding its RSL for industrial soil of 25 mg/kg in two samples: SB-9 (12-14') (110 mg/kg), and SB-9 (18-20') (35 mg/kg). No other VOCs exceeded their RSLs. Acetone (0.012 to 0.13 mg/kg) was detected in 36 samples, m- and/or p-xylene (0.007 to 72 mg/kg) and o-xylene (0.007 to 26 mg/kg) were detected in 11 samples, isopropylbenzene (0.13 to 8.7 mg/kg) was detected in eight samples, and methylcyclohexane (0.018 J to 25 mg/kg) was detected in seven samples. The "J" qualifier denotes that the concentration is an estimate. Toluene (0.0065 J to 74 mg/kg) was detected in six samples, cyclohexane (0.011 to 4.3 mg/kg) was detected in four samples, and carbon disulfide (0.027 to 0.0485 mg/kg) was detected in three samples. Methylene chloride (0.0056 mg/kg), 2-butanone (0.028 mg/kg), and styrene (21 mg/kg) were each detected in one sample. Table E-1 in Appendix E summarizes VOC concentrations in the subsurface soil samples.

SVOCs – Benzo(a)pyrene (0.24 to 24 J mg/kg) was detected in 17 subsurface soil samples, exceeding its RSL for industrial soil of 2.9 mg/kg in 15 samples. Benzo(a)anthracene (0.46 to 32 mg/kg) was also detected in 17 samples, exceeding its RSL for industrial soil of 2.9 mg/kg in 5 samples. Dibenz(a,h)anthracene (0.24 to 4.7 J mg/kg) was detected in 10 samples, exceeding its RSL for industrial soil of 2.9 mg/kg in 8 samples. Benzo(b)fluoranthrene (0.3 to 32 mg/kg) was detected in 16 samples, exceeding its RSL for industrial soil of 2.9 mg/kg in 6 samples. Naphthalene (0.22 to 1,200 mg/kg) was detected in 18 samples, exceeding its RSL for industrial soil of 17 mg/kg in 4 samples. Indeno(1,2,3-cd)pyrene (0.34 to 14 mg/kg) was detected in 12 samples, exceeding its RSL for industrial soil of 2.9 mg/kg in 1 sample. No other SVOCs exceeded their RSLs. Dimethylphthalate

ED_005352_00000649-00013

(0.23 to 0.95 mg/kg) was detected in 59 samples, and pyrene (0.31 to 84 mg/kg) was detected in 18 samples. Chrysene (0.24 to 33 mg/kg), fluoranthene (0.31 to 49 mg/kg), and phenanthrene (0.67 to 310 mg/kg) were detected in 17 samples; acenaphthylene (0.23 to 6.2 mg/kg), anthracene (0.26 to 17 mg/kg), fluorene (0.23 to 24 mg/kg), and 2-methylnaphthalene (0.26 to 750 mg/kg) were detected in 15 samples; and acenaphthylene (0.28 to 42 mg/kg) and benzo(g,h,i)perylene (0.24 to 18 mg/kg) were each detected in 13 samples. Benzo(k)fluoranthrene (0.35 to 12 mg/kg) was detected in 11 samples, biphenyl (0.32 to 9 mg/kg) was detected in 7 samples, dibenzofuran (0.25 to 2.3 mg/kg) was detected in 6 samples, and carbazole (0.51 and 0.52 mg/kg) was detected in 2 samples. 2,4-Dimethylphenol (0.36 mg/kg), 4-methylphenol (1.1 mg/kg), and phenol (1 mg/kg) were each detected in 1 sample. Table E-2 in Appendix E summarizes SVOC concentrations in the subsurface soil samples.

Metals – Arsenic (6.2 to 38.6 mg/kg) was detected in 44 subsurface soil samples, all exceeding its RSL for industrial soil of 3 mg/kg; however, only three concentrations exceeded the U.S. Geological Survey (USGS) mean background concentration of 12.1 mg/kg for Pottawattamie County soils. No other TAL metals exceeded their RSLs. Table E-3 in Appendix E summarizes concentrations of metals in the subsurface soil samples.

Cyanide – Cyanide was detected in six subsurface soil samples at concentrations ranging from 0.74 to 4.1 mg/kg, all below the RSL for industrial soil of 12 mg/kg. Table E-4 in Appendix E summarizes cyanide concentrations in the subsurface soil samples.

TPH – TPH-GRO (4.06 to 1,850 mg/kg) was detected in 17 subsurface soil samples, exceeding the RSL of 42 mg/kg for TPH-aromatic low in industrial soil in eight samples at concentrations ranging from 47.9 to 1,850 mg/kg). TPH-DRO (278 to 50,600 mg/kg) was detected in 22 samples, exceeding the RSL of 44 mg/kg for TPH-aliphatic medium in 19 samples at concentrations ranging from 61.6 to 50,600 mg/kg. Tables E-1 and E-2 in Appendix E summarize TPH-GRO and TPH-DRO concentrations in the subsurface soil samples, respectively.

4.2 DPT GROUNDWATER SAMPLES

During this RA, 31 DPT groundwater samples (collocated with the 31 soil boring locations) were collected and submitted for laboratory analysis. A summary of laboratory results from those samples follows:

VOCs – Benzene (8.6 to 11,000 µg/L) was detected in 10 DPT groundwater samples at concentrations exceeding its EPA MCL of 5 µg/L and RSL (tap water) of 0.46 µg/L. Ethylbenzene (14 to 2,600 µg/L)

ED_005352_00000649-00014

was detected in 8 samples, exceeding its RSL (tap water) of 1.5 µg/L in all 8 samples, and exceeding its MCL of 700 µg/L in 5 samples. Nine samples contained o-xylene (6.4 to 1,300 µg/L), exceeding its RSL (tap water) of 19 µg/L in 6 samples. Six samples contained m- and/or p-xylene (16 to 2,200 µg/L), exceeding its RSL (tap water) of 19 µg/L in 5 samples. Toluene (8.4 to 490 J µg/L) was detected in 9 samples, exceeding its RSL (tap water) of 110 µg/L in 3 samples. *Cis*-1,2-DCE (8.6 and 50 µg/L) was detected in 2 samples, both exceeding its RSL (tap water) of 3.6 µg/L. No other VOCs were detected above their respective MCLs or RSLs; however, the following VOCs were above laboratory reporting limits in at least 1 sample: naphthalene (24 to 9,200 µg/L) in 10 samples, isopropylbenzene (12 to 160 µg/L) in 7 samples, cyclohexane (6.4 to 180 µg/L) in 3 samples, and methylcyclohexane (13 and 93 µg/L) in 2 samples. No MCLs have been established for isopropylbenzene or cyclohexane; no RSLs (tap water) or MCLs have been established for methylcyclohexane or naphthalene. Table E-5 in Appendix E summarizes VOC concentrations in the DPT groundwater samples.

SVOCs – Biphenyl (7.1 to 54 µg/L) was detected in 7 DPT groundwater samples, all exceeding its RSL (tap water) of 0.83 µg/L. 2-Methylnaphthalene (5.3 to 1,000 µg/L) was detected in 8 samples, exceeding its RSL (tap water) of 36 µg/L in 5 samples. Benzo(a)anthracene (6.8 µg/L) was detected in 1 sample exceeding its RSL (tap water) of 0.012 µg/L, and chrysene (6.1 µg/L) was detected in 1 sample exceeding its RSL (tap water) of 3.4 µg/L. No other SVOCs were detected above their respective RSLs; however, the following SVOCs were detected above laboratory reporting limits in at least 1 sample: acenaphthalene (6.0 to 250 µg/L) in 11 samples, naphthalene (20 to 6,200 µg/L) in 9 samples, fluorene (12 to 94 J µg/L) in 8 samples, anthracene (6.3 to 20 µg/L) in 6 samples, 2,4-dimethylphenol (33 to 79 µg/L) in 5 samples, fluoranthene (7.8, 11, and 15 µg/L) in 3 samples, pyrene (8.9, 14, and 19 µg/L) in 3 samples, acetophenone (14 and 15 µg/L) in 2 samples, and phenol (21 and 140 µg/L) in 2 samples. For none of the aforementioned SVOCs have MCLs been established. Other detected SVOCs for which no MCLs or RSLs have been established include: acenaphthylene (6.1 to 70 µg/L) in 8 samples, dibenzofuran (5.7 to 16 µg/L) and phenanthrene (17 to 100 µg/L) in 7 samples, carbazole (13, 20, and 33 µg/L) in 3 samples, and 2-methylphenol (16 and 110 µg/L) and 4-methylphenol (73 and 190 µg/L) in 2 samples. Table E-6 in Appendix E summarizes SVOC concentrations in the DPT groundwater samples.

Metals – Selenium (54 to 744 µg/L) was detected in 25 DPT groundwater samples, all exceeding its MCL of 50 µg/L and its RSL (tap water) of 10 µg/L. Arsenic (26 to 164 µg/L) was detected in 17 samples, all exceeding its MCL of 10 µg/L and RSL (tap water) of 0.052 µg/L. Barium (16 to 6,150 µg/L) was detected in 31 samples, exceeding its MCL of 2,000 µg/L in 5 samples, and its RSL (tap water) of 380 µg/L in 16 samples. Lead (52 to 247 J µg/L) was detected in 8 samples, all exceeding its MCL (action level) and RSL (tap water) of 15 µg/L. Aluminum (157 to 252,000 µg/L) was detected in

ED_005352_00000649-00015

31 samples, exceeding its MCL of 20,000 μg/L in 12 samples. Beryllium (5 to 13 J μg/L) was detected in 2 samples, both exceeding its MCL of 4 μg/L and its RSL (tap water) of 2.5 μg/L. Cadmium (5 and 10 J μg/L) was detected in 2 samples, both equal to or exceeding its MCL of 5 μg/L and exceeding its RSL (tap water) of 0.92 μg/L. Chromium (22 to 274 μg/L) was detected in 14 samples, exceeding its MCL of 100 μg/L in 2 samples. Manganese (93 to 20,000 μg/L) was detected in 31 samples, exceeding its RSL (tap water) of 430 μg/L in 26 samples. Iron (1,060 to 395,000 μg/L) was detected in 31 samples, exceeding its RSL (tap water) of 14,000 μg/L in 23 samples. Cobalt (12 to 153 J μg/L) was detected in 16 samples, all exceeding its RSL (tap water) of 6 μg/L. Vanadium (11 to 634 μg/L) was detected in 27 samples, exceeding its RSL (tap water) of 86 μg/L in 6 samples. Copper (8 to 392 μg/L) was detected in 29 samples, exceeding its RSL (tap water) of 80 μg/L in 4 samples, but below its MCL of 1,300 μg/L. Zinc (34 to 1,290 μg/L) was detected in 28 samples, exceeding its RSL (tap water) of 600 μg/L in 1 sample. Nickel (22 to 416 J μg/L) was detected in 13 samples, exceeding its RSL (tap water) of 390 μg/L in 1 sample. No other metals were detected at concentrations above their respective MCLs or RSLs; however, molybdenum (17 μg/L) was above laboratory reporting limits in 1 sample. In addition, calcium (103 to 1,280 μg/L), magnesium (12,100 to 428,000 μg/L), potassium (5,240 to 141,000 μg/L), and sodium (18,500 to 1,330,000 μg/L) were detected in all 31 samples, and titanium (11 to 634 μg/L) was detected in 30 samples. MCLs have not been established for aluminum, manganese, iron, cobalt, vanadium, nickel, or molybdenum. Moreover, calcium, magnesium, potassium, sodium, and titanium do not have established MCLs or RSLs (tap water). Table E-7 in Appendix E summarizes total metal concentrations in the DPT groundwater samples.

Cyanide – Cyanide was detected in 11 DPT groundwater samples at concentrations ranging from 12.8 to 206 μg/L, exceeding its RSL (0.15 μg/L) in all 11 samples, and its MCL of 200 μg/L in 1 sample. Table E-8 in Appendix E summarizes cyanide concentrations in the DPT groundwater samples.

TPH – TPH-GRO (42 to 90,800 μg/L) was detected in 12 DPT groundwater samples, all exceeding the RSL of 3.3 μg/L for TPH-aromatic low in tap water. TPH-DRO (534 to 9,880 μg/L) was detected in 9 samples, all exceeding the RSL of 5.5 μg/L for TPH-aromatic medium in tap water. Tables E-5 and E-6 in Appendix E summarize TPH-GRO and TPH-DRO concentrations in the DPT groundwater samples, respectively.

ED_005352_00000649-00016

4.3 MONITORING WELL SAMPLES

During this RA, groundwater samples were collected from six monitoring wells and submitted for laboratory analysis. A summary of laboratory results for those samples follows:

VOCs – Benzene (360 and 1,500 μg/L) was detected in two monitoring well samples, both exceeding its MCL of 5 μg/L and RSL (tap water) of 0.46 μg/L. Ethylbenzene (110 and 1,800 μg/L) was also detected in two samples, exceeding its RSL (tap water) of 1.5 μg/L in both samples, and exceeding its MCL of 700 μg/L in one sample. Two samples contained m- and/or p-xylene (48 and 480 μg/L) and o-xylene (8.4 and 350 μg/L); both m- and/or p-xylene concentrations exceeded the RSL for total xylenes (tap water) of 19 μg/L, and one o-xylene concentration exceeded the RSL. No other VOCs were detected above their respective MCLs or RSLs; however, the following VOCs were detected above laboratory reporting limits in at least one sample: isopropylbenzene (74 and 91 μg/L) in two samples, and toluene (61 μg/L) in one sample. Methylcyclohexane (5.61 μg/L) was detected in one sample, and naphthalene (29 to 10,000 J μg/L) was detected in three samples; no RSLs (tap water) or MCLs have been established for methylcyclohexane or naphthalene. Table E-9 in Appendix E summarizes VOC concentrations in the monitoring well samples.

SVOCs – No concentrations of SVOCs exceeded any MCLs in the monitoring well samples. Biphenyl (59 μg/L) was detected in one sample, exceeding its RSL (tap water) of 0.83 μg/L. No other concentrations of SVOCs were detected above their respective RSLs; however, the following SVOCs were above laboratory reporting limits in at least one sample: 2-methylnaphthalene (16 μg/L), acenaphthene (8.6 μg/L), anthracene (14 μg/L), fluoranthene (7.0 μg/L), fluorene (72 μg/L), and pyrene (7.6 μg/L). The following SVOCs were also detected, for which no MCLs or RSLs have been established: acenaphthylene (7.8 μg/L), carbazole (26 μg/L), dibenzofuran (7.8 μg/L), and phenanthrene (78 μg/L), each detected in one sample; naphthalene (16, 2,500, and 8,900 μg/L) was detected in three monitoring well samples. Table E-10 in Appendix E summarizes SVOC concentrations in the monitoring well samples.

Metals – Selenium (53 to 154 μg/L) was detected in five monitoring well samples, all exceeding its MCL of 50 μg/L and RSL (tap water) of 10 μg/L. Arsenic (29, 41, and 50 μg/L) was detected in three samples, all exceeding its MCL of 10 μg/L and RSL (tap water) of 0.052 μg/L. Iron (423 to 34,500 μg/L) was detected in six samples, exceeding its RSL (tap water) of 14,000 μg/L in five samples. Manganese (418 to 8,370 μg/L) was detected in six samples, exceeding its RSL (tap water) of 430 μg/L in five samples. Barium (267 to 1,540 μg/L) was detected in six samples, exceeding it RSL (tap water) of

ED_005352_00000649-00017

380 µg/L in three samples. Calcium (114 to 307 µg/L), magnesium (37.4 to 105 µg/L), potassium (6,150 to 10,800 µg/L), and sodium (43,000 to 215,000 µg/L) were detected in all six samples; calcium, magnesium, potassium, and sodium do not have established MCLs or RSLs (tap water). Table E-11 in Appendix E summarizes concentrations of total metals in the monitoring well samples.

Cyanide – Cyanide was detected in three monitoring well samples at concentrations of 13.8, 19.9, and 73.7 µg/L, all below its MCL of 200 µg/L, but above its RSL (0.15 µg/L). Table E-12 in Appendix E summarizes cyanide concentrations in the monitoring well samples.

TPH – TPH-GRO (2,650, and 19,600 µg/L) was detected in two samples, both exceeding its RSL of 3.3 µg/L for TPH-aromatic low in tap water. TPH-DRO (4,230 and 11,200 µg/L) was also detected in two samples, both exceeding its RSL of 5.5 µg/L for TPH-aromatic medium in tap water. Tables E-9 and E-10 in Appendix E summarize TPH-GRO and TPH-DRO concentrations in the monitoring well samples, respectively.

4.4 INVESTIGATION-DERIVED WASTE SAMPLE

During this RA, one IDW sample (purge water) was collected and submitted for laboratory analysis. This IDW sample was collected to assess proper disposal options for the purge water. A summary of laboratory results from the IDW sample follows:

VOCs – Naphthalene (3,200 J µg/L), benzene (330 µg/L), ethylbenzene (290 µg/L), toluene (17 µg/L), 2-butanone (170 J µg/L), acetone (190 J µg/L), isopropylbenzene (27 µg/L), m- and/or p-xylene (110 µg/L), and o-xylene (73 µg/L) were detected in the IDW sample. Table E-9 in Appendix E summarizes VOC concentrations in the IDW sample.

SVOCs – Naphthalene (1,600 µg/L), biphenyl (12 µg/L), 2-methylnaphthalene (97 J µg/L), acenaphthalene (51 µg/L), fluorene (18 µg/L), and phenanthrene (24 µg/L) were detected in the IDW sample. Table E-10 in Appendix E summarizes SVOC concentrations in the IDW sample.

Metals – Manganese (1,070 µg/L), barium (646 µg/L), iron (12,000 µg/L), aluminum (72 µg/L), calcium (159 µg/L), magnesium (64.4 µg/L), potassium (8,900 µg/L), and sodium (67,000 µg/L) were detected. Table E-11 in Appendix E summarizes concentrations of total metals in the IDW sample.

Cyanide – Cyanide was not detected in the IDW sample.

ED_005352_00000649-00018

TPH – TPH-GRO (3,310 µg/L) and TPH-DRO (2,760 µg/L) were detected in the IDW sample. Tables E-9 and E-10 in Appendix E summarize the TPH-GRO and TPH-DRO concentrations in the IDW sample, respectively.

4.5 QUALITY CONTROL SAMPLES

In accordance with the QAPP, QC sampling included collection of one equipment rinsate sample from the decontaminated Geoprobe Screen Point 16 metal sheath, and one field blank sample. Those samples were analyzed for VOCs, SVOCs, TPH-GRO, TPH-DRO, TAL metals, and cyanide. Analytical results from the rinsate sample indicated detectable concentrations of acetone (7.4 µg/L) and iron (94 µg/L). Acetone is a common laboratory contaminant, and the iron concentration was significantly less than those found in the DPT groundwater samples. Analytical results for the field blank were below laboratory detection limits for all analytes. In addition, one laboratory-prepared trip blank sample accompanied the sample cooler dedicated to VOC samples throughout the sampling event. The trip blank was analyzed for VOCs and TPH-GRO; no analytes were detected.

4.6 DEVIATIONS FROM THE QUALITY ASSURANCE PROJECT PLAN

The following describes instances when RA field activities did not accord with the approved QAPP:

- Due to shallow DPT refusal and poor sample recovery, only one soil sample was collected at boring SB-28, from the bottom of the boring at 6-8 feet bgs.
- For further assessment of the former gasometer/tar pit area, an additional boring (identified as SB-31) was advanced north of this location. One soil sample and one groundwater sample were collected from this DPT boring.

ED_005352_00000649-00019

5.0 SUMMARY

Tetra Tech START was tasked by the EPA Region 7 Superfund Division to support a removal assessment at the Citizen's Gas and Electric site, an FMGP in Council Bluffs, Pottawattamie County, Iowa. The purpose of the investigation was to determine the impact of historical gas manufacturing practices on soil and groundwater at the site.

The Citizen's Gas and Electric site occupies two blocks east (Block 11) and west (Block 12) of South 7th Street, between 10th Avenue and a CB&Q rail line. The site encompasses approximately 4.75 acres. Block 12 currently consists of a vacant, grass-covered lot (north portion) and a fenced gravel lot (south portion). No structures are present within this block. Block 11 currently consists of a vacant commercial building (south portion) and a Black Hills Energy facility (north portion). A roofing supply company (RCI) operates east of South Expressway Street, immediately east of Block 11.

RA field activities included collection of 60 soil and 31 groundwater samples by use of Geoprobe DPT equipment on site and at adjacent commercial properties, and collection of 6 groundwater samples from existing monitoring wells, for laboratory analysis.

DPT Soil Samples

Benzene was detected in 11 subsurface soil samples, exceeding its RSL for industrial soil in 2 samples. Ethylbenzene was also detected in 11 samples, exceeding its RSL for industrial soil in 2 samples. No other VOCs exceeded their RSLs.

Benzo(a)pyrene was detected in 17 subsurface soil samples, exceeding its RSL for industrial soil in 15 samples. Benzo(a)anthracene was also detected in 17 samples, exceeding its RSL for industrial soil in 5 samples. Dibenz(a,h)anthracene was detected in 10 samples, exceeding its RSL for industrial soil in 8 samples. Benzo(b)fluoranthrene was detected in 16 samples, exceeding its RSL for industrial soil in 6 samples. Naphthalene was detected in 18 samples, exceeding its RSL for industrial soil in 4 samples. Indeno(1,2,3-cd)pyrene was detected in 12 samples, exceeding its RSL for industrial soil in 1 sample. No other SVOCs exceeded their RSLs.

Arsenic was detected in 44 subsurface soil samples, all exceeding its RSL for industrial soil; however, only three concentrations exceeded the USGS mean background concentration of 12.1 mg/kg for Pottawattamie County soils. No other TAL metals exceeded their RSLs.

ED_005352_00000649-00020

TPH-GRO was detected in 17 subsurface soil samples, exceeding the RSL for TPH-aromatic low in industrial soil in 2 samples. TPH-DRO was detected in 22 samples, exceeding the RSL for TPH-aliphatic medium in industrial soil.

DPT Groundwater Samples

Benzene was detected in 10 DPT groundwater samples at concentrations exceeding its EPA MCL and RSL (tap water). Ethylbenzene was detected in 8 samples, exceeding its RSL (tap water) in all 8 samples, and exceeding its MCL in 5 samples. Nine samples contained o-xylene, exceeding its RSL (tap water) in 6 samples. Six samples contained m- and/or p-xylene, exceeding its RSL (tap water) in 5 samples. Toluene was detected in 9 samples, exceeding its RSL (tap water) in 3 samples. *Cis*-1,2-DCE was detected in 2 samples, both exceeding its RSL (tap water). No other VOCs were detected above their respective MCLs or RSLs.

Biphenyl was detected in 7 DPT groundwater samples, all exceeding its RSL (tap water). 2-Methylnaphthalene was detected in 8 samples, exceeding its RSL (tap water) in 5 samples. Benzo(a)anthracene was detected in 1 sample, exceeding its RSL (tap water), and chrysene was also detected in 1 sample above its RSL (tap water). No other SVOCs were detected above their respective MCLs or RSLs.

Selenium was detected in 25 DPT groundwater samples, all exceeding its MCL and RSL (tap water). Arsenic was detected in 17 samples, all exceeding its MCL and RSL (tap water). Barium was detected in 31 samples, exceeding its MCL in 5 samples, and its RSL (tap water) in 16 samples. Lead was detected in 8 samples, all exceeding its MCL (action level) and RSL (tap water). Aluminum was detected in 31 samples, exceeding its MCL in 12 samples. Chromium was detected in 14 samples, exceeding its MCL in 2 samples. Beryllium was detected in 2 samples, both exceeding its MCL and its RSL (tap water). Cadmium was detected in 2 samples, both equal to or exceeding its MCL and exceeding its RSL (tap water). Manganese was detected in 31 samples, exceeding its RSL (tap water) in 26 samples. Iron was detected in 31 samples, exceeding its RSL (tap water) in 23 samples. Cobalt was detected in 16 samples, all exceeding its RSL (tap water). Vanadium was detected in 27 samples, exceeding its RSL (tap water) in 6 samples. Copper was detected in 29 samples, exceeding its RSL (tap water) in 4 samples, but below its MCL. Zinc was detected in 28 samples, exceeding its RSL (tap water) in 1 sample. Nickel was detected in 13 samples, exceeding its RSL (tap water) in 1 sample. No other metals were detected above their respective MCLs or RSLs.

ED_005352_00000649-00021

Cyanide was detected in 11 DPT groundwater samples, exceeding its RSL in all 11 samples, and its MCL in 1 sample.

TPH-GRO was detected in 12 DPT groundwater samples, exceeding the RSL for TPH-aromatic low in tap water in 12 samples. TPH-DRO was detected in 9 samples, exceeding the RSL for TPH-aromatic medium in tap water in all 9 samples.

Monitoring Well Samples

Benzene was detected in two monitoring well samples, both exceeding its MCL and RSL (tap water). Ethylbenzene was detected in two samples, exceeding its RSL (tap water) of 1.5 µg/L in both samples, and exceeding its MCL in one sample. Two samples contained m- and/or p-xylene and o-xylene; both m- and/or p-xylene concentrations exceeded the RSL (tap water) for total xylenes, and one o-xylene concentration exceeded the RSL. No other VOCs were detected above their respective MCLs or RSLs.

Biphenyl was detected in one monitoring well sample, exceeding its RSL (tap water). No other SVOCs were detected above their respective MCLs or RSLs (no SVOCs exceeded any MCLs in the monitoring well samples).

Selenium was detected in five monitoring well samples, all exceeding its MCL and RSL (tap water). Arsenic was detected in three samples, all exceeding its MCL and RSL (tap water). Iron was detected in six samples, exceeding its RSL (tap water) in five samples. Manganese was detected in six samples, exceeding its RSL (tap water) in five samples. Barium was detected in six samples, exceeding its RSL (tap water) in three samples.

Cyanide was detected in three monitoring well samples, all above its RSL.

TPH-GRO was detected in two monitoring well samples, both exceeding the RSL for TPH-aromatic low in tap water. TPH-DRO was detected in two samples, both exceeding the RSL for TPH-aromatic medium in tap water.

5.1 REMOVAL CONSIDERATIONS

The RA investigation confirmed presence of soil contamination. Elevated concentrations of BTEX and PAHs at the site are likely related to former FMGP operations. Soil contamination occurs in the southern portion of the site, extending from 2 feet bgs to the soil-groundwater interface (approximately 5 to 14 feet bgs). The highest levels of contamination occur around the former gasometer locations. One soil sample

ED_005352_00000649-00022

contained TPH-DRO at a concentration exceeding its 10^{-4} cancer risk value. Workers may be exposed to contaminated soil during excavation.

5.2 PRE-REMEDIAL CONSIDERATIONS

Laboratory analysis indicated coal tar constituents have significantly impacted groundwater within the immediate vicinity of the site. Groundwater contamination occurs in the southern portion of the site, and extends west across 6th Street and south of 11th Avenue. Groundwater contamination may be more widespread at depth. The 2003 Phase II ESA completed for 1001 6th Street indicated coal tar constituents in soils within 64 to 75.5 feet bgs, below the depth of existing monitoring wells at the site (24 to 44 feet below top of casing [TOC]).

An EPA-funded PA was conducted in 1990. An Expanded Site Inspection was conducted by the Potentially Responsible Party from 1994 to 1996 (EPA 2016).

ED_005352_00000649-00023

6.0 REFERENCES

Barr Engineering Company (Barr). 1995. Phase II Investigation Report, Citizen's Gas and Electric Company Site. October.

Dames and Moore. 1990. Phase I Investigation for Peoples Natural Gas, Council Bluffs, Iowa. April 12.

Ecology and Environment, Inc. (E&E). 1990. Preliminary Assessment of Former Coal Gasification Site. November 15.

Iowa Department of Natural Resources (IDNR). 2015. Storage Tanks Database. Accessed October 26, 2015. https://programs.iowadnr.gov/tanks/pages/advanced.aspx

Tetra Tech, Inc. (Tetra Tech). 2015. Quality Assurance Project Plan. Citizen's Gas and Electric Site, Council Bluffs, Iowa. November 11.

Thiele Geotec, Inc. 2003. Limited Phase II ESA. Commercial Property — 1001 South 6th Street, Council Bluffs, Iowa.

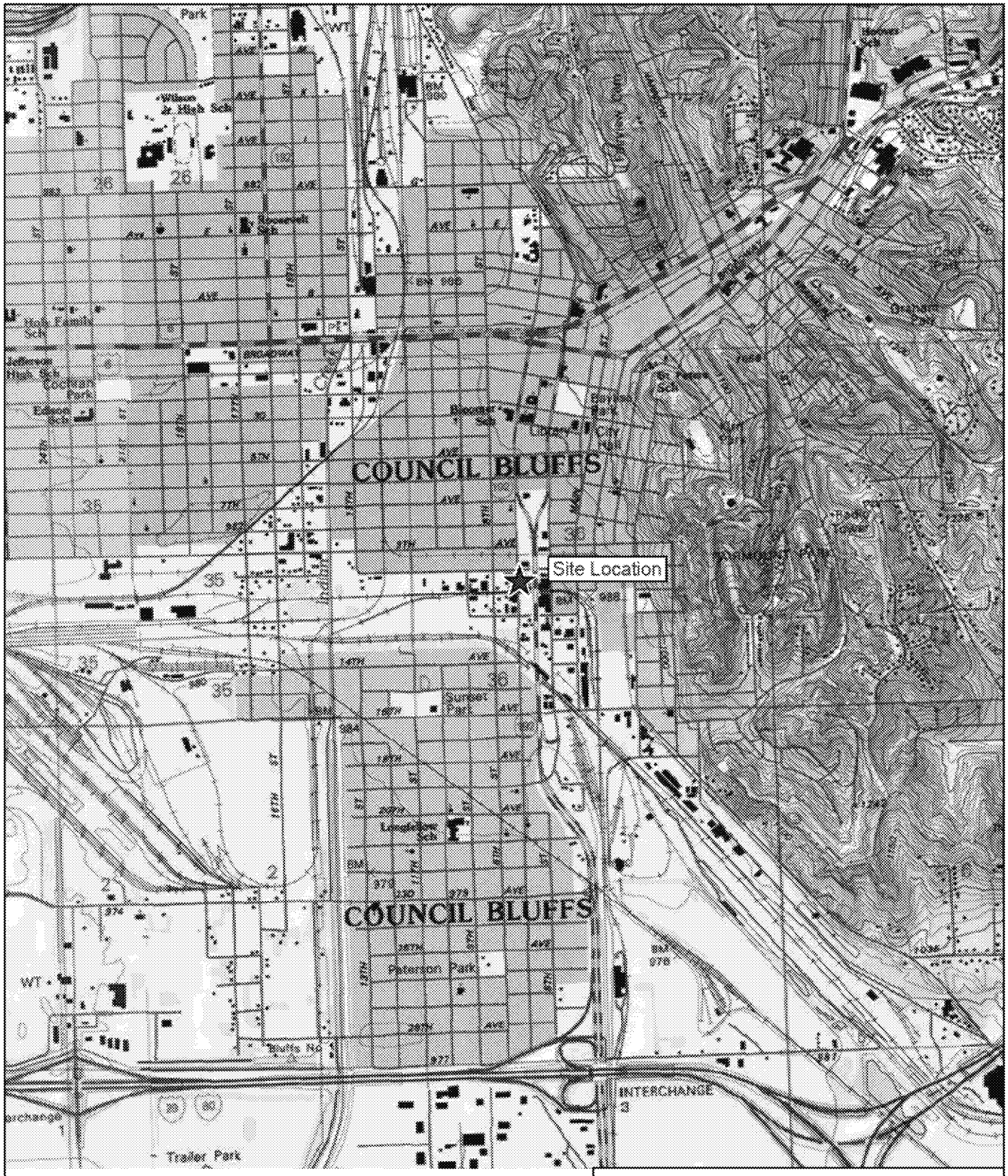
U.S. Environmental Protection Agency (EPA). 1993. Administrative Order on Consent, Citizen's Gas and Electric Company Site. September 30.

EPA. 2016. Envirofacts CERCLIS Search. Accessed: April 8, 2016. https://www.epa.gov/enviro/cerclis-search

U.S. Geological Survey (USGS). 1994. Council Bluffs North, Iowa, Quadrangle. USGS 7.5-Minute Topographic Series.

APPENDIX A

FIGURES



Source: USGS Council Bluffs North, Iowa 7.5 Minute Topo Quad,1994;
USGS Council Bluffs South, Iowa 7.5 Minute Topo Quad, 1994

Citizen's Gas and Electric Company Site
Council Bluffs, Iowa

Figure 1
Site Location Map

TETRA TECH

Date 10/23/2015 Drawn By Clayton Hayes Project No X90.25.16.2112.000

Legend

- DPT soil and groundwater sample location
- Former LUST location
- Monitoring well groundwater sample location
- Approximate site boundary
- Former gasometer location
- Former gasometer/tar pit location
- Site feature boundary
- DPT Direct push technology
- LUST Leaking underground storage tank

N

0 75 150

Feet

Source: ESRI, ArcGIS Online, Bing Maps Imagery, 2014

Citizen's Gas and Electric Company Site
Council Bluffs, Iowa

Figure 2

Sample Location Map

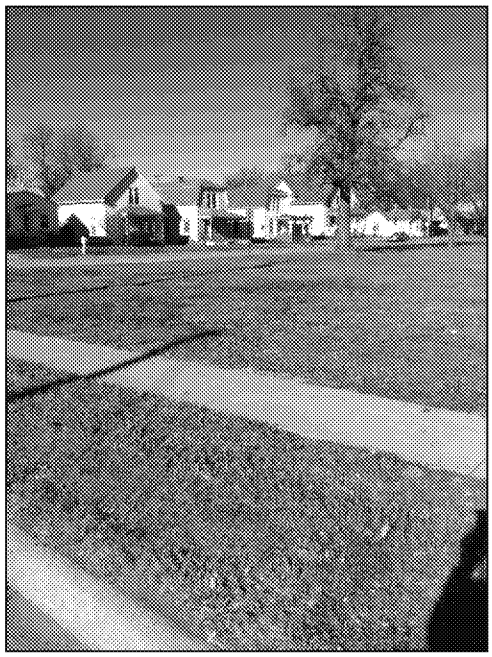
TETRA TECH

Date 2/12/2016 Drawn By Nick Wiedenfeld Project No 208025.16.03.12.003

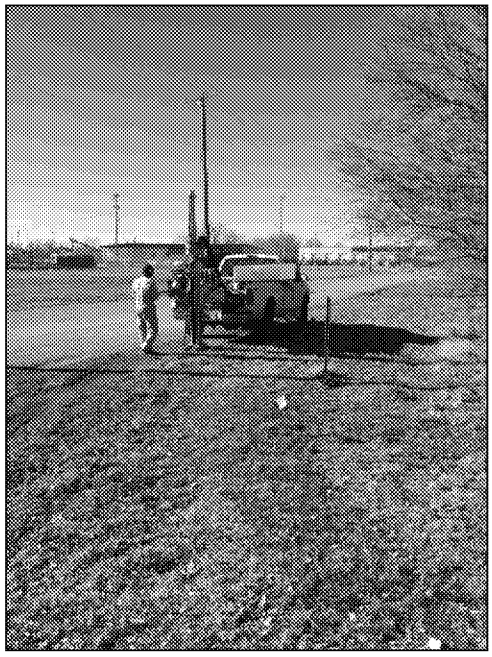
APPENDIX B

PHOTOGRAPHIC DOCUMENTATION

Citizen's Gas & Electric Site
Council Bluffs, Iowa



TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the location of Soil Boring 1 (SB-1)/ Groundwater 1 (GW-1).	1
	CLIENT	Environmental Protection Agency – Region 7	Date 12/7/2015
Direction: Northwest	PHOTOGRAPHER	Keith Brown	

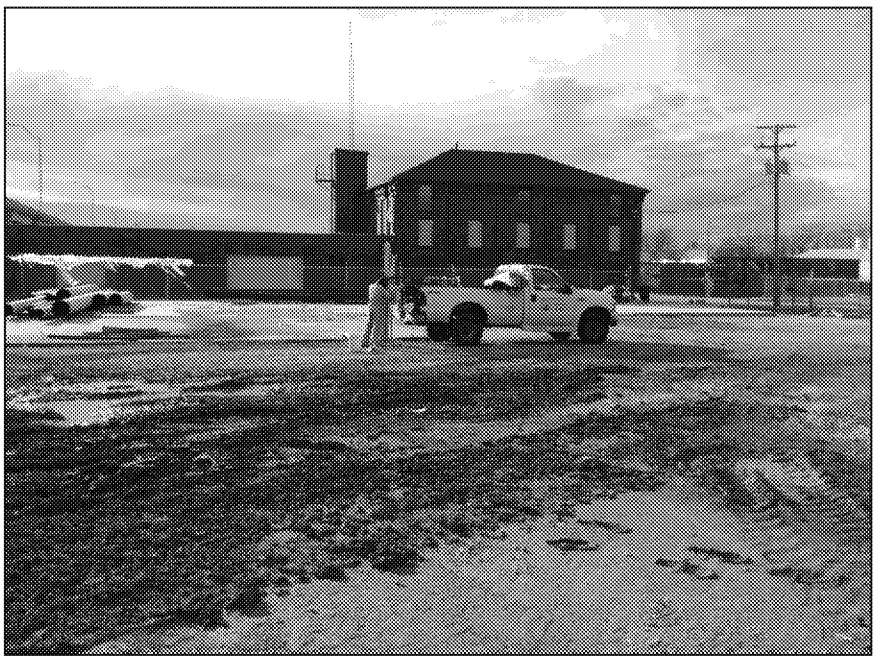


TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the direct-push technology (DPT) rig at SB-2/GW-2.	2
	CLIENT	Environmental Protection Agency – Region 7	Date 12/7/2015
Direction: West	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00029

Citizen's Gas & Electric Site
Council Bluffs, Iowa

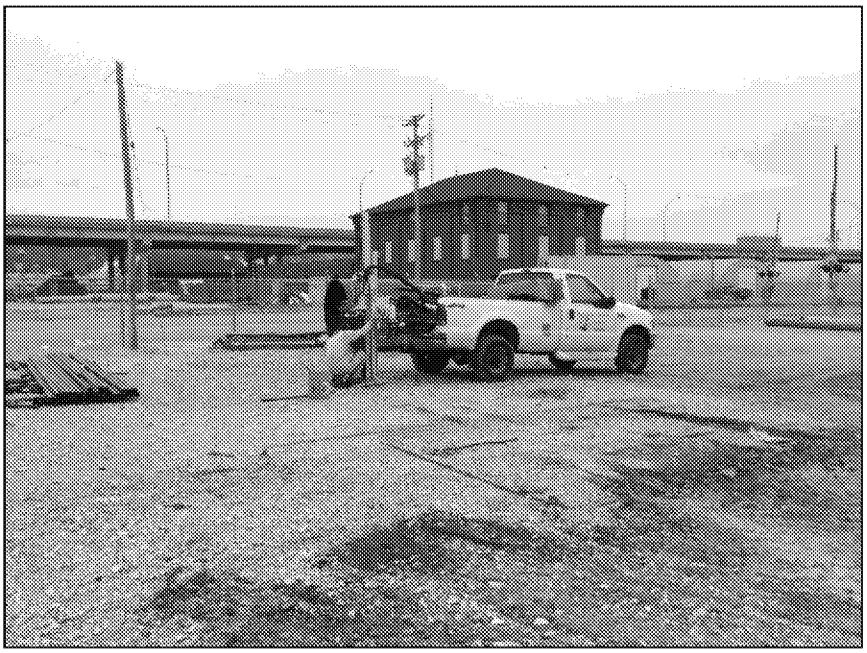
TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-13/GW-13.	3
	CLIENT	Environmental Protection Agency – Region 7	Date 12/9/2015
Direction: Southwest	PHOTOGRAPHER	Keith Brown	



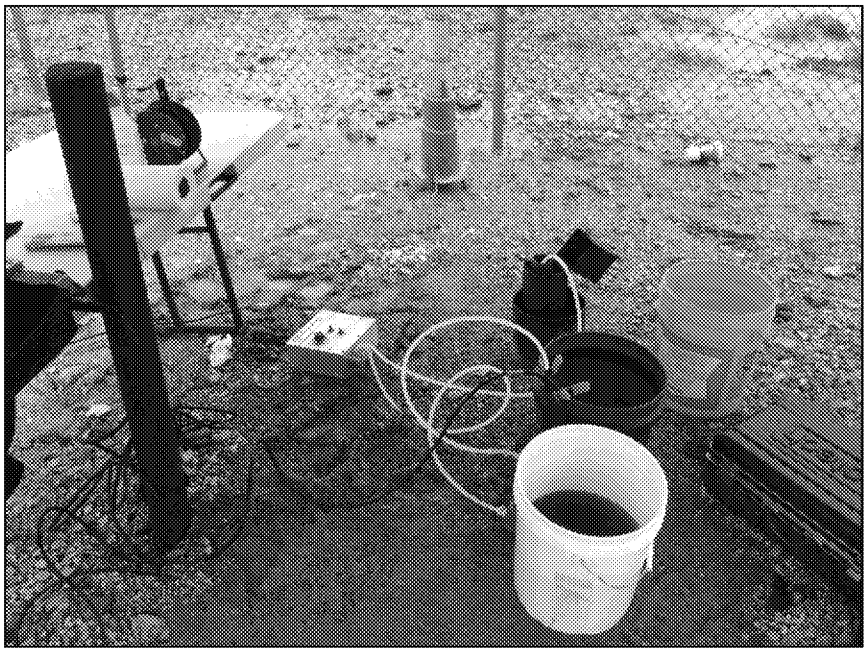
TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-7/GW-7.	4
	CLIENT	Environmental Protection Agency – Region 7	Date 12/7/2015
Direction: Southwest	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00030

Citizen's Gas & Electric Site
Council Bluffs, Iowa



TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-31/GW-31.	5
	CLIENT	Environmental Protection Agency – Region 7	Date 12/12/2015
Direction: Southeast	PHOTOGRAPHER	Keith Brown	

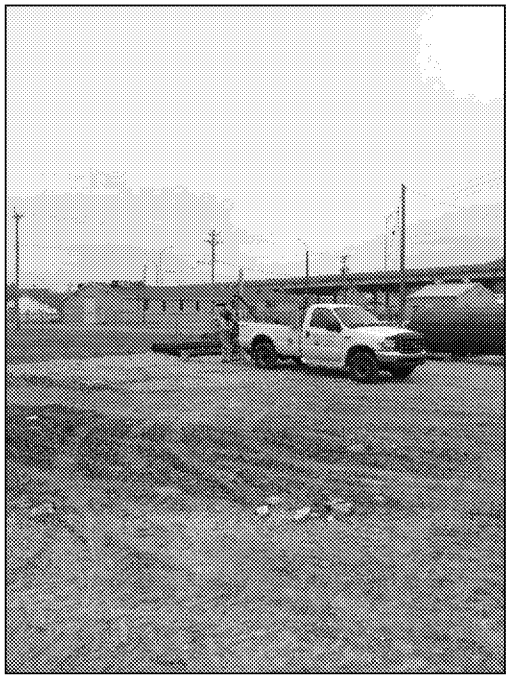


TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the groundwater purging/sampling setup at Monitoring Well 4 (MW-4).	6
	CLIENT	Environmental Protection Agency – Region 7	Date 12/13/2015
Direction: West	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00031

Citizen's Gas & Electric Site
Council Bluffs, Iowa

TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-30/GW-30.	7
	CLIENT	Environmental Protection Agency – Region 7	Date 12/12/2015
Direction: South	PHOTOGRAPHER	Keith Brown	

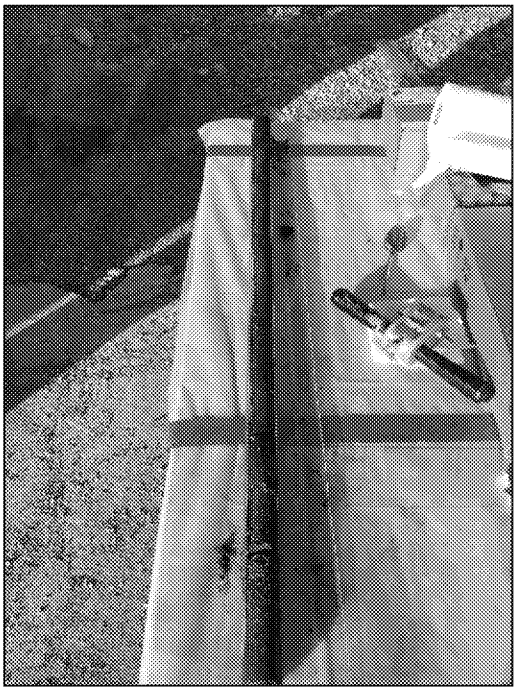


TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-31/GW-31.	8
	CLIENT	Environmental Protection Agency – Region 7	Date 12/12/2015
Direction: Northeast	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00032

Citizen's Gas & Electric Site
Council Bluffs, Iowa

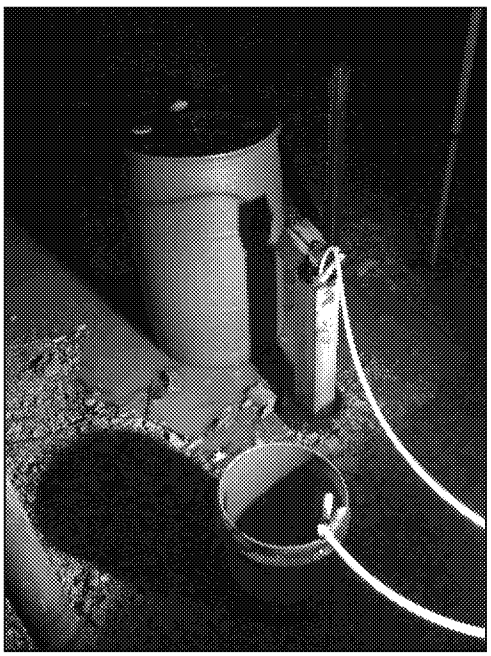
TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-11/GW-11.	9
	CLIENT	Environmental Protection Agency – Region 7	Date 12/9/2015
Direction: West	PHOTOGRAPHER	Keith Brown	



TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows a soil core at SB-9 from 8 to 12 feet below ground surface.	10
	CLIENT	Environmental Protection Agency – Region 7	Date 12/8/2015
Direction: Down	PHOTOGRAPHER	Keith Brown	

Citizen's Gas & Electric Site
Council Bluffs, Iowa

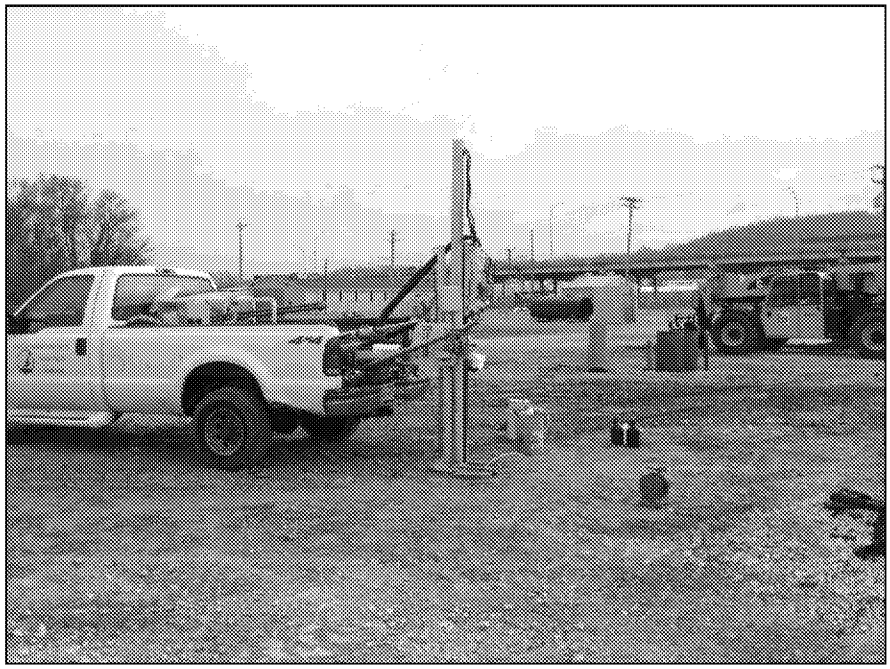
TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-30/GW-30.	11
	CLIENT	Environmental Protection Agency – Region 7	Date 6/25/2015
Direction: Southeast	PHOTOGRAPHER	Keith Brown	



TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows MW-3 being purged. The blue drum in the background was used to contain monitoring well purge water.	12
	CLIENT	Environmental Protection Agency – Region 7	Date 12/13/2015
Direction: Southeast	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00034

Citizen's Gas & Electric Site
Council Bluffs, Iowa



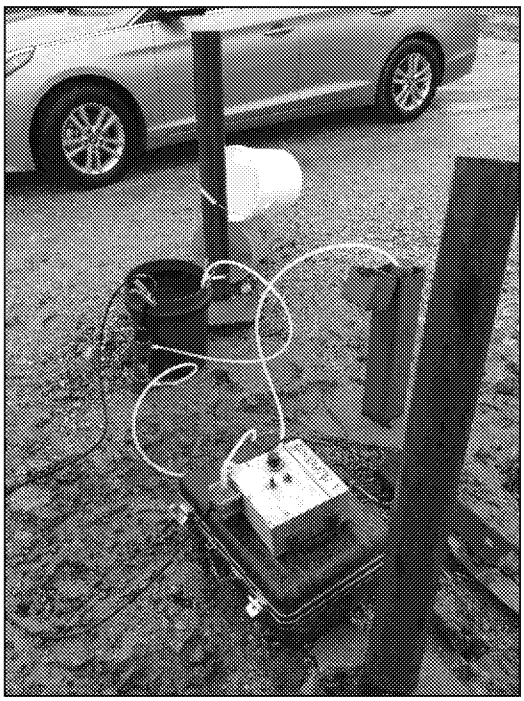
TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-29/GW-29.	13
	CLIENT	Environmental Protection Agency – Region 7	Date 12/12/2015
Direction: East	PHOTOGRAPHER	Keith Brown	

TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-9/GW-9.	14
	CLIENT	Environmental Protection Agency – Region 7	Date 12/8/2015
Direction: Northwest	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00035

Citizen's Gas & Electric Site
Council Bluffs, Iowa

TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-23/GW-23.	15
	CLIENT	Environmental Protection Agency – Region 7	Date 12/11/2015
Direction: South	PHOTOGRAPHER	Keith Brown	



TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the groundwater purging/sampling setup at MW-8.	16
	CLIENT	Environmental Protection Agency – Region 7	Date 12/14/2015
Direction: Southeast	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00036

Citizen's Gas & Electric Site
Council Bluffs, Iowa

TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows the DPT rig at SB-24/GW-24.	17
	CLIENT	Environmental Protection Agency – Region 7	Date 12/11/2015
Direction: Northwest	PHOTOGRAPHER	Keith Brown	

TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows a bailer containing a dense non-aqueous phase liquid from the bottom of MW-3.	18
	CLIENT	Environmental Protection Agency – Region 7	Date 12/14/2015
Direction: South	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00037

Citizen's Gas & Electric Site
Council Bluffs, Iowa

TETRA TECH PROJECT NO. X9025.16.0112.000	DESCRIPTION	This photograph shows a section of plastic tubing approximately 45 feet long that was removed from MW-3. Note staining on the tubing.	19
	CLIENT	Environmental Protection Agency – Region 7	Date 12/14/2015
Direction: Southeast	PHOTOGRAPHER	Keith Brown	

ED_005352_00000649-00038

APPENDIX C

SITE LOGBOOK

KS1514

Rite in the Rain

ALL-WEATHER

LEVEL

№ 311FX

Citizens Gas & Electric

MADE IN TACOMA
SINCE 1816
Rite in the Rain
DEFYING MOTHER NATURE

Name

Address

Phone

Project

USA GREEN Archival

RiteintheRain.com

CONTENTS

PAGE	REFERENCE	DATE
	Atmos Energy Contacts	
	Ally Little 402-917-8557	
	Mike Pogany 605-390-3657	
	Les Campbell 712-325-3016	

1320 - Arrived in Council Bluffs. Stop at Home Depot for field supplies - Padlocks, gloves, towels

1400 - Arrive onsite; meet with Ally Little - Black Hills Energy, and Les - "

walk around site - identify existing monitoring wells. Find all wells with exception of MW-5.

Discuss upcoming field work scheduled for next couple weeks

Drive around area photographing site features and proposed sampling areas.

MW-1, -2, -3, -4, -6, & -8 all appear functional. All well caps locked. I told Ally & Les that I would cut off the locks and replace with new locks and give them the keys, if they could not find existing lock keys.

1600 - drive to self storage unit, a few blocks south of the site.

KB

Need a small storage unit to store field supplies, i.e. core liners, sample coolers, tubing, generator, etc.

No units are available; owner advises me to try Affordable Family Storage that is only a few miles away.

1620 - Drive to Affordable Family Storage at:

1851 Madison Ave Suite #300
Council Bluffs, IA
712-388-8110
402-659-4065

Rent 10'x10' outside unit (Unit #1)
$85.00/month + tax

Store 5 boxes of macrocore liners, 9 empty coolers, 3 - 500' rolls of tubing, box of GW points, water level indicator.

1730 - Depart for Hotel

KB

12/2/15

0900 - Arrive on site - drive around area identifying marked utilities.

stop and talk with Bob Driver, owner of property south of site where MW-8 is located. Discuss sampling objectives for next week and let him know that we would be sampling the monitoring well on his property, and sampling on city ROW next to his property. He said his son, Dan Driver, owns most of his property now and he will be around next week.

1130 - investigating proposed sampling locations

1200 - depart Br KC

12/7/15

0800 - meet Ally Little, Black Hills Energy and their contractor ERM at Black Hills Energy office.

0900 - Arrive onsite. Quan Do, Seagull Environmental arrives onsite.

0915 - setting up at background location. (NE corner of 7th Street + 9th Ave.) SB-1

very wet from 12-16' bgs

PID not working properly - charging unit. No smell or staining on core.

0950 ~~top sample~~ shallow sample collected from 0-2' bgs

7007-1

1000 - deep sample collected from 6-8' bgs

7007-2

1018 - collect GW-1 from 12-16' bgs

7007-101

SWL = 12' bgs

KB

Rain

12/7/15

1100 - setting up at SB-2/GW-2
1130 - collect SB-2 (14-16') 7007-3
1210 - collect SB-2 (22-24') 7007-4
1215 - collect GW-2 7007-102
pushed down to 24' bgs before reaching groundwater
SWL = 10' bgs - groundwater rose to 10' bgs after reaching 24' bgs.
1410 - setting up at SB-3/GW-3
1440 - collect SB-3 (4-6') 7007-5
1450 collect SB-3 (12-14') 7007-6
1500 - collect GW-3 7007-103
Total depth 20' bgs, screened from 16-20' bgs, SWL = 10' bgs
1540 - setting up at SB-4/GW-4
1600 - collect SB-4 (6-8') 7007-7
1615 - collect SB-4 (14-16') 7007-8
1620 - collect GW-4 7007-104

1655 - setting up at SB-5/GW-5
~~1705~~ AB
1715 - collect SB-5 (6-8') 7007-9
1725 - collect SB-5 (14-16') 7007-10

KB

12/7/15

1745 - collected GW-5 7007-105
screened from 16-20' bgs
SWL = ~~13~~ 7' bgs
1815 - depart site; drive to storage unit. offload/load supplies.
1900 - depart storage unit for hotel.
1930 - arrive at hotel: update IPAD - collector app - with sample info for day
2030 - finish for day

KB

12/8/15

0738 - Arrive onsite; Black Hills Energy contractor onsite

0800 - locations under overpass, east of site may not have been cleared by utilities - no markings present, but underground utilities are in area. I will call for a relocate.

0810 - setting up at SB-6/GW-6 inside fenced area of eastern site block

0820 - collect SB-6 (4-6') 7007-11

0830 - collect SB-6 (18-20') 7007-12

0900 - collect GW-6 7007-106

SWL = 13' bgs screened 20-24' bgs

0945 - setting up at SB-7/GW-7

1005 - collect SB-7 (4-6') 7007-13

1020 - collect SB-7 (14-16') 7007-14

1040 - collect GW-7 7007-107

SWL = 16' bgs screened = 16-20' bgs

1225 - setting up at SB-8/GW-8

1240 - collect SB-8 (6-8') 7007-15

1255 - collect SB-8 (14-16') 7007-16

1330 - collect GW-8 7007-108

GW-8 = SWL = 8' bgs

screened from 12-16' bgs

GW-8 = MS/MSD

1400 - setting up at SB-9/GW-9 refusal at 4' bgs, move 3' S. - refusal at 2'. Bottom of soil liner smells like coal tar/naphthene. move

1450 - 8' E + 15' S.

1515 - collect SB-9 (12-14') 7007-17

Highest PID @ 13' = 20ppm

1525 - collect SB-9 (18-20') 7007-18

1545 - collect GW-9 7007-109

SWL = 11' bgs

screened from 20-24' bgs

coal tar/naphthene odor and oily sheen on water

1630 - setting up at SB-10/GW-10

1645 - collecting SB-10 (2-4') 7007-19

1655 - collecting SB-10 (14-16') 7007-20

MS/MSD = 7007-20

1705 - collecting GW-10 7007-110

SWL = 9' bgs

screened from 16-20' bgs

Rain on the Rain

12/8/15

1805 - depart site for storage unit.

1815 - Arrive at storage unit - stage supplies - load more sampling supplies for tomorrow

1930 - finish for day

KB

12/9/15

0730 - Arrive onsite - Black Hills Energy contractor onsite conducting oversight.

0750 - setting up at SB-11/GW-11 east of old Purifier house

0820 - collect | SB-11 (16-18') | 7007-21 |

0840 - collect | SB-11 (22-24') | 7007-22 |

0900 - collect | GW-11 | 7007-111 |

SWL = 16' bgs 22-26'

screened from ~~20-26'~~ bgs

0940 - setting up at SB-12/GW-12

1000 - collect | SB-12 (2-4') | 7007-23 |

1010 - collect | SB-12 (10-12') | 7007-24 |

Highest PID @ 11' = 6.8 ppm

1030 - collect | GW-12 | 7007-112 |

SWL = 8' bgs

screened from 12-16' bgs

1055 - setting up at SB-13/GW-13

1115 - collect | SB-13 (4-6') | 7007-25 |

1125 collect | SB-13 (14-16') | 7007-26 |

1140 - collect | GW-13 | 7007-113 |

SWL = 12' bgs

Screened from ~~12-16~~ 16-20 bgs

KB

Rite in the Rain

12/9/15

1230 - setting up at SB-14/GW-14
1255 - collect | SB-14 (14-16') | 7007-27 |
1315 - collect | SB-14 (18-20) | 7007-28 |
PID = 500 ppm @ SB-14 (14-16')
PID = 20 ppm @ SB-14 (18-20)
1330 - collect | GW-14 | 7007-114 |
SWL = 20' bgs
screened from 22-26' bgs
1450 - setting up at SB-15/GW-15
1445 - collect | SB-15 (8-10') | 7007-29 |
1500 - collect | SB-15 (14-16') | 7007-30 |
1510 - collect | GW-15 | 7007-115 |
SWL = 16' bgs
screened from ~~18-20~~ 18-22' bgs

1600 - depart site for storage shed
Pack 8 coolers with soil & GW samples collected on 12/7-8/15
Iced all coolers.
1730 - depart for Federal Express in Omaha
1800 - arrive at Federal Express
ship 8 coolers of samples to EPA Region 7 Lab.

Kab

0730 - Arrived onsite; ERM on site
0740 - setting up at SB-16/GW-16
0800 - collect | SB-16 (4-6') | 7007-31 |
0815 - collect | SB-16 (14-16') | 7007-32 |
0830 - collect | GW-16 | 7007-116 |
SWL = 13' bgs
screened from 18-22' bgs
0915 - setting up at SB-17/GW-17
0930 - collecting | SB-17 (4-6') | 7007-33 |
0940 - collecting | SB-17 (10-12') | 7007-34 |
1000 - collecting | GW-17 | 7007-117 |
SWL = 6' bgs
screened from 14-18' bgs
1030 - setting up at SB-18/GW-18
1045 - collecting | SB-18 (6-8') | 7007-35 |
1055 - collecting | SB-18 (10-12') | 7007-36 |
1110 - collecting | GW-18 | 7007-118 |
SWL = 4' bgs
screened from 14-18' bgs
1220 - setting up at SB-19/GW-19
1235 - collecting | SB-19 (4-6') | 7007-37 |
1250 - collecting | SB-19 (10-12) | 7007-38 |

Kab Peter de Rain

12/10/15

1305 - collecting GW-19 | 7007-119
SWL = 7'
screened from 12-16' bgs
1350 - setting up at SB-20/GW-20
1400 - collecting SB-20 (4-6') | 7007-39
↳ MS/MSD
1410 - collecting SB-20 (10-12') | 7007-40
1425 - collecting GW-20 | 7007-120
SWL = 7' bgs
screened from 12-16' bgs
1450 - setting up at SB-21/GW-21
1500 - collecting SB-21 (4-6') | 7007-41
1510 - collecting SB-21 (10-12') | 7007-42
1525 - collecting GW-21 | 7007-121
SWL = 6' bgs
screened from 12-16' bgs
1600 - depart site to storage unit to package samples for shipment.
1900 - Arrive at FedEx to ship 10 coolers of samples collected on 12-9 & 10-15
2000 - finish day

RB

0710 - Loading sampling supplies at storage unit
0740 - Arrive onsite
0750 - setting up at SB-22/GW-22
0805 - collecting SB-22 (6-8') | 7007-43
0820 - collecting SB-22 (10-12') | 7007-44
0835 - collecting GW-22 | 7007-122
SWL = 8' bgs
screened from 12-16' bgs
0900 - setting up at SB-23/GW-23
0915 - collecting SB-23 (7-9') | 7007-45
0935 - collecting SB-23 (14-16') | 7007-46
PID = 4.6ppm @ 7.5' bgs
~~collecting~~ RB
0950 - collecting GW-23 | 7007-123
SWL = 10' bgs
screened from 12-16' bgs
1045 - setting up at SB-24/GW-24
1055 - collecting SB-24 (2-4') | 7007-47
1105 - collecting SB-24 (14-16') | 7007-48
soil soft and ~~wet~~ wet at 16' bgs; drove GW sampler to 20', exposed screen 16-20', no GW encountered, pulled up 2 feet

RB

Rain

still no GW. move 1' over
and drive GW sampler to
~ 26' bgs. Harder to push rods
at ~ 23-24'.

1150 - collect GW-24 | 7007-124
SWL = 14' bgs
Screened from 22-26' bgs

1305 - setting up at SB-25/GW-25
refusal @ 6' bgs. move ~10' So.

1320 - collect SB-25 (6-8') | 7007-49

1335 - collect SB-25 (10-12') | 7007-50

1355 - collect GW-25 | 7007-125
SWL = 12' bgs
screened from 10-14' bgs

1440 - setting up at SB-26

1455 - collect SB-26 (2-4') | 7007-51

~~1510~~ 1510 - collect SB-26 (6-8') | 7007-52
core from 8-12' is saturated
coal tar / brick that all ~~ca~~ fell
out of liner. Not attempting
groundwater at this location
at this time.

1530 - setting up at SB-27/GW-27

1550 - collected SB-27 (2-4') | 7007-53

KB

1602 - collect SB-27 (6-8') | 7007-54

1630 - collect GW-27 | 7007-127
SWL = 5'
open hole screened from 5-8' bgs

1700 - collect GW-26 | 7007-126

~~1710 - setting up at~~ SWL = 5' bgs
open hole screened 5-8' bgs

1710 - setting up at SB-28/GW-28

1730 - collect SB-28 (6-8') | 7007-55
groundwater at 8' - no
poor recovery 0-6'
only one sample interval collected
at SB-28

1745 - collect GW-28 | 7007-128
SWL = 5' bgs
screened from 5-8' bgs

1853 - depart site for storage
unit

1930 - finish sample prep + restock
supplies

KB

Rite in the Rain

0740 - Arrive onsite
0750 - Setting up at SB-29 / GW-29
0800 - collect SB-29 (2-4') 7007-56
0810 - collect SB-29 (6-8') 7007-57
0825 - collect GW-29 7007-129
0850 - setting up at SB-30 / GW-30
0900 - collect SB-30 (2-4') 7007-58
0910 - collect SB-30 (6-8') 7007-59
0925 - collect GW-30 7007-130
1015 - setting up at SB-31 / GW-31
1105 - collect SB-31 (14-16') 7007-60
PID = 1 ppm at 15' bgs
coal tar odor
→ MS/MSD collected
1130 - collect GW-31 7007-131
SWL = 20' bgs
screened from 22-26' bgs
1200 - collect equipment rinsate
sample through DPT macro-core sampler ~~ER-132~~ KB
ER 7007-132
1430 - setting up at MW-1
SWL = 11'5" TOC

KB

TD = 24'10.5"; 1 well vol = 2.27 gal
3 well vol. = 6.82 gal

1508 - MW-1 Parameters

	Temp.	Cond.	pH	vol.
Initial				
↳	14.37°C	1803 µS/cm	7.32	Initial
1513	14.42°C	1895	6.92	1 gal
1518	14.57°C	2121	6.65	2 gal
1523	14.64°C	2259	6.54	3 gal
1528	14.57°C	2420	6.45	4 gal
1535	14.41°C	2608	6.35	5 gal
1540	14.36°C	2640	6.33	6 gal
	14.35°C	2684	6.26	7 gal.

1545 - collect sample from MW-1 7007-133
1600 - setting up at MW-2
1605 - MW-2 Parameters

	Temp	Cond	pH	Vol.
1611 -	13.54	718	8.18	Initial
1623 -	13.08	1750	7.66	2.5 gal
1634 -	13.03	2049	6.68	4.5 gal
1650 -	12.99	2070	6.39	7 gal.
1659 -	12.92	2048	6.34	9 gal
1710 -	12.85	2070	6.28	11 gal
1720 -	13.01	2079	6.26	13 gal

KB Rain

12/12/15

MW-2 Parameters cont'd

	Temp	Cond	pH	Vol.
1730 -	12.88	2072	6.25	15 gal

1732 - collect [MW-2] [7007-134]

MW-2 information
SWL = 16' 1" BTOC
TD = 45' 2" BTOC
casing height = 35"
water column ≈ 29' = 4.93 gal
1 well vol.
3 well vol. = 14.79 gal

SWL after sampling = 17' BTOC

1815 - depart site for storage shed
stage/prep samples and
load supplies for tomorrow

1930 - Finish day

12/13/15

0900 - Arrive at site; Raining steady since ≈ 10:00 pm last night.

0920 - setting up at MW-4
SWL = 13' BTOC
casing stickup = 14"
TD = 44' BTOC
31' = watered.
× .17
5.27 gal = 1 well vol
× 3
15.81 gal = 3 well vol.

1005 - Begin purging MW-4

MW-4 parameters

	Temp °C	Cond µmhos	pH	Vol.
1006 -	13.94	700	8.19	Initial
1020 -	13.51	781	7.99	2 gal
1035 -	13.34	1266	7.23	5 gal
1047 -	13.22	1278	7.04	7 gal
1055 -	13.30	1283	6.96	9 gal
1113 -	13.27	1286	6.91	13 gal
1125 -	13.19	1282	6.88	16 gal

1128 - collect [MW-4] [7007-135]

Rain in the Rain

SWL = 12.5' BTOC on MW-4
after sampling/purging complete

1345 - Setting up at MW-6
SWL = 11' BTOC
TD = 40'3" BTOC
casing height = 25"
water col. = 29.25'
1 well vol. = 4.97 gal
3 well vol. 14.92 gal

MW-6 Parameters

	Temp	Cond	pH	Vol
1405 -	14.01	895	7.33	2 gal
1417 -	13.44	881	7.18	3 gal
1427 -	13.41	995	7.08	4 gal
1442 -	13.51	1025	6.97	6 gal
1455 -	13.42	1026	7.03	8 gal
1505 -	13.40	1021	7.03	10 gal
1518 -	13.38	1020	6.99	13 gal
1530 -	13.37	1019	7.00	15 gal

1535 - collect [MW-6 | 7007-136]
SWL = 12'9" after purge/sampling

1607 - Setting up at MW-3
MW-3 has a 1-1.5" plastic pipe ≈ 45' long that was in the well upon opening with a string attached to the top with a ~2' long piece of pipe attached to the other end of the string. We removed the plastic pipe from the well in order to collect sample. The pipe is very contaminated with coal tar & petroleum staining & odor. We are not collecting parameters at this well so as to not completely contaminate or ruin water quality propes. We will purge ~15 gallons & sample

1630 - Begin purging MW-3
Purge ~15 gal
1750 - collect [MW-3 | 7007-137]
1855 - depart site/Finish day

Rite in the Rain

12/14/15

0830 - setting up at MW-8
SWL = 12.05' BTOC
TD = 40' BTOC
casing height = 22"
water col. = ~ 28'
1 well vol = 4.76 gal
3 well vol = 14.28 gal

MW-8 Parameter

~~Dt~~	Temp °C	cond µs/cm	pH	vol.
0905 -	12.66	1172	7.5	Initial
0919 -	12.7	1273	6.79	2 gal
0929 -	12.83	1318	6.58	4 gal
0939 -	12.93	1333	6.45	6 gal
1002 -	12.71	1307	6.45	9 gal
1017 -	12.70	1299	6.39	11 gal
1031 -	12.90	1296	6.42	14 gal
1035 -	12.93	1294	6.42	15 gal

1040 - collect MW-8 | 7007-138
SWL after purge/sample = 11'9"
1145 - collect IDW | 7007-139
IDW sample collected from full 55-gal poly drum

[signature]

12/14/15

containing purge water from MW-1, -2, -3, -4, -6.
2nd 55-gal IDW drum contains purge water from MW-8.
1215 - collect Field Blank | 7007-140-FB
1305 - depart site for ~~storage unit~~ KB Black Hills Energy offices to give them keys to monitoring well locks and gate lock at site. Then to storage shed to pickup remaining supplies and samples.
1520 - finish loading supplies/samples from storage unit. Check out of storage unit.
1530 - Label Trip Blank
↳ TB | 7007-141-FB
1600 - ~~load~~ KB Kepack samples on ice.
1900 - Arrive in K.C.; Finish for day.

[signature]

Rite in the Rain

APPENDIX D

FIELD SHEETS

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 1 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-1-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-1 (0-2')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/7/15 09:50

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Background location

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 2 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-2-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-1 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/7/15 10:00
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Background Location

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 3 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-3-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-2 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/7/15	11:30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 4 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-4-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-2 (22-24')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/7/15	12:10
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 5 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-5-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-3 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/7/15 14:40
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

~~SWL = KB~~

~~Selected from 16-20' bgs~~ KB

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 6 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-6-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-3 (12-14')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/7/15 14:50

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 7 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-7-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-4 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/7/15	16:00
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2 - 40mL VOA vial	4 Deg C	14 Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28 Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 8 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-8-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-4 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/7/15	16:15
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 9 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-9-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-5 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/7/15	17:15
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 10 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-10-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-5 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/7/15	17:25
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 11 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-11-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-6 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/8/15	08:20
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 12 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-12-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-6 (18-20')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/8/15	08:~~20~~ 30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

ED_005352_00000649-00066

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 13 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-13-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB - 7 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/8/15	10:05
	End:	__/__/__	__:__

Latitude: ___ ___ ___
Longitude: ___ ___ ___

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 14 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-14-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-7 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/8/15	10:20
	End:	__/__/__	__:__

Latitude: ___ ___ ___
Longitude: ___ ___ ___

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 15 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-15-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-8 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/8/15	12:40
	End:	__/__/__	__:__

Latitude: ___ ___ ___
Longitude: ___ ___ ___

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2 - 40mL VOA vial	4 Deg C	14 Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28 Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 16 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-16-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-8 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/8/15	12:55
	End:	__/__/__	__:__

Latitude: ___ ___ ___
Longitude: ___ ___ ___

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2 - 40mL VOA vial	4 Deg C	14 Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28 Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 17 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-17-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-9 (12-14')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/8/15	15:15
	End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

PID = 20ppm

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 18 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-18-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-9 (18-20')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/8/15	15:25
	End:	__/__/__	__:__

Latitude: ___ ___ ___
Longitude: ___ ___ ___

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

PID = 4 ppm

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 19 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-19-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-10 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___

Longitude: ___ ___ ___

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/8/15	16:45
	End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2 - 40mL VOA vial	4 Deg C	14 Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28 Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 20 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-20-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-10 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/8/15	16:55
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
6 2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
8 4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

MS/MSD

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 21 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-21-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: ~~SB-21~~ KB SB-11 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/9/15	08:20
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

PID = 60ppm

coaltar odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 22 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-22-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-11 (22-24')

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/9/15 08:40

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A) coal tar odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 23 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-23-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-12 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/9/15	10:00
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 24 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-24-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-12 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/9/15	10:10
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

PID = 6.8 ppm
slight coal tar odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 25 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-25-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-13 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/9/15	11:15
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 26 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-26-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-13 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/9/15	11:25
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 27 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-27-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-14 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/9/15 12:55

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

PID = 500 ppm
coal tar/napthalene odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 28 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-28-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-14 (18-20')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/9/15 13:15

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

PID = 20ppm

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 29 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-29-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-15 (8-10')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/9/15	14:45
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 30 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-30-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-15 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/9/15 15:00

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 31 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-31-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-16 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/10/15 08:00

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 32 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-32-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-16 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/10/15 08:15

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 33 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-33-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-17 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/10/15 09:30

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 34 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-34-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-17 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/10/15 09:40

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 35 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-35-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-18 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/10/15 10:45
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 36 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-36-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-18 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/10/15	10:55
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 37 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-37-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-19 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/10/15 12:35

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 38 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-38-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-19 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/10/15	12:50
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 39 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-39-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-20 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/10/15	14:00
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
6 1 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
8 1 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

MS/MSD

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 40 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-40-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-20 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/10/15	14:10
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 41 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-41-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-21 (4-6')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/10/15 15:00

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 42 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-42-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-21 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/10/15	15:10
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 43 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-43-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-22 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

	Date	Time(24 hr)
Sample Collection: Start:	12/11/15	08:05
End:	__/__/__	__:__

Latitude: ___ ___ ___
Longitude: ___ ___ ___

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 44 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-44-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-22 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	08:20
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 45 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-45-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-23 (7-9')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	09:15
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

PID = 4.6 ppm

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 46 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-46-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-23 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/11/15	09:35
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 47 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-47-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-24 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/11/15 10:55

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 48 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-48-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-24 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/11/15 11:05

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 49 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-49-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-25 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/11/15	13:20
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 50 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-50-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-25 (10-12')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/11/15	13:35
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 51 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-51-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-26 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	14:55
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:
(N/A) slight coal tar odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 52 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-52-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-26 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/11/15	15:10
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:
(N/A)

PID = 17 ppm
coal tar odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 53 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-53-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-27 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	15:50
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 54 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-54-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-27 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	16:02
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 55 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-55-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-28 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	17:30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 56 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-56-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-29 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/12/15	08:00
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 57 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-57-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-29 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/12/15 08:10

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:
(N/A)

PID = 2 ppm

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 58 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-58-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-30 (2-4')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/12/15	09:00
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 59 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-59-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-30 (6-8')

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium High)) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/12/15 09:10

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C	14	Days	1 Volatile TPH in Soil by GC/MS
4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14	Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180	Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28	Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14	Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0	Days	1 Percent Solid

Sample Comments:

(N/A) coal tar odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 60 **QC Code:** __ **Matrix:** Solid **Tag ID:** 7007-60-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: SB-31 (14-16')

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/12/15	11:05
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
6 ~~2~~ - 40mL VOA vial	4 Deg C	14 Days	1 Volatile TPH in Soil by GC/MS
8 4 - 40mL VOA vials (soil VOA 5035)	4 Deg C, H2O + sodium bisulfate (in 2 vials)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP-AES
1 - 8 oz glass	4 Deg C	28 Days	1 Cyanide, Total in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile Organic Compounds in Soil
1 - 8 oz glass	4 Deg C	14 Days	1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID
0 -	4 Deg C	0 Days	1 Percent Solid

Sample Comments:
(N/A)

MS/MSD PID = 1 ppm

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 101 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-101-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-1

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/7/15	10:18
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

Background
Location
SWL = 12' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 102 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-102-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-2

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/7/15 12:15

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 10' bgs -
screened at 20-24' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 103 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-103-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-3

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/7/15 15:00
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 10' bgs
Screened from 16-20' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 104 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-104-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-4

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/7/15	16:20
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 10' bgs
screened from 16-20' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 105 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-105-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-5

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

		Date	Time(24 hr)
Sample Collection:	**Start:**	12/7/15	17:45
	End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 7' bgs
screened from 16-20' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 106 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-106-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-6

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/8/15	09:00
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 13' bgs
screened interval = 20-24' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 107 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-107-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-7

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/8/15	10:40
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 16' bgs
screened interval = 19-23' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 108 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-108-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-8

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/8/15	13:30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

	Container	Preservative	Holding Time		Analysis
	1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
	1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
2	1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
2	1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
6	1 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
6	1 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 8' bgs
screened from 12-16' bgs

MS/MSD

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 109 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-109-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-9

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/8/15 15:45
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

coal tar/napthalene odor
+ oil sheen on water
SWL = 11' bgs
Screened from 20-24' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 110 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-110-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-10

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/8/15	17:05
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

~~MS/MSD~~ KB
KB
SWL = 9'10" bgs
screened from 16-20' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 111 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-111-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-11

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/9/15 09:00
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

coal tar odor
SWL = 16' bgs
screened from ~~20-24'~~ 22-26' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 112 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-112-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-12

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/9/15	10:30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 8' bgs
screened from 12-16' bgs

slight coal tar odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 113 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-113-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-13

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/9/15	11:40
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 12' bgs
Screened from 16-20' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 114 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-114-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-14

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium) High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/9/15 13:30

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

petroleum odor
SWL = 20' bgs
screened from 22-26' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 115 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-115-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW -15

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/9/15 15:10

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 16' bgs
screened from ~~16-20'~~ 18-22' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 116 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-116-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-16

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/10/15	08:30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 13' bgs
screened from 18-22' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 117 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-117-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-17

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/10/15	10:00
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 6' bgs
screened from 14-18' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 118 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-118-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-18

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/10/15	11:10
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 4' bgs
screened from 14-18' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 119 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-119-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-19

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/10/15	13:05
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 7' bgs
Screened interval 12-16' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 120 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-120-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-20

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

Latitude: ___ ___ ___
Longitude: ___ ___ ___

	Date	Time(24 hr)
Sample Collection: Start:	12/10/15	14:25
End:	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 7' bgs
screened from 12-16' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 121 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-121-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW- 21

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/10/15	15:25
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 6' bgs
screened from 12-16' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 122 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-122-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-22

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/11/15 08:35

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 8' bgs
Screened from 12-16' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 123 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-123-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-23

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	09:50
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 10' bgs
screened from 12-16' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 124 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-124-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-24

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/11/15 11:50

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 14' bgs
screened interval = 22-26' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 125 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-125-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-25

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/11/15 13:55
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

petroleum odor

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 126 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-126-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-26

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium (High)) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/11/15 17:00

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

strong coal tar odor
SWL = 5' bgs
screened from 5-8' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 127 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-127-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-27

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	16:30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 5' bgs
screened 5-8' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 128 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-128-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-28

External Sample Number: _____

Expected Conc: (or Circle One: (Low) Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/11/15	17:45
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 5' bgs
screened from 5-8' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 129 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-129-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-29

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/12/15 08:25

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 5' bgs
screened open hole ~~to~~ ka 5-8' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 130 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-130-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-3D

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/12/15	09:25
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
2 ~~1~~ - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
2 ~~1~~ - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
6 ~~2~~ - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
6 ~~2~~ - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 5' bgs
open hole screened from 5-8' bgs

MS/MSD

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 131 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-131-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: GW-31

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/12/15 11:30
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 20' bgs
Screened from 22-26' bgs

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 132 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-132-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: ER

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/12/15 12:00

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

Equipment Rinsate Blank

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 133 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-133-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: MW-1

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/12/15	15:45
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 11.5' BTOC
TD = 24'10.5" BTOC
casing height = 20"

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 134 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-134-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: MW-2

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/12/15	17:32
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 16'1" BTOC
TD = 45'2" BTOC
casing height = 35"

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 135 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-135-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: MW-4

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/13/15 11:28
Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

SWL = 12.5' BTOC
TD = 44' BTOC
casing height = 14"

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 136 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-136-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: MW-6

External Sample Number: _____

Expected Conc: (or Circle One: Low (Medium High)) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/18/15 15:35

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

strong coal tar odor on water
SWL = 12'9" BTOC
TD = 40'3" BTOC
casing height = 25"

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 137 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-137-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: MW-3

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium (High))

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/13/15	17:50
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

Very strong coal tar odor
& oily sheen on water

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 138 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-138-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: MW-8

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/14/15	10:40
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:
(N/A)

SWL = 11' 9" btoc
TD = 40' btoc
casing height = 22"

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 139 **QC Code:** __ **Matrix:** Water **Tag ID:** 7007-139-__

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: IDW - Monitoring Well Purge Water

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High) **Date** **Time(24 hr)**

Latitude: ___ ___ ___ **Sample Collection: Start:** 12/14/15 11:45

Longitude: ___ ___ ___ **End:** __/__/__ __:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** 140 **QC Code:** FB **Matrix:** Water **Tag ID:** 7007-140-FB

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: Field Blank

External Sample Number: _____

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/14/15	12:15
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
1 - 1 Liter plastic bottle	HNO3 acidify, 4 Deg C	180	Days	1 Metals in Water by ICP-AES
1 - 1 Liter plastic bottle	NaOH to pH >12	14	Days	1 Cyanide, Total in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile Organic Compounds in Water
1 - 128oz amber glass	4 Deg C	7	Days	1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

Sample Collected By: TT

Sample Collection Field Sheet
US EPA Region 7
Kansas City, KS

ASR Number: 7007 **Sample Number:** ~~143~~ 141 KB **QC Code:** FB **Matrix:** Water **Tag ID:** 7007-~~143~~ 141 KB-FB

Project ID: KL07HY **Project Manager:** Kevin Larson
Project Desc: Citizens Gas & Electric Co. sampling
City: Council Bluffs **State:** Iowa
Program: Superfund
Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

Location Desc: Water LDL VOA/TPH VOA (GRO) Trip Blank sample

External Sample Number: TB

Expected Conc: (or Circle One: Low Medium High)

		Date	Time(24 hr)
Latitude: ___ ___ ___	**Sample Collection: Start:**	12/14/15	15:30
Longitude: ___ ___ ___	**End:**	__/__/__	__:__

Laboratory Analyses:

Container	Preservative	Holding Time		Analysis
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 VOCs in Water by GC/MS
2 - 40mL VOA vial	4 Deg C, HCL to pH<2	14	Days	1 Volatile TPH in Water by GC/MS

Sample Comments:

(N/A)

Sample Collected By: TT

APPENDIX E

ANALYTICAL SUMMARY TABLES

TABLE E-1

SUMMARY OF VOC AND TPH-GRO ANALYSES FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (mg/kg)													
	Acetone	Benzene	2-Butanone	Carbon Disulfide	Cyclohexane	Ethyl Benzene	Isopropylbenzene	Methylcyclohexane	Methylene Chloride	m- and/or p-Xylene	o-Xylene	Styrene	Toluene	TPH-GRO
SB-1 (0-2')	0.028	0.0065 U	0.013 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	2.43 U
SB-1 (6-8')	0.022 U	0.011 U	0.022 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	5.87 U
SB-2 (14-16')	0.016 U	0.0082 U	0.016 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	2.98 U
SB-2 (22-24')	0.016 U	0.0082 U	0.016 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	3.49 U
SB-3 (4-6')	0.035	0.0056 U	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	2.42 U
SB-3 (12-14')	0.014 U	0.0068 U	0.014 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	3.76 U
SB-4 (6-8')	0.018	0.0051 U	0.01 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	2.82 U
SB-4 (14-16')	0.014 U	0.0071 U	0.014 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U	2.74 U
SB-5 (6-8')	0.016 U	0.008 U	0.016 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	3.29 U
SB-5 (14-16')	0.034	0.0051 U	0.01 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	3.15 U
SB-6 (4-6')	0.025	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	3.07 U
SB-6 (18-20')	0.02 U	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	3.12 U
SB-7 (4-6')	0.014 U	0.0069 U	0.014 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	2.65 U
SB-7 (14-16')	0.022	0.0064 U	0.013 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	2.68 U
SB-8 (6-8')	0.035	0.0066 U	0.013 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	2.54 U
SB-8 (14-16')	0.024 U	0.012 U	0.024 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	3.61 U
SB-9 (12-14')	3 U	**5.4**	3 U	1.5 U	1.5 U	**110**	8.7	1.5	1.5 U	25	35	1.5 U	1.5 U	**487**
SB-9 (18-20')	0.63 U	2.6	0.63 U	0.32 U	0.32 U	**35**	3.4	0.48	0.32 U	9.6	12	0.32 U	0.32 U	**97.9**
SB-10 (2-4')	0.021	0.0098 U	0.02 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	0.0098 U	2.39 U
SB-10 (14-16')	0.028	0.0059 U	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 UJ	0.0059 U	0.0059 U	0.0059 U	0.0059 U	3.1 UJ
SB-11 (14-16')	0.6 U	0.58	0.6 U	0.3 U	0.3 U	0.57	0.3 U	0.3 U	0.3 U	0.95	0.46	0.3 U	0.3 U	**129**
SB-11 (22-24')	0.63 U	4.4	0.63 U	0.31 U	0.31 U	8.1	0.35	0.34	0.31 U	38	7.4	0.31 U	0.31 U	26.4
SB-12 (2-4')	0.012	0.023	0.0079 U	0.0039 U	0.0039 U	0.022	0.0039 U	0.0039 U	0.0039 U	0.007	0.007	0.0039 U	0.0039 U	25
SB-12 (10-12')	0.062	0.49 J	0.016 U	0.0081 U	0.011	0.88 J	0.17	0.029	0.0081 U	0.29	1.1 J	0.0081 U	0.18	26.9
SB-13 (2-4')	0.027	0.006 U	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	2.18 U
SB-13 (14-16')	0.0082 U	0.0041 U	0.0082 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	2.6 U
SB-14 (14-16')	0.62 U	0.31 U	0.62 U	0.31 U	0.53	0.31 U	0.31 U	2.8	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	**206**
SB-14 (18-20')	0.014 U	0.0069 U	0.014 U	0.0069 U	4.3	0.0069 U	1.2	25	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U	**58.6**
SB-15 (8-10')	0.021	0.0055 U	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	4.14
SB-15 (14-16')	0.01 U	0.0051 U	0.01 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0056	0.0051 U	0.0051 U	0.0051 U	0.0051 U	3.43 U
SB-16 (4-6')	0.0098 U	0.0049 U	0.0098 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	2.97 U
SB-16 (14-16')	0.0091 U	0.0045 U	0.0091 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	4.46 U
SB-17 (4-6')	0.031	0.0078 U	0.016 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	2.83 U
SB-17 (10-12')	0.046	0.0072 U	0.014 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	2.81 U
SB-18 (6-8')	0.019	0.0067 U	0.013 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 UJ	0.0067 U	0.0067 U	0.0067 U	0.0067 U	2.57 U
SB-18 (10-12')	0.012 U	0.0059 U	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	2.32 U
SB-19 (4-6')	0.13	0.0065 U	0.028	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	2.36 U
SB-19 (10-12')	0.019	0.0057 U	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	2.72 U
SB-20 (4-6')	0.028	0.0068 U	0.014 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U	4.46 U
SB-20 (10-12')	0.027	0.0082 U	0.016 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	3.31 U

TABLE E-1

SUMMARY OF VOC AND TPH-GRO ANALYSES FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (mg/kg)													
	Acetone	Benzene	2-Butanone	Carbon Disulfide	Cyclohexane	Ethyl Benzene	Isopropylbenzene	Methylcyclohexane	Methylene Chloride	m- and/or p-Xylene	o-Xylene	Styrene	Toluene	TPH-GRO
SB-21 (4-6')	0.017	0.0054 U	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	2.76 U
SB-21 (10-12')	0.04	0.007 U	0.014 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 UJ	0.007 U	0.007 U	0.007 U	0.007 U	3.04 U
SB-22 (6-8')	0.022	0.0076 U	0.015 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	2.81 U
SB-22 (10-12')	0.077	0.0074 U	0.015 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	2.71 U
SB-23 (7-9')	0.069 J	0.0074 U	0.015 U	0.03 J	#VALUE!	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0074 U	0.0065 J	**77.8**
SB-23 (14-16')	0.011 U	0.0057 U	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	4.06
SB-24 (2-4')	0.016	0.0053 U	0.011 U	0.0053 U	0.0053 U	0.0053	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	1.93 U
SB-24 (14-16')	0.0096 U	0.0048 U	0.0096 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	2.96 U
SB-25 (6-8')	0.022	0.007 U	0.014 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	2.86 U
SB-25 (10-12')	0.012	0.006 U	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	2.4 U
SB-26 (2-4')	0.061	0.64	0.028 U	0.014 U	0.015 J	0.016	0.063	0.025	0.014 U	0.24	0.064	0.014 U	0.049	27.2
SB-26 (6-8')	3 U	3.3	3 U	1.5 U	1.5 U	8.4	1.5 U	1.5 U	1.5 U	5.3	5.7	1.5 U	1.5	35.9
SB-27 (2-4')	0.029	0.0061 U	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	2.45 U
SB-27 (6-8')	0.029	0.009 U	0.017 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	4.01 U
SB-28 (6-8')	0.092	0.013 U	0.026 U	0.048	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	**47.9**
SB-29 (2-4')	0.025	0.0048 U	0.0095 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	2.62 U
SB-29 (6-8')	6.4 U	**44**	6.4 U	3.2 U	3.2 U	5.3	3.2 U	3.2 U	3.2 U	72	26	21	74	**1,850**
SB-30 (2-4')	0.018	0.0072 U	0.014 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 UJ	0.0072 U	0.0072 U	0.0072 U	0.0072 U	2.53 U
SB-30 (6-8')	0.086	0.13	0.031 U	0.027	0.015 U	1.5 J	0.68 J	0.018 J	0.015 U	0.47	0.95 J	0.015 U	0.21	6.61
SB-31 (14-16')	0.031	0.72	0.016 U	0.0081 U	0.0081 U	3.9	0.63	0.0081 U	0.0081 U	0.056	2.3	0.0081 U	0.022	16.6
Screening Values (mg/kg)														
EPA RSL	670,000	5.1	190,000	3,500	27,000	25	9,900	NE	1,000	2,400	2,800	35,000	47,000	42*

Notes:

Bold value indicates result is greater than EPA RSL for industrial soil.
SB-1 was off-site background location.

*	Value for TPH-aromatic low in industrial soil
EPA	U.S. Environmental Protection Agency
'	Feet
GRO	Gasoline-range organics
J	Concentration is an approximate value
mg/kg	Milligrams per kilogram
NE	None established
RSL	Regional Screening Level (industrial soil)
TPH	Total petroleum hydrocarbons
U	Analyte not detected above method detection limit, which is the value presented
VOC	Volatile organic compound

TABLE E-2

SUMMARY OF SVOC AND TPH-DRO ANALYSES FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (mg/kg)																								
	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Biphenyl	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	2,4-Dimethylphenol	Dimethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	4-Methylphenol	Naphthalene	Phenanthrene	Phenol	Pyrene	TPH-DRO
SB-1 (0-2')	0.23 U	0.23 U	0.23 U	0.25	0.24	0.3	0.23 U	0.23 U	0.23 U	0.44 U	0.24	0.23 U	0.23 U	0.23 U	0.38	0.33	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.31	10.2 U
SB-1 (6-8')	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.52	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.41 U	0.21 U	11.3 U
SB-2 (14-16')	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.48 U	0.25 U	0.25 U	0.25 U	0.25 U	0.7	0.25 U	0.25 U	0.25 U	0.25 U	0.48 U	0.25 U	0.25 U	0.48 U	0.25 U	11.9 U
SB-2 (22-24')	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.5 U	0.26 U	0.26 U	0.26 U	0.26 U	0.55	0.26 U	0.26 U	0.26 U	0.26 U	0.5 U	0.26 U	0.26 U	0.5 U	0.26 U	12.5 U
SB-3 (4-6')	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.55	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.41 U	0.21 U	10.4 U
SB-3 (12-14')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.71	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.23 U	11.9 U
SB-4 (6-8')	0.24 U	0.24 U	0.24 U	0.24 U	**0.32**	0.35	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.24 U	0.24 U	0.38	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.47 U	0.24 U	31.9 J
SB-4 (14-16')	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.24 U	0.24 U	0.66	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.47 U	0.24 U	11.6 U
SB-5 (6-8')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.72	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.45 U	0.23 U	11.6 U
SB-5 (14-16')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.7	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.45 U	0.23 U	11.8 U
SB-6 (4-6')	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.67	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.41 U	0.21 U	9.62 U
SB-6 (18-20')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.76	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.45 U	0.23 U	10.1 U
SB-7 (4-6')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.9	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.45 U	0.23 U	11.2 U
SB-7 (14-16')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.89	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.23 U	11.1 U
SB-8 (6-8')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.48	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.43 U	0.22 U	10.9 U
SB-8 (14-16')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.73	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.43 U	0.22 U	11.8 U
SB-9 (12-14')	200	1.4	13	**8.2**	**4.8**	**4.2**	1.7	1.4	7.9	0.52	7.2	**0.63**	2	0.21 U	0.43	16 J	17	1.4	750	0.41 U	**1,200**	310	0.41 U	20	**4,140**
SB-9 (18-20')	3.5	0.26	1.6	1	**0.67**	0.57	0.24	0.23 U	0.89	0.44 U	0.9	0.23 U	0.39	0.23 U	0.42	1.8 J	1.8	0.23 U	13	0.44 U	**25**	6.2	0.44 U	2.3	**572**
SB-10 (2-4')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.22 U	0.22 U	0.7	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.42 U	0.22 U	10.7 U
SB-10 (14-16')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.58	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.45 U	0.23 U	11.2 U
SB-11 (14-16')	1.2	0.23	0.6	0.34	0.21 U	0.21 U	0.21 U	0.21 U	0.43	0.41 U	0.34	0.21 U	0.21 U	0.21 U	0.39	0.56	0.79	0.21 U	8.1	0.41 U	16	2.1	0.41 U	0.84	**1,750**
SB-11 (22-24')	0.36	0.23 U	0.4	0.35	0.28	0.23 U	0.23 U	0.23 U	0.32	0.44 U	0.35	0.23 U	0.23 U	0.23 U	0.65	0.63	0.53	0.23 U	4.7	0.44 U	11	2	0.44 U	0.84	**572**
SB-12 (2-4')	14	6.2	9	**6.3**	**3.8 J**	**3.2 J**	1.7	0.9	0.66	0.38 U	7	**0.56**	1.2	0.19 U	0.25	10	11	1.3	41	0.38 U	**39**	36	0.38 U	22	**1,750**
SB-12 (10-12')	0.33	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.39 U	0.2 U	0.2 U	0.2 U	0.2 U	0.48	0.31	0.23	0.2 U	1.3	0.39 U	1.9	0.67	0.39 U	0.37	**61.6**
SB-13 (2-4')	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.21 U	0.21 U	0.42	0.21 U	0.21 U	0.21 U	0.21 U	0.41 U	0.21 U	0.21 U	0.41 U	0.21 U	10.7 U
SB-13 (14-16')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.77	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.23 U	12.2 U
SB-14 (14-16')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.54	0.23 U	0.23 U	0.23 U	1.3	0.44 U	0.69	0.23 U	0.44 U	0.23 U	**783**
SB-14 (18-20')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.4	0.23 U	0.23 U	0.23 U	0.51	0.44 U	0.25	0.23 U	0.44 U	0.23 U	**439**
SB-15 (8-10')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.42 U	0.22 U	10.9 U
SB-15 (14-16')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.22 U	0.22 U	0.67	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.42 U	0.22 U	10.7 U
SB-16 (4-6')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.42 U	0.22 U	11.9 U
SB-16 (14-16')	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.46 U	0.24 U	0.24 U	0.24 U	0.24 U	0.55	0.24 U	0.24 U	0.24 U	0.24 U	0.46 U	0.24 U	0.24 U	0.46 U	0.24 U	12.2 U
SB-17 (4-6')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.22 U	0.22 U	0.82	0.22 U	0.22 U	0.22 U	0.22 U	0.43 U	0.22 U	0.22 U	0.43 U	0.22 U	27.9
SB-17 (10-12')	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	0.27 U	0.27 U	0.27 U	0.27 U	0.66	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	0.27 U	0.27 U	0.53 U	0.27 U	28.3

TABLE E-2

SUMMARY OF SVOC AND TPH-DRO ANALYSES FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (mg/kg)																								
	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Biphenyl	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	2,4-Dimethylphenol	Dimethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	4-Methylphenol	Naphthalene	Phenanthrene	Phenol	Pyrene	TPH-DRO
SB-18 (6-8')	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	0.27 U	0.27 U	0.27 U	0.27 U	0.37	0.27 U	0.27 U	0.27 U	0.27 U	0.53 U	0.27 U	0.27 U	0.53 U	0.27 U	11.1 U
SB-18 (10-12')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.77	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.23 U	10.9 U
SB-19 (4-6')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.22 U	0.22 U	0.58	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.42 U	0.22 U	10.6 U
SB-19 (10-12')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.49	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.23 U	12.1 U
SB-20 (4-6')	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.52 U	0.27 U	0.27 U	0.27 U	0.27 U	0.66	0.27 U	0.27 U	0.27 U	0.27 U	0.52 U	0.27 U	0.27 U	0.52 U	0.27 U	14 UJ
SB-20 (10-12')	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.48 U	0.25 U	0.25 U	0.25 U	0.25 U	0.31	0.25 U	0.25 U	0.25 U	0.25 U	0.48 U	0.25 U	0.25 U	0.48 U	0.25 U	13.4 U
SB-21 (4-6')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.22 U	0.22 U	0.74	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.42 U	0.22 U	11.8 U
SB-21 (10-12')	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.46 U	0.24 U	0.24 U	0.24 U	0.24 U	0.65	0.24 U	0.24 U	0.24 U	0.24 U	0.46 U	0.24 U	0.24 U	0.46 U	0.24 U	11.8 U
SB-22 (6-8')	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.24 U	0.24 U	0.95	0.24 U	0.24 U	0.24 U	0.24 U	0.47 U	0.24 U	0.24 U	0.47 U	0.24 U	12.6 U
SB-22 (10-12')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.64	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.45 U	0.23 U	11.4 U
SB-23 (7-9')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.53	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.23 U	11.4 U
SB-23 (14-16')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.23 U	0.23 U	0.57	0.23 U	0.23 U	0.23 U	0.23 U	0.45 U	0.23 U	0.23 U	0.45 U	0.23 U	11.8 U
SB-24 (2-4')	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.23	0.4 U	0.2 U	9.84 U
SB-24 (14-16')	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.23 U	0.23 U	0.57	0.23 U	0.23 U	0.23 U	0.23 U	0.44 U	0.23 U	0.23 U	0.44 U	0.23 U	11 U
SB-25 (6-8')	0.97	2.7	8.1	**32**	**21**	**32**	18	12	0.9	0.47 U	33	**4.7 J**	0.25	0.24 U	0.46	49	7.6	**14**	1.9	0.47 U	1.4	65	0.47 U	84	**1,270**
SB-25 (10-12')	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.22 U	0.22 U	0.7	0.22 U	0.22 U	0.22 U	0.22 U	0.42 U	0.22 U	0.22 U	0.42 U	0.22 U	10.6 U
SB-26 (2-4')	0.21 U	0.61	0.26	0.5	**1.2**	1.1	0.97	0.21 U	0.21 U	0.41 U	0.66	0.26	0.21 U	0.21 U	0.36	0.53	0.32	0.67	1.2	0.41 U	1.9	1.2	0.41 U	1.1	**240**
SB-26 (6-8')	42	2.3	17	**9.4**	**24 J**	**19 J**	2.4	1.6	9	0.41 U	9.3	**0.77**	2.3	0.21 U	0.28	18	24	1.8	440 J	0.41 U	**570 J**	74	0.41 U	30	**2,930 J**
SB-27 (2-4')	0.19 U	0.63	0.33	1.8	**2.4**	2.8	2.3	0.89	0.19 U	0.36 U	2.3	**0.57**	0.19 U	0.19 U	0.27	2	0.19 U	1.5	0.26	0.36 U	0.51	1.3	0.36 U	3	**308**
SB-27 (6-8')	0.26	0.49	0.61	**3.2**	**3.3**	**4.9**	1.9	1.3	0.24 U	0.47 U	4.9	**0.57**	0.24 U	0.24 U	0.25	3.7	0.28	1.5	0.27	0.47 U	0.33	3.1	0.47 U	7.5	**130**
SB-28 (6-8')	0.36	0.55	1.1	2.1	**2.2**	2.5	1.2	0.77	0.27 U	0.53 U	2.7	**0.38**	0.27 U	0.27 U	0.29	4.1	1.3	1	0.27 U	0.53 U	0.27 U	6.1	0.53 U	6.4	**5,950**
SB-29 (2-4')	0.19 U	0.27	0.19 U	0.46	**0.66**	0.7	0.46	0.19	0.19 U	0.37 U	0.56	0.19 U	0.19 U	0.19 U	0.32	0.33	0.19 U	0.34	0.19 U	0.37 U	0.22	0.19 U	0.37 U	0.79	**94.8**
SB-29 (6-8')	0.28	1.2	1.6	1.2	**0.93**	1	0.42	0.35	0.38	0.51	0.97	0.24 U	1.1	0.36	0.24 U	2.5	1.5	0.42	2.2	1.1	7.3	4.9	1	2.2	**50,600**
SB-30 (2-4')	0.19 U	0.56	0.92	**5.6**	**5.4**	**6.6**	3.5	1.9	0.19 U	0.37 U	5.5	**0.88**	0.19 U	0.19 U	0.25	8.3	0.28	2.6	0.29	0.37 U	0.38	4.3	0.37 U	9.9	**286**
SB-30 (6-8')	0.91	0.46	1.2	2.2	**1.7**	1.5	0.76	0.38	0.23 U	0.44 U	2.2	0.24	0.23 U	0.23 U	0.23	3	0.97	0.58	0.23 U	0.44 U	0.96	3.2	0.44 U	6.9	**2,100**
SB-31 (14-16')	1.4 J	0.34	0.91	0.63	**0.55**	0.44	0.25 U	0.25 U	0.58	0.48 U	0.57	0.25 U	0.25 U	0.25 U	0.27	1.1	1.3	0.25 U	0.25 U	0.48 U	0.69	3.9	0.48 U	1.7 J	**698 J**

TABLE E-2

SUMMARY OF SVOC AND TPH-DRO ANALYSES FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (mg/kg)																							
	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Biphenyl	Carbazole	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	2,4-Dimethylphenol	Dimethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	2-Methylnaphthalene	4-Methylphenol	Naphthalene	Phenanthrene	Phenol	Pyrene	TPH-DRO
	Screening Values (mg/kg)																							
EPA RSL	45,000	NE	230,000	2.9	0.29	2.9	NE	29	200	NE	290	0.29	NE	16,000	NE	30,000	30,000	2.9	3,000	NE	17	NE	250,000	23,000	44*

Notes:

Bold value indicates result is greater than EPA RSL for industrial soil.
SB-1 was off-site background location.

*	Value for TPH-aliphatic medium in industrial soil
DRO	Diesel-range organics
EPA	U.S. Environmental Protection Agency
'	Feet
J	Concentration is an approximate value
mg/kg	Milligrams per kilogram
NE	None established
RSL	Regional Screening Level (industrial soil)
SVOC	Semivolatile organic compound
TPH	Total petroleum hydrocarbons
U	Analyte not detected above method detection limit, which is the value presented

ED_005352_00000649-00161

TABLE E-3

SUMMARY OF METALS ANALYSIS FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (mg/kg)																		
	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Vanadium	Zinc
SB-1 (0-2')	7,140	**8.3**	198 J	1.2 U	1.2	25,600 J	9.8	6.6	20.7	13,300	76.6	9,140	616	18.8	1,350	12.1 U	171	19.1	144
SB-1 (6-8')	7,990	**8.7**	227	1.3 U	1.3 U	27,500	10.4	8.2	14.7	14,700	12.2	11,100	780	19.7	1,370	13.3 U	582	23.1	50.7
SB-2 (14-16')	15,800	**10.9**	229	1.4 U	1.4 U	21,500	18.1	10	28.1	22,400	15.6	8,310	791	26.8	2,990	14.0 U	514	39.1	81.8
SB-2 (22-24')	13,700	**8.3**	219	1.5 U	1.5 U	18,800	17.2	8.2	23.2	18,400	16.7	8,750	592	24.4	2,420	15.2 U	325	30.9	75.5
SB-3 (4-6')	8,340	**6.4**	160	1.3 U	1.3 U	24,600	10	5.8	14.2	12,600	53.8	8,240	506	16.1	1,360	12.5 U	330	21.5	56.6
SB-3 (12-14')	8,710	**7.9**	197	1.3 U	1.3 U	22,500	12.3	6.9	15.1	16,000	12.1	8,700	478	20	1,740	13.1 U	316	24.1	55.2
SB-4 (6-8')	11,200	**7.2**	186	1.3 U	1.3 U	8,880	13.1	5.6	19.2	15,500	15.2	4,740	255	16.9	2,260	13.0 U	193	25.9	72.7
SB-4 (14-16')	15,300	**8.7**	162	1.4 U	1.4 U	17,600	19.5	9	25.3	20,500	14.4	8,380	831	28.7	2,370	14.2 U	238	30.5	81.9
SB-5 (6-8')	8,730	**8.7**	219	1.4 U	1.4 U	20,400	12.4	6.9	17.7	17,300	9.4	8,730	571	24.7	1,560	13.6 U	297	24.1	56.7
SB-5 (14-16')	8,260	**7.4**	220	1.3 U	1.3 U	23,700	10.2	6.7	14.6	15,000	9.2	10,200	647	21.1	1,600	13.4 U	162	23.4	47.7
SB-6 (4-6')	6,960	6.2 U	137	1.2 U	1.2 U	18,100	9.4	5.2	11.7	10,900	9.8	6,200	413	15.7	1,170	12.3 U	136	18.5	41.6
SB-6 (18-20')	6,960	6.3 U	117	1.3 U	1.3 U	8,530	9.6	4.4	9	11,200	7.6	5,760	419	16.8	1,140	12.6 U	152	17.7	39.4
SB-7 (4-6')	10,900	**7.5**	180	1.3 U	1.3 U	5,490	14.7	7.7	17.5	16,800	15.2	4,360	530	25.2	1,560	13.0 U	114	27.3	63
SB-7 (14-16')	11,700	**9.1**	208	1.3 U	1.3 U	4,720	14	9	17.8	18,500	12.8	4,890	826	23.6	1,770	12.7 U	110	28	57.6
SB-8 (6-8')	10,100	6.5 U	170	1.3 U	1.3 U	6,220	13.1	7.1	17	16,600	11.7	4,450	662	22.6	1,690	13.0 U	256	25.7	58.8
SB-8 (14-16')	6,490	**7**	182	1.3 U	1.3 U	28,300	8.3	5.5	10	11,000	8.5	6,240	618	17.7	1,040	12.8 U	293	17.8	37.9
SB-9 (12-14')	7,840	6.3 U	114	1.3 U	1.3 U	34,200	9.8	5.7	16.6	13,400	22.8	4,520	347	17.8	1,250	12.5 U	479	21.8	72.8
SB-9 (18-20')	8,570	6.7 U	158	1.3 U	1.3 U	29,500	11.3	6.8	20.8	13,600	10.3	10,100	625	21.8	1,560	13.3 U	403	22.7	52.1
SB-10 (2-4')	7,090	**8.6**	206	1.3 U	1.5	25,400	9.1	7.1	21	14,300	66.3	11,000	1,000	21.2	1,330	12.6 U	131	19.6	153
SB-10 (14-16')	6,850	6.4 U	192	1.3 U	1.3 U	25,000	8.7	6.5	11.4	11,900	8.5	7,930	509	17.7	1,230	12.9 U	244	18.5	40.3
SB-11 (14-16')	11,600	**8.4**	155	1.3 U	1.3 U	21,300	14.6	6.6	17	15,900	12.8	8,160	500	19.4	1,960	13.1 U	364	29.2	60.5
SB-11 (22-24')	11,600	**11.4**	171	1.4 U	1.4 U	25,300	15.4	8.5	20.3	18,900	10.3	9,300	548	24	1,840	13.6 U	499	29.8	59.7
SB-12 (2-4')	11,800	**6.2**	226 J	1.2 U	1.2 U	12,900 J	14.5	6.7	31.8	18,600 J	32.2	5,960	387 J	20.8	2,250	11.5 U	944	26.5	146 J
SB-12 (10-12')	1,360	5.6 U	28.5	1.1 U	1.1 U	25,000	2.2	1.2	4.9	2,760	10.2	926	55	3.1	434	11.2 U	345	5.6 U	20.3
SB-13 (2-4')	9,490	**13.8**	202	1.2 U	1.2 U	26,800	13.6	6.4	25.8	15,700	43.9	8,680	610	19.1	1,740	12.4 U	770	25.6	185
SB-13 (14-16')	11,300	**12.2**	134	1.3 U	1.3 U	5,710	14.3	6.6	14.5	18,200	10.6	4,200	362	20.1	1,990	12.8 U	521	29.1	60.3
SB-14 (14-16')	16,000	**7.8**	178	1.3 U	1.3 U	13,200	18.7	8.1	20.9	21,900	12.9	7,850	673	24.2	2,240	13.2 U	358	37.1	70.6
SB-14 (18-20')	13,700	6.8 U	185	1.4 U	1.4 U	16,700	16.7	7.5	17.8	18,700	10.6	8,650	946	23.3	2,050	13.6 U	386	31.5	66.2
SB-15 (8-10')	13,400	6.4 U	182	1.3 U	1.3 U	8,880	15.8	8.6	14.8	18,400	12.7	6,210	683	22.3	1,860	12.8 U	163	30.9	61.8
SB-15 (14-16')	8,280	**7.5**	175	1.3 U	1.3 U	24,600	10.8	5.8	10.3	13,500	8.9	6,790	347	16	1,150	12.8 U	192	22.9	39.8
SB-16 (4-6')	9,710	6.4 U	209	1.3 U	1.3 U	31,200	11.9	6.8	13.6	15,600	9.3	10,400	485	17.9	1,740	12.8 U	460	26.4	47.2
SB-16 (14-16')	17,200	**9.7**	278	1.4 U	1.4 U	21,300	20.6	10.7	25.8	23,900	14.8	8,960	754	27.9	3,040	14.3 U	374	39.9	80.1
SB-17 (4-6')	9,400	**6.4**	175	1.3 U	1.3 U	19,000	12.4	6.9	31.8	19,900	46.9	6,550	506	20.8	1,840	12.7 U	237	22.4	109
SB-17 (10-12')	11,700	**7.4**	195	1.3 U	1.3 U	15,600	13.8	6.7	17.1	17,000	22.6	6,820	452	18.8	2,540	13.2 U	190	27.1	73
SB-18 (6-8')	13,700	**7.1**	180	1.3 U	1.3 U	26,200	16.2	8.1	25	22,600	20.9	7,630	614	22.9	2,120	12.7 U	257	33	101
SB-18 (10-12')	10,800	6.7 U	193	1.3 U	1.3 U	18,000	13.8	6.6	15	17,000	10.6	8,330	442	19.3	1,670	13.3 U	257	27.4	54.2
SB-19 (4-6')	10,200	**8.3**	245	1.3 U	10.3	27,200	13.8	7	19.1	14,600	34.4	10,200	445	19.7	1,990	12.8 U	273	28	424
SB-19 (10-12')	13,100	**8.4**	273	1.3 U	1.3 U	31,100	15.5	7.8	15.9	17,600	10.1	8,600	556	21.3	1,940	13.5 U	287	30.3	59.7

TABLE E-3

SUMMARY OF METALS ANALYSIS FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (mg/kg)																		
	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Vanadium	Zinc
SB-20 (4-6')	9,960	7.0 U	185	1.4 U	1.4 U	27,800	12	6.1	13.6	14,500	31.2	10,500	488	15.2	1,880	14.0 U	203	22	65.9
SB-20 (10-12')	16,500	**10.4**	251	1.5 U	1.5 U	18,700	17.9	10	23.2	22,000	22.4	8,250	679	26.9	2,660	14.8 U	190	36.5	93
SB-21 (4-6')	7,300	**9.4**	285	1.3 U	1.3 U	56,400	9	7	13.6	13,900	8.3	12,600	1,400	17.2	1,830	12.8 U	300	20.6	46.9
SB-21 (10-12')	12,200	**8.3**	211	1.4 U	1.4 U	19,500	14.8	8.9	23.2	18,800	16.7	8,000	660	24.4	2,440	13.9 U	317	27.5	81.8
SB-22 (6-8')	8,130	**7.1**	223	1.4 U	1.4 U	31,200	10.8	8.2	16.2	14,000	13.8	11,700	498	18.7	1,770	13.5 U	262	23.2	56.6
SB-22 (10-12')	13,200	7.1 U	288	1.4 U	1.4 U	33,100	14.8	9.1	24.7	20,400	15.4	7,370	849	23.5	2,930	14.1 U	262	30.6	76.6
SB-23 (7-9')	8,960	**7.1**	215	1.3 U	1.3 U	27,200	11.7	7.6	17.2	17,000	12.3	10,600	844	20.3	1,680	13.2 U	792	24.8	56.9
SB-23 (14-16')	12,000	**8.2**	206	1.4 U	1.4 U	20,900	15.2	9.1	22.7	17,500	13.1	8,580	640	21.1	1,890	13.6 U	383	28.3	78.6
SB-24 (2-4')	10,800	**9.9**	206	1.2 U	1.2 U	16,000	13.2	7.4	20.4	15,500	85.6	7,380	552	18.3	1,560	12.0 U	1,490	26	119
SB-24 (14-16')	9,530	**6.7**	145	1.3 U	1.3 U	20,100	11.7	6.6	14.5	14,700	16.9	6,180	506	18.1	1,350	12.9 U	524	23.5	55.3
SB-25 (6-8')	11,600	**9.9**	196	1.4 U	1.4 U	28,100	16.6	9.3	79.9	33,400	21.3	4,330	425	23.5	2,340	14.4 U	132	31.2	84.3
SB-25 (10-12')	10,700	**7.5**	164	1.3 U	1.3 U	4,370	14	7.5	14.1	17,500	12.8	3,970	300	21.5	1,510	12.6 U	145	28.8	51.4
SB-26 (2-4')	5,760	**9.7**	116	1.1 U	1.6	46,200	9.2	5.4	38.5	14,000	116	4,520	296	16.9	1,020	11.3 U	275	15.7	256
SB-26 (6-8')	7,340	**14.2**	110	1.2 U	2.5	43,400	11.6	5.7	53.4	17,400	183	4,510	237	20	1,330	12.2 U	341	17.8	337
SB-27 (2-4')	4,400	**11.4**	92.7	1.2 U	1.6	98,600	31.9	5	117	41,300	124	5,940	286	17.1	791	11.7 U	180	18.5	127
SB-27 (6-8')	9,300	**15.2**	144	1.9	3.9	21,800	14.8	9.5	114	22,200	178	1,110	169	32.2	1,030	14.0 U	467	21.4	782
SB-28 (6-8')	9,220	8.2 U	88.8	1.6 U	1.6 U	114,000	9.5	6.2	26.2	38,500	43.2	4,430	390	20.5	1,610	17.6	189	20.5	124
SB-29 (2-4')	6,890	5.8 U	135	1.2 U	1.2 U	30,400 J	10.2	5.6	12	12,000	26.9	5,220	348	14.6	1,120	11.6 U	146	18	82.4
SB-29 (6-8')	5,860	**38.6**	83.1	1.5 U	9	8,340	7.5	10.1	54	15,000	97.4	1,050	203	24.2	667	14.6 U	207	21.8	469
SB-30 (2-4')	6,120	**10.1**	112	1.2 U	2.5	57,400	11.1	5	39.6	14,500	246	5,300	275	17.4	855	11.7 U	234	18.3	374
SB-30 (6-8')	8,490	**7.7**	87.7	1.4 U	2.1	65,800	11.2	4.6	20.9	13,800	91.7	5,010	168	13.6	1,130	13.7 U	230	18.8	376
SB-31 (14-16')	15,100	7.1 U	312	1.4 U	1.4 U	18,700	19.7	8.9	27	21,500	14.2	9,380	472	24.7	2,210	14.3 U	212	31.6	82
	Screening Values (mg/kg)																		
USGS Mean Background Concentration[a]	56,750	12.1	NE	NE	NE	8,150	NE	NE	18	25,520	21.8	6,180	769	NE	NE	NE	8,420	NE	75.7
EPA RSL	1,100,000	3	220,000	2,300	980	NE	1,800,000[b]	350	47,000	820,000	800	NE	26,000	NE	NE	5,800	NE	5,800	350,000

Notes:

Bold value indicates result is greater than a screening value or the USGS reported mean background concentration.
SB-1 was off-site background location.

[a]	For Pottawattamie County soils
[b]	Represents the RSL for chromium (III)
EPA	U.S. Environmental Protection Agency
'	Feet
J	Concentration is an approximate value
mg/kg	Milligrams per kilogram
NE	None established
RSL	Regional Screening Level (industrial soil)
U	Analyte not detected above method detection limit, which is the value presented
USGS	United States Geological Survey

TABLE E-4

SUMMARY OF CYANIDE ANALYSIS FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Cyanide Sample Results (mg/kg)
SB-1 (0-2')	0.64 U
SB-1 (6-8')	0.62 U
SB-2 (14-16')	0.72 U
SB-2 (22-24')	0.75 U
SB-3 (4-6')	0.60 U
SB-3 (12-14')	0.65 U
SB-4 (6-8')	0.69 U
SB-4 (14-16')	0.68 U
SB-5 (6-8')	0.69 U
SB-5 (14-16')	0.67 U
SB-6 (4-6')	0.59 U
SB-6 (18-20')	0.66 U
SB-7 (4-6')	0.65 U
SB-7 (14-16')	0.66 U
SB-8 (6-8')	0.65 U
SB-8 (14-16')	0.63 U
SB-9 (12-14')	0.59 U
SB-9 (18-20')	0.65 U
SB-10 (2-4')	0.64 U
SB-10 (14-16')	0.67 U
SB-11 (14-16')	0.62 U
SB-11 (22-24')	0.64 U
SB-12 (2-4')	0.66 U
SB-12 (10-12')	0.60 U
SB-13 (2-4')	0.62 U
SB-13 (14-16')	0.64 U
SB-14 (14-16')	0.65 U
SB-14 (18-20')	0.66 U
SB-15 (8-10')	0.63 U
SB-15 (14-16')	0.63 U
SB-16 (4-6')	0.61 U
SB-16 (14-16')	0.71 U
SB-17 (4-6')	0.63 U
SB-17 (10-12')	0.77 U
SB-18 (6-8')	0.77 U
SB-18 (10-12')	0.65 U
SB-19 (4-6')	0.63 U
SB-19 (10-12')	0.64 U
SB-20 (4-6')	0.77 U
SB-20 (10-12')	0.70 U
SB-21 (4-6')	0.64 U
SB-21 (10-12')	0.68 U
SB-22 (6-8')	0.69 U

TABLE E-4

SUMMARY OF CYANIDE ANALYSIS FOR SOIL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Cyanide Sample Results (mg/kg)
SB-22 (10-12')	0.68 U
SB-23 (7-9')	0.66 U
SB-23 (14-16')	1.7
SB-24 (2-4')	0.59 U
SB-24 (14-16')	0.64 U
SB-25 (6-8')	0.69 U
SB-25 (10-12')	0.62 U
SB-26 (2-4')	0.62 U
SB-26 (6-8')	0.67 U
SB-27 (2-4')	7.1
SB-27 (6-8')	0.70 U
SB-28 (6-8')	2.1
SB-29 (2-4')	0.53 U
SB-29 (6-8')	4.1
SB-30 (2-4')	0.84
SB-30 (6-8')	0.74
SB-31 (14-16')	0.71 U
Screening Values (mg/kg)	
EPA RSL	12

Notes:

SB-1 was off-site background location.

EPA	U.S. Environmental Protection Agency
'	Feet
mg/kg	Milligrams per kilogram
RSL	Regional Screening Level (industrial soil)
U	Analyte not detected above method detection limit which is the value presented

TABLE E-5

SUMMARY OF VOC AND TPH-GRO ANALYSES FOR DPT GROUNDWATER SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (µg/L)											
	Acetone	Benzene	cis-1,2-Dichloroethene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m- and/or p-Xylene	o-Xylene	Methylcyclohexane	Naphthalene	Toluene	TPH-GRO
GW-1	5.0 U	5.0 U	**50**	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40 U
GW-3	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-4	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	NA
GW-7	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	NA
GW-8	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-9	5.0 U	**680**	5.0 U	6.4	**1,900**	110	**290**	**780**	5.0 U	6,300	57	**15,300**
GW-10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	25	5.0 U	**103**
GW-11	5.0 U	**6,900**	**8.6**	9.0	**2,600**	85	**2,200**	**1,300**	13	9,200	**140**	**47,900**
GW-12	5.0 U	**11,000**	5.0 U	5.0 U	**2,200**	160	**900**	**880**	5.0 U	3,700 J	**490 J**	**90,800**
GW-13	5.0 U	**70**	5.0 U	5.0 U	**15**	5.0 U	10 U	6.4	5.0 U	24	8.4	**348**
GW-14	5.0 U	**81**	5.0 U	180	**14**	23	16	8.6	93	130	11	**3,070**
GW-15	5.0 U	**8.6**	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	**67.1**
GW-16	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-17	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-18	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-19	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-20	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-21	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-22	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-23	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-24	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-25	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-26	5.0 U	**3,000**	5.0 U	5.0 U	**800**	48	**440**	**370**	5.0 U	4,900 J	**350**	**19,200**
GW-27	5.0 U	**430**	5.0 U	5.0 U	**100**	12	10 U	**68**	5.0 U	46	15	**2,660**
GW-28	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	**42**
GW-29	5.0 U	**51**	5.0 U	5.0 U	5.0 U	5.0 U	10 U	8.6	5.0 U	140	9.2	**293**
GW-30	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
GW-31	5.0 U	**61**	5.0 U	5.0 U	**1,400**	96	**73**	**520**	5.0 U	1,100 J	14	**9,790**
Rinsate Blank	7.4 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U

TABLE E-5

SUMMARY OF VOC AND TPH-GRO ANALYSES FOR DPT GROUNDWATER SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (µg/L)											
	Acetone	Benzene	cis-1,2-Dichloroethene	Cyclohexane	Ethylbenzene	Isopropylbenzene	m- and/or p-Xylene	o-Xylene	Methylcyclohexane	Naphthalene	Toluene	TPH-GRO
Field Blank	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
Trip Blank	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
Screening Values (µg/L)												
EPA MCL	NE	5	70	NE	700	NE	10,000[a]		NE	NE	1,000	NE
EPA RSL	14,000	0.46	3.6	13,000	1.5	450	19	19	NE	NE	110	3.3[b]

Notes:

Bold value indicates result is greater than a screening level.
GW-1 was off-site background location.

[a]	Represents MCL for total xylenes
[b]	Value for TPH-aromatic low in tap water
DPT	Direct-push technology
EPA	U.S. Environmental Protection Agency
GRO	Gasoline-range organics
J	Concentration is an approximate value
MCL	Maximum contaminant level
µg/L	Micrograms per liter
NA	Not analyzed
NE	None established
RSL	Regional Screening Level (tap water)
TPH	Total petroleum hydrocarbons
U	Analyte not detected above method detection limit, which is the value presented
VOC	Volatile organic compound

TABLE E-6

SUMMARY OF SVOC AND TPH-DRO ANALYSES FOR DPT GROUNDWATER SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (µg/L)																			
	2,4-Dimethylphenol	2-Methylnaphthalene	2-Methylphenol	4-Methylphenol	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Benzo(a)anthracene	Biphenyl	Carbazole	Chrysene	Dibenzofuran	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol	Pyrene	TPH-DRO
GW-1	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-2	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-3	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-4	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-5	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-6	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-7	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-8	5.0 U	5.0 U	10 U	10 U	17	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-9	5.0 U	**390**	10 U	10 U	200	9.7	10 U	19	**6.8**	**54**	20	**6.1**	12	15	53	5,600	100	10 U	19	**8,320**
GW-10	5.0 U	5.3	10 U	10 U	47	54	10 U	9.8	5.0 U	**44**	10 U	5.0 U	8.0	5.0 U	38	20	48	10 U	5.0 U	**1,460**
GW-11	47	**400**	16	73	50	6.1	14	7.6	5.0 U	**46**	10 U	5.0 U	6.0	5.0 U	38	6,200	44	21	5.0 U	**8,120**
GW-12	110	**470**	10 U	10 U	61	9.1	15	6.3	5.0 U	**20**	10 U	5.0 U	5.7	5.0 U	20	3,000	29	10 U	5.0 U	**8,840**
GW-13	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	20	5.0 U	10 U	5.0 U	500 U
GW-14	33	32	10 U	10 U	6.4	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	80	5.0 U	10 U	5.0 U	**822**
GW-15	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-16	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-17	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-18	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U
GW-20	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-21	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-22	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U
GW-24	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-25	5.0 U	5.0 U	10 U	10 U	9.5	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-26	37	**1,000**	10 U	10 U	160 J	34	10 U	20	5.0 U	**49**	13	5.0 U	13	11	67	4,600	80	10 U	14	**9,880**
GW-27	5.0 U	5.0 U	10 U	10 U	67	12	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	12	32	5.0 U	10 U	5.0 U	**676**
GW-28	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-29	79	**38**	110	190	6.0	25	10 U	5.0 U	5.0 U	**7.1**	12	5.0 U	13	5.0 U	14	340	17	140	5.0 U	**534**
GW-30	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
GW-31	5.0 U	8.2	10 U	10 U	250	70	10 U	19	5.0 U	**73**	33	5.0 U	16	7.8	94 J	990	97 J	10 U	8.9	**5,490**
Rinsate Blank	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
Field Blank	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	500 U
	Screening Values (µg/L)																			
EPA MCL	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL	360	36	NE	NE	530	NE	1,900	1,800	0.012	0.83	NE	3.4	NE	800	290	NE	NE	5,800	120	5.5[a]

Notes:

Bold value indicates result is greater than a screening level.
GW-1 was off-site background location.

[a]	Value for TPH-aromatic medium in tap water
DRO	Diesel-range organics
DPT	Direct-push technology
EPA	U.S. Environmental Protection Agency
J	Concentration is an approximate value
MCL	Maximum contaminant level
µg/L	Micrograms per liter
NA	Not analyzed
NE	None established
RSL	Regional Screening Level (tap water)
SVOC	Semivolatile organic compound
TPH	Total petroleum hydrocarbons
U	Analyte not detected above method detection limit, which is the value presented

TABLE E-7

SUMMARY OF TOTAL METALS ANALYSIS FOR DPT GROUNDWATER SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (µg/L)																				
	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium	Sodium	Titanium	Vanadium	Zinc
GW-1	18,800	25 U	366	3 U	3 U	173	22	10 U	25	**19,300**	50 U	78,800	**1,830**	15 U	20 U	13,300	50 U	241,000	369	45	80
GW-2	1,710	25 U	211	3 U	3 U	252	15 U	10 U	8	**21,900**	50 U	108,000	**799**	15 U	20 U	10,900	**101**	93,200	42	10 U	25 U
GW-3	**20,900**	25 U	**533**	3 U	3 U	198	29	**14**	25	**25,800**	50 U	62,000	**4,380**	15 U	22	17,700	50 U	96,800	422	48	100
GW-4	3,910	25 U	109	3 U	3 U	191	15 U	10 U	8	4,480	50 U	49,100	**5,140**	15 U	20 U	6,880	50 U	51,700	76	10 U	34
GW-5	**58,800**	**39**	**1,220**	3 U	3 U	224	79	**40**	**104**	**89,400**	**52**	107,000	**5,780**	15 U	86	16,600	**67**	99,200	798	**152**	278
GW-6	15,100	25 U	255	3 U	3 U	188	32	10 U	19	**17,500**	50 U	58,900	**6,300**	15 U	20 U	9,080	**54**	58,100	294	39	118
GW-7	6,930	25 U	193	3 U	3 U	179	15 U	10 U	11	8,270	50 U	58,800	113	15 U	20 U	5,240	50 U	33,000	160	23	39
GW-8	8,370	**113**	254	3 U	3 U	499	15 U	10 U	13	**39,800**	50 U	140,000	**4,210**	15 U	20 U	13,000	**236**	349,000	167	26	39
GW-9	**53,900**	**42**	**1,090**	3 U	3 U	212	64	**25**	76	**76,700**	**52**	83,000	**2,080**	15 U	66	17,400	**81**	74,200	1,130	**140**	276
GW-10	19,400	**37**	**387**	3 U	3 U	103	38	10 U	22	**23,300**	50 U	26,000	**1,000**	15 U	20 U	7,400	50 U	83,400	453	44	91
GW-11	17,300	**57**	**5,360**	3 U	3 U	1,280	15 U	**12**	38	**116,000**	50 U	428,000	**5,750**	15 U	20 U	26,300	**744**	960,000	350	29	66
GW-12	15,800	**52**	**5,490**	3 U	3 U	377	15 U	10 U	63	**81,700**	**127**	97,700	**2,340**	15 U	20 U	141,000	**175**	1,330,000	317	34	235
GW-13	865	25 U	78	3 U	3 U	225	15 U	10 U	5 U	1,060	50 U	61,800	224	15 U	20 U	14,700	**80**	340,000	23	10 U	25 U
GW-14	**22,600**	**150**	**6,150**	3 U	3 U	884	15 U	**21**	42	**100,000**	50 U	355,000	**2,840**	15 U	24	19,600	**484**	715,000	469	47	97
GW-15	1,370	25 U	31	3 U	3 U	662	15 U	**14**	11	2,790	50 U	362,000	**5,550**	15 U	20 U	9,060	**352**	214,000	39	12	25 U
GW-16	15,600	25 U	371	3 U	3 U	292	15 U	**13**	24	**19,400**	50 U	69,000	**5,370**	15 U	23	43,500	**108**	126,000	378	38	79
GW-17	**30,800**	**26**	**644**	3 U	3 U	224	42	**19**	64	**37,000**	50 U	84,800	**6,040**	15 U	33	15,800	**108**	66,400	637	67 J	155
GW-18	**21,200**	25 U	**455**	3 U	3 U	258	42	**13**	44	**33,800**	50 U	96,700	**5,700**	15 U	34	11,600	**75**	102,000	493	53 J	113
GW-19	**94,900**	**99**	**2,140**	**5**	3 U	436	**104**	**63**	**165**	**181,000**	**96**	161,000	**8,570**	15 U	169	22,000	**226**	99,200	1,520	**262 J**	485
GW-20	14,000	**108**	**815**	3 U	**5**	230	15 U	**15**	**246**	**28,300**	**66**	74,000	**9,830**	15 U	20 U	13,000	**65**	23,200	202	26 J	87
GW-21	**252,000**	**164**	**5,220**	**13 J**	**10 J**	880	**274**	**153 J**	**392**	**395,000**	**247 J**	343,000	**20,000**	15 UJ	**416 J**	58,100 J	**526**	120,000	2,180 J	**634**	**1,290**
GW-22	**22,100**	**90**	**803**	3 U	3 U	318	26	**17**	48	**61,400**	50 U	90,500	**6,520**	15 U	34	32,100	**146**	81,900	532	60	136
GW-23	**23,600**	**66**	**529**	3 U	3 U	252	33	**15**	28	**41,300**	50 U	84,000	**5,520**	15 U	74	11,200	**133**	64,000	520	54	117
GW-24	**54,100**	**27**	**1,110**	3 U	3 U	415	65	**24**	66	**78,900**	50 U	140,000	**3,240**	15 U	76	15,700	**210**	121,000	1,010	**142**	273
GW-25	12,300	**89**	254	3 U	3 U	299	15 U	10 U	12	**39,700**	50 U	104,000	**3,320**	15 U	20 U	7,360	**147**	63,000	224	23	47
GW-26	3,870	25 U	328	3 U	3 U	164	15 U	10 U	28	17,200	**98**	45,400	**548**	15 U	20 U	30,400	50 U	107,000	109	14	209
GW-27	157	25 U	146	3 U	3 U	294	15 U	10 U	5 U	**14,500**	50 U	21,800	**894**	15 U	20 U	15,300	**146**	28,300	20 U	10 U	203
GW-28	1,930	25 U	69	3 U	3 U	149	15 U	10 U	13	4,840	50 U	27,800	126	15 U	20 U	8,250	**78**	18,800	51	11	121
GW-29	2,540	**36**	86	3 U	3 U	159	15 U	10 U	32	4,680	**64**	12,100	126	17	20 U	7,440	**63**	18,500	91	14	360
GW-30	1,050	25 U	107	3 U	3 U	196	15 U	10 U	12	1,430	50 U	23,600	93	15 U	20 U	18,200	**65**	45,200	31	11	151
GW-31	**52,900**	**27**	**965**	3 U	3 U	624	36	**27**	62	**77,400**	50 U	124,000	**5,830**	15 U	65	19,100	**361**	34,600	1,190	**141**	261
Rinsate Blank	50 U	25 U	10 U	3 U	3 U	2.00 U	15 U	10 U	5 U	94	50 U	2,000 U	5 U	15 U	20 U	2,000 U	50 U	5,000 U	20 U	10 U	25 U
Field Blank	50 U	25 U	10 U	3 U	3 U	2.00 U	15 U	10 U	5 U	50 U	50 U	2,000 U	5 U	15 U	20 U	2,000 U	50 U	5,000 U	20 U	10 U	25 U
	Screening Values (µg/L)																				
EPA MCL	NE	10	2,000	4	5	NE	100	NE	1,300	NE	15	NE	NE	NE	NE	NE	50	NE	NE	NE	6,000
EPA RSL	20,000	0.052	380	2.5	0.92	NE	22,000[a]	6	80	14,000	15	NE	430	100	390[b]	NE	10	NE	NE	86	600

Notes:

Bold value indicates result is greater than a screening level.
GW-1 was off-site background location.

[a] Represents the screening level for chromium (III)
[b] Represents the screening level for nickel soluble salts
DPT Direct-push technology
EPA U.S. Environmental Protection Agency
J Concentration is an approximate value
MCL Maximum contaminant level
µg/L Micrograms per liter
NE None established
RSL Regional Screening Level (tap water)
U Analyte not detected above method detection limit, which is the value presented
UJ Analyte not detected. Detection limit is an estimate

TABLE E-8

SUMMARY OF CYANIDE ANALYSIS FOR DPT GROUNDWATER SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Cyanide Sample Results (µg/L)
GW-1	10 U
GW-2	10 U
GW-3	**14**
GW-4	10 U
GW-5	**22.7**
GW-6	10 U
GW-7	10 U
GW-8	**66**
GW-9	10 U
GW-10	10 U
GW-11	70.1
GW-12	**68.5**
GW-13	10 U
GW-14	10 U
GW-15	**17.5**
GW-16	10 U
GW-17	10 U
GW-18	10 U
GW-19	10 U
GW-20	10 U
GW-21	10 U
GW-22	10 U
GW-23	10 U
GW-24	10 U
GW-25	**20.4**
GW-26	**206**
GW-27	**20**
GW-28	**30.7**
GW-29	10 U
GW-30	**12.8**
GW-31	10 U
Rinsate Blank	10 U
Field Blank	10 U
Screening Values (µg/L)	
EPA MCL	200
EPA RSL	0.15

Notes:

Bold value indicates result is greater than the EPA MCL or RSL.
GW-1 was off-site background location.

DPT Direct-push technology
EPA U.S. Environmental Protection Agency
µg/L Micrograms per liter
MCL Maximum contaminant level
RSL Regional Screening Level (tap water)
U Analyte not detected above method detection limit, which is the value presented

TABLE E-9

SUMMARY OF VOC AND TPH-GRO ANALYSES FOR MONITORING WELL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (µg/L)										
	2-Butanone	Acetone	Benzene	Ethylbenzene	Isopropylbenzene	m- and/or p-Xylene	o-Xylene	Methylcyclohexane	Naphthalene	Toluene	TPH-GRO
MW-1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
MW-2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
MW-3	5.0 U	5.0 U	**1,500**	**1,800**	91	**480**	**350**	5.6	10,000 J	61	**19,600**
MW-4	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U	40 U
MW-6	5.0 U	5.0 U	**360**	**110**	74	**48**	**8.4**	5.0 U	3,600 J	5.0 U	**2,650**
MW-8	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	29	5.0 U	40 U
IDW	170 J	190 J	**330**	**290**	27	**110**	**73**	5.0 U	3,200 J	17	**3,310**
Screening Values (µg/L)											
EPA MCL	NE	NE	5	700	NE	10,000[a]		NE	NE	1,000	NE
EPA RSL	5,600	14,000	0.46	1.5	450	19	19	NE	NE	110	3.3[b]

Notes:

Bold value indicates result is greater than a screening level.

[a]	Represents MCL for total xylenes
[b]	Value for TPH-aromatic low in tap water
EPA	U.S. Environmental Protection Agency
GRO	Gasoline-range organics
IDW	Investigation-derived waste
J	Concentration is an approximate value
MCL	Maximum contaminant level
µg/L	Micrograms per liter
MW	Monitoring well
NE	None established
RSL	Regional Screening Level (tap water)
TPH	Total petroleum hydrocarbons
U	Analyte not detected above method detection limit, which is the value presented
VOC	Volatile organic compound

TABLE E-10

SUMMARY OF SVOC AND TPH-DRO ANALYSES FOR MONITORING WELL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (µg/L)												
	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Biphenyl	Carbazole	Dibenzofuran	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	TPH-DRO
MW-1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U
MW-2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U
MW-3	1,000 U	1,000 U	7.8	14	**59**	26	7.8	7.0	72	8,900	78	7.6	**11,200**
MW-4	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	500 U
MW-6	16	8.6	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	2,500	5.0 U	5.0 U	**4,230**
MW-8	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U	5.0 U	5.0 U	16	5.0 U	5.0 U	500 U
IDW	**97 J**	51	5.0 U	5.0 U	**12**	10 U	5.0 U	5.0 U	18	1,600	24	5.0 U	**2,760**
Screening Values (µg/L)													
EPA MCL	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
EPA RSL	36	530	NE	1,800	0.83	NE	NE	800	290	NE	NE	120	5.5[a]

Notes:

Bold value indicates result is greater than a screening level.

[a]	Value for TPH-aromatic medium in tap water
DRO	Diesel-range organics
EPA	U.S. Environmental Protection Agency
IDW	Investigation-derived waste
J	Concentration is an approximate value
MCL	Maximum contaminant level
µg/L	Micrograms per liter
MW	Monitoring well
NE	None established
RSL	Regional Screening Level (tap water)
SVOC	Semivolatile organic compound
TPH	Total petroleum hydrocarbons
U	Analyte not detected above method detection limit, which is the value presented

TABLE E-11

SUMMARY OF TOTAL METALS ANALYSIS FOR MONITORING WELL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Analytes and Sample Results (µg/L)									
	Aluminum	Arsenic	Barium	Calcium	Iron	Magnesium	Manganese	Potassium	Selenium	Sodium
MW-1	50 U	25 U	267	307	423	105	**8,370**	6,150	**154**	215,000
MW-2	50 U	**50**	324	297	**34,500**	102	**1,410**	6,310	**139**	43,800
MW-3	50 U	25 U	**841**	98.9	**15,700**	37.4	**727**	8,590	**53**	79,300
MW-4	50 U	**41**	**1,540**	192	**23,900**	68.7	**1,530**	7,790	**85**	43,000
MW-6	50 U	25 U	**917**	114	**17,800**	41.1	418	10,800	50 U	61,300
MW-8	50 U	**29**	284	195	**15,600**	74.2	**1,040**	7,470	**75**	50,800
IDW	72	25 U	**656**	159	12,000	64.4	**1,070**	8,900	50 U	67,000
	Screening Values (µg/L)									
EPA MCL	NE	10	2,000	NE	NE	NE	NE	NE	50	NE
EPA RSL	20,000	0.052	380	NE	14,000	NE	430	NE	10	NE

Notes:

Bold value indicates result is greater than a screening level.

EPA	U.S. Environmental Protection Agency
IDW	Investigation-derived waste
MCL	Maximum contaminant level
µg/L	Micrograms per liter
MW	Monitoring well
NE	None established
RSL	Regional Screening Level (tap water)
U	Analyte not detected above method detection limit, which is the value presented

TABLE E-12

SUMMARY OF CYANIDE ANALYSIS FOR MONITORING WELL SAMPLES
Citizen's Gas & Electric Site, Council Bluffs, Iowa

Sample Number	Cyanide Sample Results (µg/L)
MW-1	10 U
MW-2	**73.7**
MW-3	**19.9**
MW-4	10 U
MW-6	**13.8**
MW-8	10 U
IDW	10 U
Screening Values (µg/L)	
EPA MCL	200
EPA RSL	0.15

Notes:

Bold value indicates result is greater than a screening level.

EPA	U.S. Environmental Protection Agency
IDW	Investigation-derived waste
µg/L	Micrograms per liter
MCL	Maximum contaminant level
MW	Monitoring well
RSL	Regional Screening Level (tap water)
U	Analyte not detected above method detection limit, which is the value presented

APPENDIX F

CHAIN-OF-CUSTODY RECORDS AND ANALYTICAL DATA PACKAGES

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION	SHEET
Kevin Larson	Citizens Gas + Electric	7-8 (DAY) 12 (MONTH) 2015 (YEAR)	1 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	8 oz BOTTLE	BOTTLE	4 vials ~~BOTTLE~~ VOA Set	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
7007-1		4		1	1		X				
-2		4		1	1		X				
-3		4		1	1		X				
-4		4		1	1		X				
-5		4		1	1		X				
-6		4		1	1		X				
-7		4		1	1		X				
-8		4		1	1		X				
-9		4		1	1		X				
-10		4		1	1		X				
-11		4		1	1		X				
-12		4		1	1		X				
-13		4		1	1		X				
-14		4		1	1		X				
-15		4		1	1		X				
-16		4		1	1		X				
-17		4		1	1		X				
-18		4		1	1		X				
-19		4		1	1		X				
-20		4		1	5		X				ms/msd

ASR NOT COMPLETE

DESCRIPTION OF SHIPMENT

____ PIECE(S) CONSISTING OF ____ BOX(ES)

____ ICE CHEST(S): OTHER ____

MODE OF SHIPMENT

X COMMERCIAL CARRIER: Fed Ex

____ COURIER

____ SAMPLER CONVEYED

____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] ☑ SEALED UNSEALED ☐	12/9/15	1720	Fed Ex ☑ SEALED UNSEALED ☐	Ship samples to Lab
RELINQUISHED BY ☐ SEALED UNSEALED ☐	DATE	TIME	RECEIVED BY ☐ SEALED UNSEALED ☐	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED UNSEALED ☐	DATE	TIME	RECEIVED BY ☐ SEALED UNSEALED ☐	REASON FOR CHANGE OF CUSTODY

7-EPA-9262(Revised 5/85)

*U.S. GPO: 2002-756-917/40053

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
Kevin Larson	Citizens Gas & Electric	7-8 / 12 / 2015	2 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	80 oz BOTTLE	1-L BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
7007-101		2	2		2	X					
-102		2	2		2	X					
-103		2	2		2	X					
-104		2	2		2	X					
-105		2	2		2	X					
-106		2	2		2	X					
-107		2	2		2	X					
-108		4	2		6	X					MS/MSD
-109		2	2		2	X					
-110		2	2		2	X					

ASR NOT COMPLETE

DESCRIPTION OF SHIPMENT

____ PIECE(S) CONSISTING OF ____ BOX(ES)

8 ICE CHEST(S); OTHER ____

MODE OF SHIPMENT

X COMMERCIAL CARRIER: Fed Ex

____ COURIER

____ SAMPLER CONVEYED

____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] ☑ SEALED UNSEALED ☐	12/9/15	1720	Fed Ex ☑ SEALED UNSEALED ☐	Ship samples to Lab
RELINQUISHED BY ☐ SEALED UNSEALED ☐	DATE	TIME	RECEIVED BY ☐ SEALED UNSEALED ☐	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED UNSEALED ☐	DATE	TIME	RECEIVED BY ☐ SEALED UNSEALED ☐	REASON FOR CHANGE OF CUSTODY

7-EPA-9262(Revised 5/85)

*U.S. GPO: 2002-756-917/40053

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
Kevin Larson	Citizens Gas & Electric	9-10 / 12 / 2015	1 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: VOA — CUBITAINER	8-oz BOTTLE	BOTTLE	500 ml BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS-OTHER INFORMATION (condition of samples upon receipt other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
9007-21		4		1	1		X				
-22		4		1	1		X				
-23		4		1	1		X				
-24		4		1	1		X				
-25		4		1	1		X				
-26		4		1	1		X				
-27		4		1	1		X				
-28		4		1	1		X				
-29		4		1	1		X				
-30		4		1	1		X				
-31		4		1	1		X				
-32		4		1	1		X				
-33		4		1	1		X				
-34		4		1	1		X				
-35		4		1	1		X				
-36		4		1	1		X				
-37		4		1	1		X				
-38		4		1	1		X				
-39		4		1	5		X				MS/MSD
-40		4		1	1		X				
-41		4		1	1		X				
-42		4		1	1		X				
	ASR NOT COMPLETE										

DESCRIPTION OF SHIPMENT

_____ PIECE(S) CONSISTING OF _____ BOX(ES)

_____ ICE CHEST(S): OTHER _____

MODE OF SHIPMENT

X COMMERCIAL CARRIER Federal Express

_____ COURIER

_____ SAMPLER CONVEYED

_____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] ☒ SEALED ☐ UNSEALED	12-10-15	1815	Federal Express ☒ SEALED ☐ UNSEALED	Shipping samples to Lab
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	RECEIVED BY ☐ SEALED ☐ UNSEALED	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	RECEIVED BY ☐ SEALED ☐ UNSEALED	REASON FOR CHANGE OF CUSTODY

7-EPA-9262(Revised 5/85)

*U.S. GPO: 2002-756-617/40053

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET
Kevin Larson	Citizens Gas + Electric	9-28 / 12 / 2015	2 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	500 ml BOTTLE	1 - L BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	tissue	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
7007-111		2	2		2	X					
-112		2	2		2	X					
-113		2	2		2	X					
-114		2	2		2	X					
-115		2	2		2	X					
-116		2	2		2	X					
-117		2	2		2	X					
-118		2	2		2	X					
-119		2	2		2	X					
-120		2	2		2	X					
-121		2	2		2	X					

REPORT CARD ATTACHED

DESCRIPTION OF SHIPMENT

_____ PIECE(S) CONSISTING OF _____ BOX(ES)

10 ICE CHEST(S); OTHER _____

MODE OF SHIPMENT

X COMMERCIAL CARRIER Federal Express

_____ COURIER

_____ SAMPLER CONVEYED

_____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] X SEALED ☐ UNSEALED	12-10-15	1815	Federal Express X SEALED ☐ UNSEALED	Shipping samples to Lab
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	RECEIVED BY ☐ SEALED ☐ UNSEALED	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	RECEIVED BY ☐ SEALED ☐ UNSEALED	REASON FOR CHANGE OF CUSTODY

7-EPA-9262(Revised 5/85)

*U.S. GPO: 2002-756-917/40055

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION	SHEET
Kevin Larson	Citizens Gas + Electric	11-12 (DAY) 12 (MONTH) 2015 (YEAR)	1 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	8 oz BOTTLE	BOTTLE	4 VIALS ~~BOTTLE~~ EA	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
7007-43		4		1	1		X				
-44		4		1	1		X				
-45		4		1	1		X				
-46		4		1	1		X				
-47		4		1	1		X				
-48		4		1	1		X				
-49		4		1	1		X				
-50		4		1	1		X				
-51		4		1	1		X				
-52		4		1	1		X				
-53		4		1	1		X				
-54		4		1	1		X				
-55		4		1	1		X				
-56		4		1	1		X				
-57		4		1	1		X				
-58		4		1	1		X				
-59		4		1	1		X				
-60		4		1	5		X				ms/msd

ASR NOT COMPLETE

DESCRIPTION OF SHIPMENT

____ PIECE(S) CONSISTING OF ____ BOX(ES)

____ ICE CHEST(S): OTHER ____

MODE OF SHIPMENT

____ COMMERCIAL CARRIER ____

____ COURIER

X SAMPLER CONVEYED

____ (SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] SEALED UNSEALED X	12-15-15	1353	Nicole Robley SEALED UNSEALED X	Analyz
RELINQUISHED BY SEALED UNSEALED	DATE	TIME	RECEIVED BY SEALED UNSEALED	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY SEALED UNSEALED	DATE	TIME	RECEIVED BY SEALED UNSEALED	REASON FOR CHANGE OF CUSTODY

7-EPA-9262(Revised 5/85)

*U.S. GPO: 2002-756-917/40053

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY REGION VII

ACTIVITY LEADER(Print)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION	SHEET
Kevin Larson	Citizens Gas & Electric	11-14 (DAY) 12 (MONTH) 2015 (YEAR)	2 of 2

CONTENTS OF SHIPMENT

SAMPLE NUMBER	TYPE OF CONTAINERS: CUBITAINER	80 oz BOTTLE	1-L BOTTLE	BOTTLE	VOA SET (2 VIALS EA)	SAMPLED MEDIA: water	soil	sediment	dust	other	RECEIVING LABORATORY REMARKS/OTHER INFORMATION (condition of samples upon receipt, other sample numbers, etc.)
	NUMBERS OF CONTAINERS PER SAMPLE NUMBER										
7007-122		2	2		2	X					
-123		2	2		2	X					
-124		2	2		2	X					
-125		2	2		2	X					
-126		2	2		2	X					
-127		2	2		2	X					
-128		2	2		2	X					
-129		2	2		2	X					
-130	~~4~~ 4	4	2		6	X					MS/MSD
-131		2	2		2	X					
-132		2	2		2	X					
-133		2	2		2	X					
-134		2	2		2	X					
-135		2	2		2	X					
-136		2	2		2	X					
-137		2	2		2	X					
-138		2	2		2	X					
-139		2	2		2	X					
-140-FB		2	2		2	X					
-141-FB					2	X					

ASR COMPLETE

DESCRIPTION OF SHIPMENT

____ PIECE(S) CONSISTING OF ____ BOX(ES)

10 ICE CHEST(S); OTHER ____

MODE OF SHIPMENT

____ COMMERCIAL CARRIER ____

____ COURIER

X SAMPLER CONVEYED

(SHIPPING DOCUMENT NUMBER)

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	DATE	TIME	RECEIVED BY	REASON FOR CHANGE OF CUSTODY
[signature] SEALED UNSEALED X	12-15-15	1353	[signature] SEALED UNSEALED X	[signature]
RELINQUISHED BY SEALED UNSEALED	DATE	TIME	RECEIVED BY SEALED UNSEALED	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY SEALED UNSEALED	DATE	TIME	RECEIVED BY SEALED UNSEALED	REASON FOR CHANGE OF CUSTODY

7-EPA-9262(Revised 5/85)

*U.S. GPO: 2002-756-917/40053

United States Environmental Protection Agency
Region 7
300 Minnesota Avenue
Kansas City, KS 66101

Date: 01/25/2016

Subject: Transmittal of Sample Analysis Results for ASR #: 7007

Project ID: KL07HY

Project Description: Citizens Gas & Electric Co. sampling

From: Margaret E.W. St. Germain, Chief
Laboratory Technology & Analysis Branch, Environmental Sciences & Technology Division

To: Kevin Larson
SUPR/ERNB

Enclosed are the analytical data for the above-referenced Analytical Services Request (ASR) and Project. The Regional Laboratory has reviewed and verified the results in accordance with procedures described in our Quality Manual (QM). In addition to all of the analytical results, this transmittal contains pertinent information that may have influenced the reported results and documents any deviations from the established requirements of the QM.

Please contact us within 14 days of receipt of this package if you determine there is a need for any changes. Please complete the enclosed Customer Satisfaction Survey and Data Disposition/Sample Release memo for this ASR as soon as possible. The process of disposing of the samples for this ASR will be initiated 30 days from the date of this transmittal unless an alternate release date is specified on the Data Disposition/Sample Release memo.

If you have any questions or concerns relating to this data package, contact our customer service line at 913-551-5295.

Enclosures

cc: Analytical Data File.

ED_005352_00000649-00182

Project Manager: Kevin Larson **Org:** SUPR/ERNB **Phone:** 913-551-7808

Project ID: KL07HY

Project Desc: Citizens Gas & Electric Co. sampling

Location: Council Bluffs **State:** Iowa **Program:** Superfund

Site Name: CITIZENS GAS & ELECTRIC CO - SITE EVALUATION/DISPOSITION **Site ID:** 07HY **Site OU:** 00

GPRA PRC: 303DC6

Purpose: Site Characterization

Removal site investigation/assessment sampling.

Explanation of Codes, Units and Qualifiers used on this report

Sample QC Codes: QC Codes identify the type of sample for quality control purpose.

__ = Field Sample
FB = Field Blank

Units: Specific units in which results are reported.

ug/kg = Micrograms per Kilogram
% = Percent
mg/kg = Milligrams per Kilogram
mg/L = Milligrams per Liter
ug/L = Micrograms per Liter

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank)= Values have been reviewed and found acceptable for use.
U = The analyte was not detected at or above the reporting limit.
J = The identification of the analyte is acceptable; the reported value is an estimate.
UJ = The analyte was not detected at or above the reporting limit. The reporting limit is an estimate.
O = Parameter not analyzed.
R = The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable.

ASR Number: 7007 **Sample Information Summary** **01/25/2016**

Project ID: KL07HY **Project Desc:** Citizens Gas & Electric Co. sampling

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
1 -	__	Solid	SB-1 (0-2')		12/07/2015	09:50			12/10/2015
2 -	__	Solid	SB-1 (6-8')		12/07/2015	10:00			12/10/2015
3 -	__	Solid	SB-2 (14-16')		12/07/2015	11:30			12/10/2015
4 -	__	Solid	SB-2 (22-24')		12/07/2015	12:10			12/10/2015
5 -	__	Solid	SB-3 (4-6')		12/07/2015	14:40			12/10/2015
6 -	__	Solid	SB-3 (12-14')		12/07/2015	14:50			12/10/2015
7 -	__	Solid	SB-4 (6-8')		12/07/2015	16:00			12/10/2015
8 -	__	Solid	SB-4 (14-16')		12/07/2015	16:15			12/10/2015
9 -	__	Solid	SB-5 (6-8')		12/07/2015	17:15			12/10/2015
10 -	__	Solid	SB-5 (14-16')		12/07/2015	17:25			12/10/2015
11 -	__	Solid	SB-6 (4-6')		12/08/2015	08:20			12/10/2015
12 -	__	Solid	SB-6 (18-20')		12/08/2015	08:30			12/10/2015
13 -	__	Solid	SB-7 (4-6')		12/08/2015	10:05			12/10/2015
14 -	__	Solid	SB-7 (14-16')		12/08/2015	10:20			12/10/2015
15 -	__	Solid	SB-8 (6-8')		12/08/2015	12:40			12/10/2015
16 -	__	Solid	SB-8 (14-16')		12/08/2015	12:55			12/10/2015
17 -	__	Solid	SB-9 (12-14')		12/08/2015	15:15			12/10/2015
18 -	__	Solid	SB-9 (18-20')		12/08/2015	15:25			12/10/2015
19 -	__	Solid	SB-10 (2-4')		12/08/2015	16:45			12/10/2015
20 -	__	Solid	SB-10 (14-16')		12/08/2015	16:55			12/10/2015
21 -	__	Solid	SB-11 (14-16')		12/09/2015	08:20			12/11/2015
22 -	__	Solid	SB-11 (22-24')		12/09/2015	08:40			12/11/2015
23 -	__	Solid	SB-12 (2-4')		12/09/2015	10:00			12/11/2015
24 -	__	Solid	SB-12 (10-12')		12/09/2015	10:10			12/11/2015
25 -	__	Solid	SB-13 (2-4')		12/09/2015	11:15			12/11/2015
26 -	__	Solid	SB-13 (14-16')		12/09/2015	11:25			12/11/2015
27 -	__	Solid	SB-14 (14-16')		12/09/2015	12:55			12/11/2015
28 -	__	Solid	SB-14 (18-20')		12/09/2015	13:15			12/11/2015
29 -	__	Solid	SB-15 (8-10')		12/09/2015	14:45			12/11/2015
30 -	__	Solid	SB-15 (14-16')		12/09/2015	15:00			12/11/2015
31 -	__	Solid	SB-16 (4-6')		12/10/2015	08:00			12/11/2015
32 -	__	Solid	SB-16 (14-16')		12/10/2015	08:15			12/11/2015
33 -	__	Solid	SB-17 (4-6')		12/10/2015	09:30			12/11/2015
34 -	__	Solid	SB-17 (10-12')		12/10/2015	09:40			12/11/2015
35 -	__	Solid	SB-18 (6-8')		12/10/2015	10:45			12/11/2015
36 -	__	Solid	SB-18 (10-12')		12/10/2015	10:55			12/11/2015
37 -	__	Solid	SB-19 (4-6')		12/10/2015	12:35			12/11/2015
38 -	__	Solid	SB-19 (10-12')		12/10/2015	12:50			12/11/2015
39 -	__	Solid	SB-20 (4-6')		12/10/2015	14:00			12/11/2015
40 -	__	Solid	SB-20 (10-12')		12/10/2015	14:10			12/11/2015
41 -	__	Solid	SB-21 (4-6')		12/10/2015	15:00			12/11/2015
42 -	__	Solid	SB-21 (10-12')		12/10/2015	15:10			12/11/2015
43 -	__	Solid	SB-22 (6-8')		12/11/2015	08:05			12/15/2015
44 -	__	Solid	SB-22 (10-12')		12/11/2015	08:20			12/15/2015

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
45 -	__	Solid	SB-23 (7-9')		12/11/2015	09:15			12/15/2015
46 -	__	Solid	SB-23 (14-16')		12/11/2015	09:35			12/15/2015
47 -	__	Solid	SB-24 (2-4')		12/11/2015	10:55			12/15/2015
48 -	__	Solid	SB-24 (14-16')		12/11/2015	11:05			12/15/2015
49 -	__	Solid	SB-25 (6-8')		12/11/2015	13:20			12/15/2015
50 -	__	Solid	SB-25 (10-12')		12/11/2015	13:35			12/15/2015
51 -	__	Solid	SB-26 (2-4')		12/11/2015	14:55			12/15/2015
52 -	__	Solid	SB-26 (6-8')		12/11/2015	15:10			12/15/2015
53 -	__	Solid	SB-27 (2-4')		12/11/2015	15:50			12/15/2015
54 -	__	Solid	SB-27 (6-8')		12/11/2015	16:02			12/15/2015
55 -	__	Solid	SB-28 (6-8')		12/11/2015	17:30			12/15/2015
56 -	__	Solid	SB-29 (2-4')		12/12/2015	08:00			12/15/2015
57 -	__	Solid	SB-29 (6-8')		12/12/2015	08:10			12/15/2015
58 -	__	Solid	SB-30 (2-4')		12/12/2015	09:00			12/15/2015
59 -	__	Solid	SB-30 (6-8')		12/12/2015	09:10			12/15/2015
60 -	__	Solid	SB-31 (14-16')		12/12/2015	11:05			12/15/2015
101 -	__	Water	GW-1		12/07/2015	10:18			12/11/2015
102 -	__	Water	GW-2		12/07/2015	12:15			12/11/2015
103 -	__	Water	GW-3		12/07/2015	15:00			12/10/2015
104 -	__	Water	GW-4		12/07/2015	16:20			12/10/2015
105 -	__	Water	GW-5		12/07/2015	17:45			12/10/2015
106 -	__	Water	GW-6		12/08/2015	09:00			12/10/2015
107 -	__	Water	GW-7		12/08/2015	10:40			12/10/2015
108 -	__	Water	GW-8		12/08/2015	13:30			12/10/2015
109 -	__	Water	GW-9		12/08/2015	15:45			12/10/2015
110 -	__	Water	GW-10		12/08/2015	17:05			12/10/2015
111 -	__	Water	GW-11		12/09/2015	09:00			12/11/2015
112 -	__	Water	GW-12		12/09/2015	10:30			12/11/2015
113 -	__	Water	GW-13		12/09/2015	11:40			12/11/2015
114 -	__	Water	GW-14		12/09/2015	13:30			12/11/2015
115 -	__	Water	GW-15		12/09/2015	15:10			12/11/2015
116 -	__	Water	GW-16		12/10/2015	08:30			12/11/2015
117 -	__	Water	GW-17		12/10/2015	10:00			12/11/2015
118 -	__	Water	GW-18		12/10/2015	11:10			12/11/2015
119 -	__	Water	GW-19		12/10/2015	13:05			12/11/2015
120 -	__	Water	GW-20		12/10/2015	14:25			12/11/2015
121 -	__	Water	GW-21		12/10/2015	15:25			12/11/2015
122 -	__	Water	GW-22		12/11/2015	08:35			12/15/2015
123 -	__	Water	GW-23		12/11/2015	09:50			12/15/2015
124 -	__	Water	GW-24		12/11/2015	11:50			12/15/2015
125 -	__	Water	GW-25		12/11/2015	13:55			12/15/2015
126 -	__	Water	GW-26		12/11/2015	17:00			12/15/2015
127 -	__	Water	GW-27		12/11/2015	16:30			12/15/2015
128 -	__	Water	GW-28		12/11/2015	17:45			12/15/2015

ASR Number: 7007 **Sample Information Summary** **01/25/2016**

Project ID: KL07HY **Project Desc:** Citizens Gas & Electric Co. sampling

Sample No	QC Code	Matrix	Location Description	External Sample No	Start Date	Start Time	End Date	End Time	Receipt Date
129 -	__	Water	GW-29		12/12/2015	08:25			12/15/2015
130 -	__	Water	GW-30		12/12/2015	09:25			12/15/2015
131 -	__	Water	GW-31		12/12/2015	11:30			12/15/2015
132 -	__	Water	Equipment Rinsate Blank		12/12/2015	12:00			12/15/2015
133 -	__	Water	MW-1		12/12/2015	15:45			12/15/2015
134 -	__	Water	MW-2		12/12/2015	17:32			12/15/2015
135 -	__	Water	MW-4		12/13/2015	11:28			12/15/2015
136 -	__	Water	MW-6		12/13/2015	15:35			12/15/2015
137 -	__	Water	MW-3		12/13/2015	17:50			12/15/2015
138 -	__	Water	MW-8		12/14/2015	10:40			12/15/2015
139 -	__	Water	IDW - Monitoring well purge water		12/14/2015	11:45			12/15/2015
140 -	FB	Water	Field Blank sample		12/14/2015	12:15			12/15/2015
141 -	FB	Water	Water LDL VOA/TPH VOA (GRO) Trip Blank sample		12/14/2015	15:30			12/15/2015

Analysis	Comments About Results For This Analysis

1 Cyanide, Total in Soil

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Basis: Dry

Samples:						
1-__	2-__	3-__	4-__	5-__	6-__	7-__
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	19-__	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__	33-__	34-__	35-__
36-__	37-__	38-__	39-__	40-__	41-__	42-__
43-__	44-__	45-__	46-__	47-__	48-__	49-__
50-__	51-__	52-__	53-__	54-__	55-__	56-__
57-__	58-__	59-__	60-__			

Comments:
Slight cyanide contamination was found in the preparation and/or calibration blanks. Only samples containing this analyte at a level greater than ten times the contamination level of the blank are reported without being qualified. All samples that contained this analyte but at a level less than ten times the contamination in the blank have the result U-coded indicating that the reporting limit has been raised to the level found in the sample. Samples affected were: cyanide in -23, -41, -43, and -52.

1 Metals in Solids by ICP-AES

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3122.3F

Basis: Dry

Samples:						
1-__	2-__	3-__	4-__	5-__	6-__	7-__
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	19-__	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__	33-__	34-__	35-__
36-__	37-__	38-__	39-__	40-__	41-__	42-__
43-__	44-__	45-__	46-__	47-__	48-__	49-__
50-__	51-__	52-__	53-__	54-__	55-__	56-__
57-__	58-__	59-__	60-__			

Comments:
Antimony was UJ-coded in sample 1. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual reporting limit for this analyte may be higher than the reported value.

Barium was J-coded in sample 1. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to poor precision

Analysis **Comments About Results For This Analysis**

obtained for this analyte in the laboratory matrix spike and matrix spike duplicate.

Antimony was UJ-coded in sample 23. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual reporting limit for this analyte may be higher than the reported value.

Barium was J-coded in sample 23. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual concentration for this analyte may be higher than the reported value.

Calcium and Zinc were J-coded in sample 23. Although the analytes in question have been positively identified in the sample, the quantitation is an estimate (J-coded) due to high recovery of these analytes in the laboratory matrix spike. The actual concentration for these analyte may be lower than the reported value.

Antimony was UJ-coded in sample 23. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate. The actual reporting limit for this analyte may be higher than the reported value.

Calcium, Iron, Manganese and Zinc were J-coded in sample 23. Although the analytes in question have been positively identified in the sample, the quantitation is an estimate (J-coded) due to poor precision obtained for these analytes in the laboratory matrix spike and matrix spike duplicate.

Antimony was UJ-coded in sample 56. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual reporting limit for this analyte may be higher than the reported value.

Calcium was J-coded in sample 56. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate.

1 Percent Solid

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3142.9G

Basis: N/A

Samples:

1-__	2-__	3-__	4-__	5-__	6-__	7-__
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	19-__	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__	33-__	34-__	35-__
36-__	37-__	38-__	39-__	40-__	41-__	42-__

Analysis **Comments About Results For This Analysis**

Samples:

43-__	44-__	45-__	46-__	47-__	48-__	49-__
50-__	51-__	52-__	53-__	54-__	55-__	56-__
57-__	58-__	59-__	60-__			

Comments:
(N/A)

1 Semi-Volatile Organic Compounds in Soil

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Basis: Dry

Samples:

1-__	2-__	3-__	4-__	5-__	6-__	7-__
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	19-__	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__	33-__	34-__	35-__
36-__	37-__	38-__	39-__	40-__	41-__	42-__
43-__	44-__	45-__	46-__	47-__	48-__	49-__
50-__	51-__	52-__	53-__	54-__	55-__	56-__
57-__	58-__	59-__	60-__			

Comments:
Benzo(b)Fluoranthene and Benzo(a)pyrene were J-coded in sample -23 and Dibenzo(a,h)anthracene was J-coded in sample -49. Although the analytes in question have been positively identified in the sample, the quantitation is an estimate (J-coded) due to the reported values exceeding the calibrated range of the instrument.

The medium level analysis (and its dilution) of sample -52 was extracted 3 days past its 14 day extraction time. Benzo(b)Fluoranthene, Benzo(a)pyrene, Naphthalene and 2-Methynaphthalene were reported with a J-code indicating that they are estimated values. The actual concentration of some or all analytes may have been higher than the reported result.

Isophorone was UJ-coded in sample -49. 2-Nitroanaline, 3-Nitroanaline, 4-Nitroanaline, 4-Nitrophenol and 2,4-Dinitrophenol were UJ-coded in samples -49 and -52. 4,6-Dinitro-2-methylphenol was UJ-coded in samples -17, -23, -49 and -52. This analyte was not found in the samples at or above the reporting limits; however, the reporting limits are an estimate (UJ-coded) due to low recovery of the surrogate analyte. The actual reporting limits for this analyte may be higher than the reported values.

Fluoranthene was J-coded in samples -17 and -18. Although the analyte in question has been positively identified in the samples, the quantitation is an estimate (J-coded) due to the continuing calibration checks not meeting accuracy specifications. The actual concentration for this analyte may be lower than the reported value.

Hexachlorocyclopentadiene was UJ-coded in samples -23, -37, -39, -40 -49 and -51 to -60. This analyte was not found in the samples at or above the reporting limit, however, the

Analysis **Comments About Results For This Analysis**

reporting limit is an estimate (UJ-coded) due to the continuing calibration check not meeting accuracy specifications. The actual reporting limits for this analyte may be higher than the reported values.

Acenaphthene and Pyrene were J-coded in sample -60. Although the analytes in question have been positively identified in the samples, the quantitation is an estimate (J-coded) due to high recoveries of these analytes in the laboratory matrix spike. The actual concentrations for these analytes may be lower than the reported values.

Acenaphthene was J-coded in sample -60. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate.

1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID

Lab: RASP Contract Lab (Out-Source)

Method: Similar to Modified version of SW846 Method 8015 (see comments)

Basis: Dry

Samples:

1-__	2-__	3-__	4-__	5-__	6-__	7-__
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	19-__	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__	33-__	34-__	35-__
36-__	37-__	38-__	39-__	40-__	41-__	42-__
43-__	44-__	45-__	46-__	47-__	48-__	49-__
50-__	51-__	52-__	53-__	54-__	55-__	56-__
57-__	58-__	59-__	60-__			

Comments:

Due to the sample matrix, samples 7007-17, -23, -49, -51, -55, -57, -58, & -59 could not be analyzed without dilution. Additionally, samples 7007-55 & 7007-57 could not be concentrated to the standard 1mL final volume so the reporting limits have been adjusted accordingly.

TPH DRO was J-coded in sample 7007-7. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to low recovery of a surrogate analyte in this sample. The actual concentration for this analyte may be higher than the reported value.

TPH DRO was J-coded in samples 7007-52 & 7007-60. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to high recovery of a surrogate analyte in this sample. The actual concentration for this analyte may be lower than the reported value.

TPH DRO was UJ-coded in sample 7007-39. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual reporting limit for this

Analysis **Comments About Results For This Analysis**

analyte may be higher than the reported value.

1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Basis: Dry

Samples:

1-__	2-__	3-__	4-__	5-__	6-__	7-__
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	19-__	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__	33-__	34-__	35-__
36-__	37-__	38-__	39-__	40-__	41-__	42-__
43-__	44-__	45-__	46-__	47-__	48-__	49-__
50-__	51-__	52-__	53-__	54-__	55-__	56-__
57-__	58-__	59-__	60-__			

Comments:

Samples -17, -18, -21, -22, -27, -51 and -57 were analyzed at medium level VOA analysis due to high concentration of target compounds. Only results from a 1:5 dilution of samples -17 and -52 were reported; therefore, the reporting limits were raised by a factor of 250 times. Only results from a 1:10 dilution of sample -57 were reported; therefore, the reporting limits were raised by a factor of 500 times. The reporting limits for samples -18, -21, -22 and -27 were raised by a factor of 50 times. Low level analyses of these samples were not performed.
The results from the medium level analyses of samples -51 and -59 for Bromoform, 1,2-Dibromo-3-chloropropane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene were reported. Therefore, the RL for these compounds was raised by a factor of 50.

Benzene, Ethyl Benzene and o-Xylene were J-coded in sample -24; and Benzene, Isopropylbenzene and o-Xylene were J-coded in sample -59(these compounds were diluted below the RLs in the medium level analysis of this sample; therefore, the results from the low level analysis were reported). Although the analytes in question have been positively identified in the sample, the quantitation is an estimate (J-coded) due to the reported values exceeding the calibrated range of the instrument.

Sample -45 was analyzed 5 days past its 14 day holding time. Acetone, Carbon Disulfide and Toluene were reported with a J-code indicating that they are estimated values. The actual concentration of some or all analytes may have been higher than the reported result. The results for analytes that were not found at or above the reporting limits were R-coded in sample -45 to indicate that was not possible to obtain valid results for these compounds.

Bromomethane was UJ-coded in samples -24, -28, -30, -35, -37, -41 to -50, -53 to -56, -58 and -60; and Chloromethane was UJ-coded in samples -17, -18, -21, -22 and -27. These analytes were not found in the samples at or above the reporting limit; however, the reporting limits are an estimate (UJ-coded) due to the initial instrument calibration curves not meeting linearity specifications. The actual reporting limits may be higher than the

Analysis **Comments About Results For This Analysis**

reported values.
Bromoform was subsequently R-coded in samples -45 (due to holding times) and -54 (due to internal standard outliers).

1,1-Dichloroethene, cis-1,2-Dichloroethene and trans-1,2-Dichloroethene were UJ-coded in samples -35 and -37. Carbon Tetrachloride, 1,2-Dibromoethane, 1,2-Dichloroethane, Methyl Acetate, Methylene Chloride, Methyl tert-butyl ether, 1,1,1-Trichloroethane, Trichlorofluoromethane and 1,1,2-Trichlorotrifluoroethane were UJ-coded in samples -20, -35, -42 and -58. Chlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene were UJ-coded in samples -35, -42 and -50. These analytes were not found in the samples at or above the reporting limits; however, the reporting limits are an estimate (UJ-coded) due to low recoveries of the surrogate analytes. The actual reporting limits for these analytes may be higher than the reported values.

Cyclohexane in sample -51 and Methylcyclohexane in sample -59 were J-coded. Although the analytes in question have been positively identified in the samples, the quantitation is an estimate (J-coded) due to high recovery of a surrogate analyte in these samples. The actual concentration for these analytes may be lower than the reported value.

An internal standard in sample -54 had unacceptable response indicating that is was not possible to obtain valid results for Bromoform, 1,2-Dibromo-3-chloropropane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene. Results of 'N/A' were reported with R-codes for these analytes.

1 Volatile TPH in Soil by GC/MS

Lab: RASP Contract Lab (Out-Source)

Method: Similar to Volatile TPH by GC/MS (see comments)

Basis: Dry

Samples:

1-__	2-__	3-__	4-__	5-__	6-__	7-__
8-__	9-__	10-__	11-__	12-__	13-__	14-__
15-__	16-__	17-__	18-__	19-__	20-__	21-__
22-__	23-__	24-__	25-__	26-__	27-__	28-__
29-__	30-__	31-__	32-__	33-__	34-__	35-__
36-__	37-__	38-__	39-__	40-__	41-__	42-__
43-__	44-__	45-__	46-__	47-__	48-__	49-__
50-__	51-__	52-__	53-__	54-__	55-__	56-__
57-__	58-__	59-__	60-__			

Comments:
TPH GRO was UJ-coded in sample 7007-20. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate. The actual reporting limit for this analyte may be higher than the reported value.

Analysis **Comments About Results For This Analysis**

1 Cyanide, Total in Water

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Samples:

101-__	102-__	103-__	104-__	105-__	106-__	107-__
108-__	109-__	110-__	111-__	112-__	113-__	114-__
115-__	116-__	117-__	118-__	119-__	120-__	121-__
122-__	123-__	124-__	125-__	126-__	127-__	128-__
129-__	130-__	131-__	132-__	133-__	134-__	135-__
136-__	137-__	138-__	139-__	140-FB		

Comments:

1 Metals in Water by ICP-AES

Lab: Region 7 EPA Laboratory - Kansas City, Ks.

Method: EPA Region 7 RLAB Method 3122.3F

Samples:

101-__	102-__	103-__	104-__	105-__	106-__	107-__
108-__	109-__	110-__	111-__	112-__	113-__	114-__
115-__	116-__	117-__	118-__	119-__	120-__	121-__
122-__	123-__	124-__	125-__	126-__	127-__	128-__
129-__	130-__	131-__	132-__	133-__	134-__	135-__
136-__	137-__	138-__	139-__	140-FB		

Comments:

Vanadium was J-coded in samples 117, 118, 119 and 120. Although the analyte in question has been positively identified in the samples, the quantitation is an estimate (J-coded) due to high recovery of this analyte in the laboratory control sample analyzed with these samples. The actual concentration for this analyte may be lower than the reported value.

Nickel, Potassium and Titanium were J-coded in sample 121. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual concentration for this analyte may be higher than the reported value.

Antimony and Molybdenum were UJ-coded in sample 121. This analyte was not found in the sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to low recovery of this analyte in the laboratory matrix spike. The actual reporting limit for this analyte may be higher than the reported value.

Beryllium, Cadmium, Cobalt, Lead, Nickel and Titanium were J-coded in sample 121. Although the analyte in question has been positively identified in the sample, the quantitation is an estimate (J-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate.

Antimony and Thallium were UJ-coded in sample 121. This analyte was not found in the

Analysis **Comments About Results For This Analysis**

sample at or above the reporting limit, however, the reporting limit is an estimate (UJ-coded) due to poor precision obtained for this analyte in the laboratory matrix spike and matrix spike duplicate. The actual reporting limit for this analyte may be higher than the reported value.

1 Semi-Volatile Organic Compounds in Water

Lab: Contract Lab Program (Out-Source)

Method: CLP Statement of Work

Samples:

101-__	102-__	103-__	104-__	105-__	106-__	107-__
108-__	109-__	110-__	111-__	112-__	113-__	114-__
115-__	116-__	117-__	118-__	120-__	121-__	122-__
124-__	125-__	126-__	127-__	128-__	129-__	130-__
131-__	132-__	133-__	134-__	135-__	136-__	137-__
138-__	139-__	140-FB				

Comments:
Acenaphthene in the 1:100 dilution of sample -126 (500 µg/L U reported); Fluorene and Phenanthrene in the 1:30 dilution of sample -134 (150 µg/L U reported for both); and 2-Methylnaphthalene in the 1:50 dilution of sample -139 (250 µg/L reported) were diluted below detection limits. Therefore, the results were reported from the undiluted analyses (Acenaphthene = 160 µg/L for sample -126; Fluorene and Phenanthrene = 94 µg/L and 97 µg/L respectively for sample -131; and 2-Methylnaphthalene = 110 µg/L for sample -139) were J-coded. Although the analytes in question has been positively identified in the samples, the quantitation is an estimate (J-coded) due to the reported values exceeding the calibrated range of the instrument.

4-Chloroanaline, 3,3'-Dichlorobenzidine and Hexachlorocyclopentadiene were UJ-coded in samples -131, -132, -134, -136, -137, -139 and -140FB. Isophorone and 2-Nitrophenol were UJ-coded in samples -132 and -134. These analytes were not found in the samples at or above the reporting limits; however, the reporting limits are an estimate (UJ-coded) due to low recoveries of the surrogate analytes. The actual reporting limits for these analytes may be higher than the reported values.

1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID

Lab: RASP Contract Lab (Out-Source)

Method: Similar to Modified version of SW846 Method 8015 (see comments)

Samples:

101-__	102-__	103-__	104-__	105-__	106-__	107-__
108-__	109-__	110-__	111-__	112-__	113-__	114-__
115-__	116-__	117-__	118-__	119-__	120-__	121-__
122-__	123-__	124-__	125-__	126-__	127-__	128-__
129-__	130-__	131-__	132-__	133-__	134-__	135-__
136-__	137-__	138-__	139-__	140-FB		

Comments:

Analysis **Comments About Results For This Analysis**

1 VOCs in Water by GC/MS

Lab: Region 7 ESAT Contract Lab (In-House)

Method: EPA Region 7 RLAB Method 3230.1G

Samples:

101-__	103-__	104-__	105-__	106-__	107-__	108-__
109-__	110-__	111-__	112-__	113-__	114-__	115-__
116-__	117-__	118-__	119-__	120-__	121-__	122-__
123-__	124-__	125-__	126-__	127-__	128-__	129-__
130-__	131-__	132-__	133-__	134-__	135-__	136-__
137-__	138-__	139-__	140-FB	141-FB		

Comments:

Toluene was J-coded in sample 7007-112 (undiluted results - 1:50 dilution was below calibration curve) and Naphthalene was J-coded in sample 7007-139 (1:10 dilution - not enough sample to perform another dilution). Although the analytes in question have been positively identified in the samples, the quantitation is an estimate (J-coded) due to the reported values exceeding the calibrated range of the instrument.

The % Difference exceeded the ±20% limits for Acetone (-88.4%) and for 2-Butanone (-75.2%).
Acetone was biased high and was J-coded in samples 7007-132 and 7007-139. 2-Butanone was biased high and was J-coded in sample 7007-139. Although the analytes in question have been positively identified in the samples, the quantitation is an estimate (J-coded) due to the continuing calibration check not meeting accuracy specifications. The actual concentrations may be lower than the reported values.

The % Difference exceeded the ±20% limits for Naphthalene (-20.7%).
Naphthalene was biased high and was J-coded in samples 7007-112, 7007-126, 7007-131, 7007-136, 7007-137 and 7007-139. Although the analyte in question has been positively identified in the samples, the quantitation is an estimate (J-coded) due to the continuing calibration check not meeting accuracy specifications. The actual concentrations may be lower than the reported values.

Acetone (188% vs. 67 %- 132%) was biased high and 2-Butanone (175% vs. 65 %-137%) were biased high. Acetone was J-coded in samples 7007-132 and 7007-139. 2-Butanone was J-coded in sample 7007-139. Although the analytes in question have been positively identified in the samples, the quantitation is an estimate (J-coded) due to high recoveries of these analytes in the laboratory control sample. The actual concentration for these analytes may be lower than the reported values.

Naphthalene (121% vs. 83 %- 119%) was biased high and was J-coded in samples 7007-112, 7007-126, 7007-131, 7007-136, 7007-137 and 7007-139. Although the analyte in question has been positively identified in the samples, the quantitation is an estimate (J-coded) due to high recovery of this analyte in the laboratory control sample. The actual concentration for this analyte may be lower than the reported value.

Bromomethane (12% vs. 0% - 8.0%), 2-Hexanone (6.3% vs. 0% - 6.0%) and Styrene (8.2% vs. 0% - 6.8%) were UJ-coded in sample 7007-130. These analytes were not found

Analysis **Comments About Results For This Analysis**

in the sample at or above the reporting limits; however, the reporting limits are an estimate (UJ-coded) due to poor precision obtained for these analytes in the laboratory matrix spike and matrix spike duplicate. The actual reporting limits for these analytes may be higher than the reported values.

1 Volatile TPH in Water by GC/MS

Lab: RASP Contract Lab (Out-Source)

Method: Similar to Volatile TPH by GC/MS (see comments)

Samples:

101-__	102-__	103-__	104-__	105-__	106-__	108-__
109-__	110-__	111-__	112-__	113-__	114-__	115-__
116-__	117-__	118-__	119-__	120-__	121-__	122-__
123-__	124-__	125-__	126-__	127-__	128-__	129-__
130-__	131-__	132-__	133-__	134-__	135-__	136-__
137-__	138-__	139-__	140-FB	141-FB		

Comments:
The sample containers for this analysis for sample 7007-106 were received broken. The sample was lost and this analysis could not be performed. Results of 'N/A' were reported with an O-code.

Analysis/ Analyte	Units	1-__	2-__	3-__	4-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.64 U	0.62 U	0.72 U	0.75 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	7140	7990	15800	13700
Antimony	mg/kg	2.4 UJ	2.7 U	2.8 U	3.0 U
Arsenic	mg/kg	8.3	8.7	10.9	8.3
Barium	mg/kg	198 J	227	229	219
Beryllium	mg/kg	1.2 U	1.3 U	1.4 U	1.5 U
Cadmium	mg/kg	1.2	1.3 U	1.4 U	1.5 U
Calcium	mg/kg	25600 J	27500	21500	18800
Chromium	mg/kg	9.8	10.4	18.1	17.2
Cobalt	mg/kg	6.6	8.2	10.0	8.2
Copper	mg/kg	20.7	14.7	28.1	23.2
Iron	mg/kg	13300	14700	22400	18400
Lead	mg/kg	76.6	12.2	15.6	16.7
Magnesium	mg/kg	9140	11100	8310	8750
Manganese	mg/kg	616	780	791	592
Molybdenum	mg/kg	2.4 U	2.7 U	2.8 U	3.0 U
Nickel	mg/kg	18.8	19.7	26.8	24.4
Potassium	mg/kg	1350	1370	2990	2420
Selenium	mg/kg	12.1 U	13.3 U	14.0 U	15.2 U
Silver	mg/kg	2.4 U	2.7 U	2.8 U	3.0 U
Sodium	mg/kg	171	582	514	325
Thallium	mg/kg	12.1 U	13.3 U	14.0 U	15.2 U
Vanadium	mg/kg	19.1	23.1	39.1	30.9
Zinc	mg/kg	144	50.7	81.8	75.5
1 Percent Solid					
Solids, percent	%	82.2	73.2	71.0	65.2
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	230 U	210 U	250 U	260 U
Acenaphthylene	ug/kg	230 U	210 U	250 U	260 U
Acetophenone	ug/kg	440 U	410 U	480 U	500 U
Anthracene	ug/kg	230 U	210 U	250 U	260 U
Atrazine	ug/kg	440 U	410 U	480 U	500 U
Benzaldehyde	ug/kg	440 U	410 U	480 U	500 U
Benzo(a)anthracene	ug/kg	250	210 U	250 U	260 U
Benzo(a)pyrene	ug/kg	240	210 U	250 U	260 U
Benzo(b)fluoranthene	ug/kg	300	210 U	250 U	260 U
Benzo(g,h,i)perylene	ug/kg	230 U	210 U	250 U	260 U
Benzo(k)fluoranthene	ug/kg	230 U	210 U	250 U	260 U
Biphenyl	ug/kg	230 U	210 U	250 U	260 U
bis(2-Chloroethoxy)methane	ug/kg	230 U	210 U	250 U	260 U
bis(2-Chloroethyl)ether	ug/kg	440 U	410 U	480 U	500 U
bis(2-Chloroisopropyl)ether	ug/kg	440 U	410 U	480 U	500 U
bis(2-Ethylhexyl)phthalate	ug/kg	230 U	210 U	250 U	260 U
4-Bromophenyl-phenylether	ug/kg	230 U	210 U	250 U	260 U

Analysis/ Analyte	Units	1-__	2-__	3-__	4-__
Butylbenzylphthalate	ug/kg	230 U	210 U	250 U	260 U
Caprolactam	ug/kg	440 U	410 U	480 U	500 U
Carbazole	ug/kg	440 U	410 U	480 U	500 U
4-Chloro-3-methylphenol	ug/kg	230 U	210 U	250 U	260 U
4-Chloroaniline	ug/kg	440 U	410 U	480 U	500 U
2-Chloronaphthalene	ug/kg	230 U	210 U	250 U	260 U
2-Chlorophenol	ug/kg	230 U	210 U	250 U	260 U
4-Chlorophenyl-phenylether	ug/kg	230 U	210 U	250 U	260 U
Chrysene	ug/kg	240	210 U	250 U	260 U
Di-n-butylphthalate	ug/kg	230 U	210 U	250 U	260 U
Di-n-octylphthalate	ug/kg	440 U	410 U	480 U	500 U
Dibenz(a,h)anthracene	ug/kg	230 U	210 U	250 U	260 U
Dibenzofuran	ug/kg	230 U	210 U	250 U	260 U
3,3'-Dichlorobenzidine	ug/kg	440 U	410 U	480 U	500 U
2,4-Dichlorophenol	ug/kg	230 U	210 U	250 U	260 U
Diethylphthalate	ug/kg	230 U	210 U	250 U	260 U
2,4-Dimethylphenol	ug/kg	230 U	210 U	250 U	260 U
Dimethylphthalate	ug/kg	380	520	700	550
4,6-Dinitro-2-methylphenol	ug/kg	440 U	410 U	480 U	500 U
2,4-Dinitrophenol	ug/kg	440 U	410 U	480 U	500 U
2,4-Dinitrotoluene	ug/kg	230 U	210 U	250 U	260 U
2,6-Dinitrotoluene	ug/kg	230 U	210 U	250 U	260 U
Fluoranthene	ug/kg	330	210 U	250 U	260 U
Fluorene	ug/kg	230 U	210 U	250 U	260 U
Hexachlorobenzene	ug/kg	230 U	210 U	250 U	260 U
Hexachlorobutadiene	ug/kg	230 U	210 U	250 U	260 U
Hexachlorocyclopentadiene	ug/kg	440 U	410 U	480 U	500 U
Hexachloroethane	ug/kg	230 U	210 U	250 U	260 U
Indeno(1,2,3-cd)pyrene	ug/kg	230 U	210 U	250 U	260 U
Isophorone	ug/kg	230 U	210 U	250 U	260 U
2-Methylnaphthalene	ug/kg	230 U	210 U	250 U	260 U
2-Methylphenol	ug/kg	440 U	410 U	480 U	500 U
4-Methylphenol	ug/kg	440 U	410 U	480 U	500 U
Naphthalene	ug/kg	230 U	210 U	250 U	260 U
2-Nitroaniline	ug/kg	230 U	210 U	250 U	260 U
3-Nitroaniline	ug/kg	440 U	410 U	480 U	500 U
4-Nitroaniline	ug/kg	440 U	410 U	480 U	500 U
Nitrobenzene	ug/kg	230 U	210 U	250 U	260 U
2-Nitrophenol	ug/kg	230 U	210 U	250 U	260 U
4-Nitrophenol	ug/kg	440 U	410 U	480 U	500 U
N-nitroso-di-n-propylamine	ug/kg	230 U	210 U	250 U	260 U
N-nitrosodiphenylamine	ug/kg	230 U	210 U	250 U	260 U
Pentachlorophenol	ug/kg	440 U	410 U	480 U	500 U
Phenanthrene	ug/kg	230 U	210 U	250 U	260 U
Phenol	ug/kg	440 U	410 U	480 U	500 U

Analysis/ Analyte	Units	1-__	2-__	3-__	4-__
Pyrene	ug/kg	310	210 U	250 U	260 U
1,2,4,5-Tetrachlorobenzene	ug/kg	230 U	210 U	250 U	260 U
2,4,5-Trichlorophenol	ug/kg	230 U	210 U	250 U	260 U
2,4,6-Trichlorophenol	ug/kg	230 U	210 U	250 U	260 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	10.2 U	11.3 U	11.9 U	12.5 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	28	22 U	16 U	16 U
Benzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Bromochloromethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Bromodichloromethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Bromoform	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Bromomethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
2-Butanone	ug/kg	13 U	22 U	16 U	16 U
Carbon Disulfide	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Carbon Tetrachloride	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Chlorobenzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Chloroethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Chloroform	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Chloromethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Cyclohexane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,2-Dibromo-3-Chloropropane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Dibromochloromethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,2-Dibromoethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,2-Dichlorobenzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,3-Dichlorobenzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,4-Dichlorobenzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Dichlorodifluoromethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,1-Dichloroethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,2-Dichloroethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,1-Dichloroethene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
cis-1,2-Dichloroethene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
trans-1,2-Dichloroethene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,2-Dichloropropane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
cis-1,3-Dichloropropene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
trans-1,3-Dichloropropene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Ethyl Benzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
2-Hexanone	ug/kg	13 U	22 U	16 U	16 U
Isopropylbenzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Methyl Acetate	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Methyl tert-butyl ether	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Methylcyclohexane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Methylene Chloride	ug/kg	6.5 U	11 U	8.2 U	8.2 U
4-Methyl-2-Pentanone	ug/kg	13 U	22 U	16 U	16 U
Styrene	ug/kg	6.5 U	11 U	8.2 U	8.2 U

Analysis/ Analyte	Units	1-__	2-__	3-__	4-__
1,1,2,2-Tetrachloroethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Tetrachloroethene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Toluene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,2,3-Trichlorobenzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,2,4-Trichlorobenzene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,1,1-Trichloroethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,1,2-Trichloroethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Trichloroethene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Trichlorofluoromethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1,1,2-Trichlorotrifluoroethane	ug/kg	6.5 U	11 U	8.2 U	8.2 U
Vinyl Chloride	ug/kg	6.5 U	11 U	8.2 U	8.2 U
m and/or p-Xylene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
o-Xylene	ug/kg	6.5 U	11 U	8.2 U	8.2 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.43 U	5.87 U	2.98 U	3.49 U

Analysis/ Analyte	Units	5-__	6-__	7-__	8-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.60 U	0.65 U	0.69 U	0.68 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	8340	8710	11200	15300
Antimony	mg/kg	2.5 U	2.6 U	2.6 U	2.8 U
Arsenic	mg/kg	6.4	7.9	7.2	8.7
Barium	mg/kg	160	197	186	162
Beryllium	mg/kg	1.3 U	1.3 U	1.3 U	1.4 U
Cadmium	mg/kg	1.3 U	1.3 U	1.3 U	1.4 U
Calcium	mg/kg	24600	22500	8880	17600
Chromium	mg/kg	10.0	12.3	13.1	19.5
Cobalt	mg/kg	5.8	6.9	5.6	9.0
Copper	mg/kg	14.2	15.1	19.2	25.3
Iron	mg/kg	12600	16000	15500	20500
Lead	mg/kg	53.8	12.1	15.2	14.4
Magnesium	mg/kg	8240	8700	4740	8380
Manganese	mg/kg	506	478	255	831
Molybdenum	mg/kg	2.5 U	2.6 U	2.6 U	2.8 U
Nickel	mg/kg	16.1	20.0	16.9	28.7
Potassium	mg/kg	1360	1740	2260	2370
Selenium	mg/kg	12.5 U	13.1 U	13.0 U	14.2 U
Silver	mg/kg	2.5 U	2.6 U	2.6 U	2.8 U
Sodium	mg/kg	330	316	193	238
Thallium	mg/kg	12.5 U	13.1 U	13.0 U	14.2 U
Vanadium	mg/kg	21.5	24.1	25.9	30.5
Zinc	mg/kg	56.6	55.2	72.7	81.9
1 Percent Solid					
Solids, percent	%	79.0	74.5	76.4	69.8
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	210 U	230 U	240 U	240 U
Acenaphthylene	ug/kg	210 U	230 U	240 U	240 U
Acetophenone	ug/kg	410 U	440 U	470 U	470 U
Anthracene	ug/kg	210 U	230 U	240 U	240 U
Atrazine	ug/kg	410 U	440 U	470 U	470 U
Benzaldehyde	ug/kg	410 U	440 U	470 U	470 U
Benzo(a)anthracene	ug/kg	210 U	230 U	240 U	240 U
Benzo(a)pyrene	ug/kg	210 U	230 U	320	240 U
Benzo(b)fluoranthene	ug/kg	210 U	230 U	350	240 U
Benzo(g,h,i)perylene	ug/kg	210 U	230 U	240 U	240 U
Benzo(k)fluoranthene	ug/kg	210 U	230 U	240 U	240 U
Biphenyl	ug/kg	210 U	230 U	240 U	240 U
bis(2-Chloroethoxy)methane	ug/kg	210 U	230 U	240 U	240 U
bis(2-Chloroethyl)ether	ug/kg	410 U	440 U	470 U	470 U
bis(2-Chloroisopropyl)ether	ug/kg	410 U	440 U	470 U	470 U
bis(2-Ethylhexyl)phthalate	ug/kg	210 U	230 U	240 U	240 U
4-Bromophenyl-phenylether	ug/kg	210 U	230 U	240 U	240 U

Analysis/ Analyte	Units	5-__	6-__	7-__	8-__
Butylbenzylphthalate	ug/kg	210 U	230 U	240 U	240 U
Caprolactam	ug/kg	410 U	440 U	470 U	470 U
Carbazole	ug/kg	410 U	440 U	470 U	470 U
4-Chloro-3-methylphenol	ug/kg	210 U	230 U	240 U	240 U
4-Chloroaniline	ug/kg	410 U	440 U	470 U	470 U
2-Chloronaphthalene	ug/kg	210 U	230 U	240 U	240 U
2-Chlorophenol	ug/kg	210 U	230 U	240 U	240 U
4-Chlorophenyl-phenylether	ug/kg	210 U	230 U	240 U	240 U
Chrysene	ug/kg	210 U	230 U	240 U	240 U
Di-n-butylphthalate	ug/kg	210 U	230 U	240 U	240 U
Di-n-octylphthalate	ug/kg	410 U	440 U	470 U	470 U
Dibenz(a,h)anthracene	ug/kg	210 U	230 U	240 U	240 U
Dibenzofuran	ug/kg	210 U	230 U	240 U	240 U
3,3'-Dichlorobenzidine	ug/kg	410 U	440 U	470 U	470 U
2,4-Dichlorophenol	ug/kg	210 U	230 U	240 U	240 U
Diethylphthalate	ug/kg	210 U	230 U	240 U	240 U
2,4-Dimethylphenol	ug/kg	210 U	230 U	240 U	240 U
Dimethylphthalate	ug/kg	550	710	380	660
4,6-Dinitro-2-methylphenol	ug/kg	410 U	440 U	470 U	470 U
2,4-Dinitrophenol	ug/kg	410 U	440 U	470 U	470 U
2,4-Dinitrotoluene	ug/kg	210 U	230 U	240 U	240 U
2,6-Dinitrotoluene	ug/kg	210 U	230 U	240 U	240 U
Fluoranthene	ug/kg	210 U	230 U	240 U	240 U
Fluorene	ug/kg	210 U	230 U	240 U	240 U
Hexachlorobenzene	ug/kg	210 U	230 U	240 U	240 U
Hexachlorobutadiene	ug/kg	210 U	230 U	240 U	240 U
Hexachlorocyclopentadiene	ug/kg	410 U	440 U	470 U	470 U
Hexachloroethane	ug/kg	210 U	230 U	240 U	240 U
Indeno(1,2,3-cd)pyrene	ug/kg	210 U	230 U	240 U	240 U
Isophorone	ug/kg	210 U	230 U	240 U	240 U
2-Methylnaphthalene	ug/kg	210 U	230 U	240 U	240 U
2-Methylphenol	ug/kg	410 U	440 U	470 U	470 U
4-Methylphenol	ug/kg	410 U	440 U	470 U	470 U
Naphthalene	ug/kg	210 U	230 U	240 U	240 U
2-Nitroaniline	ug/kg	210 U	230 U	240 U	240 U
3-Nitroaniline	ug/kg	410 U	440 U	470 U	470 U
4-Nitroaniline	ug/kg	410 U	440 U	470 U	470 U
Nitrobenzene	ug/kg	210 U	230 U	240 U	240 U
2-Nitrophenol	ug/kg	210 U	230 U	240 U	240 U
4-Nitrophenol	ug/kg	410 U	440 U	470 U	470 U
N-nitroso-di-n-propylamine	ug/kg	210 U	230 U	240 U	240 U
N-nitrosodiphenylamine	ug/kg	210 U	230 U	240 U	240 U
Pentachlorophenol	ug/kg	410 U	440 U	470 U	470 U
Phenanthrene	ug/kg	210 U	230 U	240 U	240 U
Phenol	ug/kg	410 U	440 U	470 U	470 U

Analysis/ Analyte	Units	5-__	6-__	7-__	8-__
Pyrene	ug/kg	210 U	230 U	240 U	240 U
1,2,4,5-Tetrachlorobenzene	ug/kg	210 U	230 U	240 U	240 U
2,4,5-Trichlorophenol	ug/kg	210 U	230 U	240 U	240 U
2,4,6-Trichlorophenol	ug/kg	210 U	230 U	240 U	240 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	10.4 U	11.9 U	31.9 J	11.6 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	35	14 U	18	14 U
Benzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Bromochloromethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Bromodichloromethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Bromoform	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Bromomethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
2-Butanone	ug/kg	11 U	14 U	10 U	14 U
Carbon Disulfide	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Carbon Tetrachloride	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Chlorobenzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Chloroethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Chloroform	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Chloromethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Cyclohexane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,2-Dibromo-3-Chloropropane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Dibromochloromethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,2-Dibromoethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,2-Dichlorobenzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,3-Dichlorobenzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,4-Dichlorobenzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Dichlorodifluoromethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,1-Dichloroethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,2-Dichloroethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,1-Dichloroethene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
cis-1,2-Dichloroethene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
trans-1,2-Dichloroethene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,2-Dichloropropane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
cis-1,3-Dichloropropene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
trans-1,3-Dichloropropene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Ethyl Benzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
2-Hexanone	ug/kg	11 U	14 U	10 U	14 U
Isopropylbenzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Methyl Acetate	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Methyl tert-butyl ether	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Methylcyclohexane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Methylene Chloride	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
4-Methyl-2-Pentanone	ug/kg	11 U	14 U	10 U	14 U
Styrene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U

Analysis/ Analyte	Units	5-__	6-__	7-__	8-__
1,1,2,2-Tetrachloroethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Tetrachloroethene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Toluene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,2,3-Trichlorobenzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,2,4-Trichlorobenzene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,1,1-Trichloroethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,1,2-Trichloroethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Trichloroethene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Trichlorofluoromethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1,1,2-Trichlorotrifluoroethane	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
Vinyl Chloride	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
m and/or p-Xylene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
o-Xylene	ug/kg	5.6 U	6.8 U	5.1 U	7.1 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.42 U	3.76 U	2.82 U	2.74 U

Analysis/ Analyte	Units	9-__	10-__	11-__	12-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.69 U	0.67 U	0.59 U	0.66 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	8730	8260	6960	6960
Antimony	mg/kg	2.7 U	2.7 U	2.5 U	2.5 U
Arsenic	mg/kg	8.7	7.4	6.2 U	6.3 U
Barium	mg/kg	219	220	137	117
Beryllium	mg/kg	1.4 U	1.3 U	1.2 U	1.3 U
Cadmium	mg/kg	1.4 U	1.3 U	1.2 U	1.3 U
Calcium	mg/kg	20400	23700	18100	8530
Chromium	mg/kg	12.4	10.2	9.4	9.6
Cobalt	mg/kg	6.9	6.7	5.2	4.4
Copper	mg/kg	17.7	14.6	11.7	9.0
Iron	mg/kg	17300	15000	10900	11200
Lead	mg/kg	9.4	9.2	9.8	7.6
Magnesium	mg/kg	8730	10200	6200	5760
Manganese	mg/kg	571	647	413	419
Molybdenum	mg/kg	2.7 U	2.7 U	2.5 U	2.5 U
Nickel	mg/kg	24.7	21.1	15.7	16.8
Potassium	mg/kg	1560	1600	1170	1140
Selenium	mg/kg	13.6 U	13.4 U	12.3 U	12.6 U
Silver	mg/kg	2.7 U	2.7 U	2.5 U	2.5 U
Sodium	mg/kg	297	162	136	152
Thallium	mg/kg	13.6 U	13.4 U	12.3 U	12.6 U
Vanadium	mg/kg	24.1	23.4	18.5	17.7
Zinc	mg/kg	56.7	47.7	41.6	39.4
1 Percent Solid					
Solids, percent	%	71.6	74.5	80.2	78.7
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	230 U	230 U	210 U	230 U
Acenaphthylene	ug/kg	230 U	230 U	210 U	230 U
Acetophenone	ug/kg	450 U	450 U	410 U	450 U
Anthracene	ug/kg	230 U	230 U	210 U	230 U
Atrazine	ug/kg	450 U	450 U	410 U	450 U
Benzaldehyde	ug/kg	450 U	450 U	410 U	450 U
Benzo(a)anthracene	ug/kg	230 U	230 U	210 U	230 U
Benzo(a)pyrene	ug/kg	230 U	230 U	210 U	230 U
Benzo(b)fluoranthene	ug/kg	230 U	230 U	210 U	230 U
Benzo(g,h,i)perylene	ug/kg	230 U	230 U	210 U	230 U
Benzo(k)fluoranthene	ug/kg	230 U	230 U	210 U	230 U
Biphenyl	ug/kg	230 U	230 U	210 U	230 U
bis(2-Chloroethoxy)methane	ug/kg	230 U	230 U	210 U	230 U
bis(2-Chloroethyl)ether	ug/kg	450 U	450 U	410 U	450 U
bis(2-Chloroisopropyl)ether	ug/kg	450 U	450 U	410 U	450 U
bis(2-Ethylhexyl)phthalate	ug/kg	230 U	230 U	210 U	230 U
4-Bromophenyl-phenylether	ug/kg	230 U	230 U	210 U	230 U

Analysis/ Analyte	Units	9-__	10-__	11-__	12-__
Butylbenzylphthalate	ug/kg	230 U	230 U	210 U	230 U
Caprolactam	ug/kg	450 U	450 U	410 U	450 U
Carbazole	ug/kg	450 U	450 U	410 U	450 U
4-Chloro-3-methylphenol	ug/kg	230 U	230 U	210 U	230 U
4-Chloroaniline	ug/kg	450 U	450 U	410 U	450 U
2-Chloronaphthalene	ug/kg	230 U	230 U	210 U	230 U
2-Chlorophenol	ug/kg	230 U	230 U	210 U	230 U
4-Chlorophenyl-phenylether	ug/kg	230 U	230 U	210 U	230 U
Chrysene	ug/kg	230 U	230 U	210 U	230 U
Di-n-butylphthalate	ug/kg	230 U	230 U	210 U	230 U
Di-n-octylphthalate	ug/kg	450 U	450 U	410 U	450 U
Dibenz(a,h)anthracene	ug/kg	230 U	230 U	210 U	230 U
Dibenzofuran	ug/kg	230 U	230 U	210 U	230 U
3,3'-Dichlorobenzidine	ug/kg	450 U	450 U	410 U	450 U
2,4-Dichlorophenol	ug/kg	230 U	230 U	210 U	230 U
Diethylphthalate	ug/kg	230 U	230 U	210 U	230 U
2,4-Dimethylphenol	ug/kg	230 U	230 U	210 U	230 U
Dimethylphthalate	ug/kg	720	700	670	760
4,6-Dinitro-2-methylphenol	ug/kg	450 U	450 U	410 U	450 U
2,4-Dinitrophenol	ug/kg	450 U	450 U	410 U	450 U
2,4-Dinitrotoluene	ug/kg	230 U	230 U	210 U	230 U
2,6-Dinitrotoluene	ug/kg	230 U	230 U	210 U	230 U
Fluoranthene	ug/kg	230 U	230 U	210 U	230 U
Fluorene	ug/kg	230 U	230 U	210 U	230 U
Hexachlorobenzene	ug/kg	230 U	230 U	210 U	230 U
Hexachlorobutadiene	ug/kg	230 U	230 U	210 U	230 U
Hexachlorocyclopentadiene	ug/kg	450 U	450 U	410 U	450 U
Hexachloroethane	ug/kg	230 U	230 U	210 U	230 U
Indeno(1,2,3-cd)pyrene	ug/kg	230 U	230 U	210 U	230 U
Isophorone	ug/kg	230 U	230 U	210 U	230 U
2-Methylnaphthalene	ug/kg	230 U	230 U	210 U	230 U
2-Methylphenol	ug/kg	450 U	450 U	410 U	450 U
4-Methylphenol	ug/kg	450 U	450 U	410 U	450 U
Naphthalene	ug/kg	230 U	230 U	210 U	230 U
2-Nitroaniline	ug/kg	230 U	230 U	210 U	230 U
3-Nitroaniline	ug/kg	450 U	450 U	410 U	450 U
4-Nitroaniline	ug/kg	450 U	450 U	410 U	450 U
Nitrobenzene	ug/kg	230 U	230 U	210 U	230 U
2-Nitrophenol	ug/kg	230 U	230 U	210 U	230 U
4-Nitrophenol	ug/kg	450 U	450 U	410 U	450 U
N-nitroso-di-n-propylamine	ug/kg	230 U	230 U	210 U	230 U
N-nitrosodiphenylamine	ug/kg	230 U	230 U	210 U	230 U
Pentachlorophenol	ug/kg	450 U	450 U	410 U	450 U
Phenanthrene	ug/kg	230 U	230 U	210 U	230 U
Phenol	ug/kg	450 U	450 U	410 U	450 U

Analysis/ Analyte	Units	9-__	10-__	11-__	12-__
Pyrene	ug/kg	230 U	230 U	210 U	230 U
1,2,4,5-Tetrachlorobenzene	ug/kg	230 U	230 U	210 U	230 U
2,4,5-Trichlorophenol	ug/kg	230 U	230 U	210 U	230 U
2,4,6-Trichlorophenol	ug/kg	230 U	230 U	210 U	230 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	11.6 U	11.8 U	9.62 U	10.1 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	16 U	34	25	20 U
Benzene	ug/kg	8.0 U	5.1 U	10 U	10 U
Bromochloromethane	ug/kg	8.0 U	5.1 U	10 U	10 U
Bromodichloromethane	ug/kg	8.0 U	5.1 U	10 U	10 U
Bromoform	ug/kg	8.0 U	5.1 U	10 U	10 U
Bromomethane	ug/kg	8.0 U	5.1 U	10 U	10 U
2-Butanone	ug/kg	16 U	10 U	20 U	20 U
Carbon Disulfide	ug/kg	8.0 U	5.1 U	10 U	10 U
Carbon Tetrachloride	ug/kg	8.0 U	5.1 U	10 U	10 U
Chlorobenzene	ug/kg	8.0 U	5.1 U	10 U	10 U
Chloroethane	ug/kg	8.0 U	5.1 U	10 U	10 U
Chloroform	ug/kg	8.0 U	5.1 U	10 U	10 U
Chloromethane	ug/kg	8.0 U	5.1 U	10 U	10 U
Cyclohexane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,2-Dibromo-3-Chloropropane	ug/kg	8.0 U	5.1 U	10 U	10 U
Dibromochloromethane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,2-Dibromoethane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,2-Dichlorobenzene	ug/kg	8.0 U	5.1 U	10 U	10 U
1,3-Dichlorobenzene	ug/kg	8.0 U	5.1 U	10 U	10 U
1,4-Dichlorobenzene	ug/kg	8.0 U	5.1 U	10 U	10 U
Dichlorodifluoromethane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,1-Dichloroethane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,2-Dichloroethane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,1-Dichloroethene	ug/kg	8.0 U	5.1 U	10 U	10 U
cis-1,2-Dichloroethene	ug/kg	8.0 U	5.1 U	10 U	10 U
trans-1,2-Dichloroethene	ug/kg	8.0 U	5.1 U	10 U	10 U
1,2-Dichloropropane	ug/kg	8.0 U	5.1 U	10 U	10 U
cis-1,3-Dichloropropene	ug/kg	8.0 U	5.1 U	10 U	10 U
trans-1,3-Dichloropropene	ug/kg	8.0 U	5.1 U	10 U	10 U
Ethyl Benzene	ug/kg	8.0 U	5.1 U	10 U	10 U
2-Hexanone	ug/kg	16 U	10 U	20 U	20 U
Isopropylbenzene	ug/kg	8.0 U	5.1 U	10 U	10 U
Methyl Acetate	ug/kg	8.0 U	5.1 U	10 U	10 U
Methyl tert-butyl ether	ug/kg	8.0 U	5.1 U	10 U	10 U
Methylcyclohexane	ug/kg	8.0 U	5.1 U	10 U	10 U
Methylene Chloride	ug/kg	8.0 U	5.1 U	10 U	10 U
4-Methyl-2-Pentanone	ug/kg	16 U	10 U	20 U	20 U
Styrene	ug/kg	8.0 U	5.1 U	10 U	10 U

Analysis/ Analyte	Units	9-__	10-__	11-__	12-__
1,1,2,2-Tetrachloroethane	ug/kg	8.0 U	5.1 U	10 U	10 U
Tetrachloroethene	ug/kg	8.0 U	5.1 U	10 U	10 U
Toluene	ug/kg	8.0 U	5.1 U	10 U	10 U
1,2,3-Trichlorobenzene	ug/kg	8.0 U	5.1 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/kg	8.0 U	5.1 U	10 U	10 U
1,1,1-Trichloroethane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,1,2-Trichloroethane	ug/kg	8.0 U	5.1 U	10 U	10 U
Trichloroethene	ug/kg	8.0 U	5.1 U	10 U	10 U
Trichlorofluoromethane	ug/kg	8.0 U	5.1 U	10 U	10 U
1,1,2-Trichlorotrifluoroethane	ug/kg	8.0 U	5.1 U	10 U	10 U
Vinyl Chloride	ug/kg	8.0 U	5.1 U	10 U	10 U
m and/or p-Xylene	ug/kg	8.0 U	5.1 U	10 U	10 U
o-Xylene	ug/kg	8.0 U	5.1 U	10 U	10 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	3.29 U	3.15 U	3.07 U	3.12 U

Analysis/ Analyte	Units	13-__	14-__	15-__	16-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.65 U	0.66 U	0.65 U	0.63 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	10900	11700	10100	6490
Antimony	mg/kg	2.6 U	2.5 U	2.6 U	2.6 U
Arsenic	mg/kg	7.5	9.1	6.5 U	7.0
Barium	mg/kg	180	208	170	182
Beryllium	mg/kg	1.3 U	1.3 U	1.3 U	1.3 U
Cadmium	mg/kg	1.3 U	1.3 U	1.3 U	1.3 U
Calcium	mg/kg	5490	4720	6220	28300
Chromium	mg/kg	14.7	14.0	13.1	8.3
Cobalt	mg/kg	7.7	9.0	7.1	5.5
Copper	mg/kg	17.5	17.8	17.0	10.0
Iron	mg/kg	16800	18500	16600	11000
Lead	mg/kg	15.2	12.8	11.7	8.5
Magnesium	mg/kg	4360	4890	4450	6240
Manganese	mg/kg	530	826	662	618
Molybdenum	mg/kg	2.6 U	2.5 U	2.6 U	2.6 U
Nickel	mg/kg	25.2	23.6	22.6	17.7
Potassium	mg/kg	1560	1770	1690	1040
Selenium	mg/kg	13.0 U	12.7 U	13.0 U	12.8 U
Silver	mg/kg	2.6 U	2.5 U	2.6 U	2.6 U
Sodium	mg/kg	114	110	256	293
Thallium	mg/kg	13.0 U	12.7 U	13.0 U	12.8 U
Vanadium	mg/kg	27.3	28.0	25.7	17.8
Zinc	mg/kg	63.0	57.6	58.8	37.9
1 Percent Solid					
Solids, percent	%	76.7	76.9	76.9	74.3
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	230 U	230 U	220 U	220 U
Acenaphthylene	ug/kg	230 U	230 U	220 U	220 U
Acetophenone	ug/kg	450 U	440 U	430 U	430 U
Anthracene	ug/kg	230 U	230 U	220 U	220 U
Atrazine	ug/kg	450 U	440 U	430 U	430 U
Benzaldehyde	ug/kg	450 U	440 U	430 U	430 U
Benzo(a)anthracene	ug/kg	230 U	230 U	220 U	220 U
Benzo(a)pyrene	ug/kg	230 U	230 U	220 U	220 U
Benzo(b)fluoranthene	ug/kg	230 U	230 U	220 U	220 U
Benzo(g,h,i)perylene	ug/kg	230 U	230 U	220 U	220 U
Benzo(k)fluoranthene	ug/kg	230 U	230 U	220 U	220 U
Biphenyl	ug/kg	230 U	230 U	220 U	220 U
bis(2-Chloroethoxy)methane	ug/kg	230 U	230 U	220 U	220 U
bis(2-Chloroethyl)ether	ug/kg	450 U	440 U	430 U	430 U
bis(2-Chloroisopropyl)ether	ug/kg	450 U	440 U	430 U	430 U
bis(2-Ethylhexyl)phthalate	ug/kg	230 U	230 U	220 U	220 U
4-Bromophenyl-phenylether	ug/kg	230 U	230 U	220 U	220 U

Analysis/ Analyte	Units	13-__	14-__	15-__	16-__
Butylbenzylphthalate	ug/kg	230 U	230 U	220 U	220 U
Caprolactam	ug/kg	450 U	440 U	430 U	430 U
Carbazole	ug/kg	450 U	440 U	430 U	430 U
4-Chloro-3-methylphenol	ug/kg	230 U	230 U	220 U	220 U
4-Chloroaniline	ug/kg	450 U	440 U	430 U	430 U
2-Chloronaphthalene	ug/kg	230 U	230 U	220 U	220 U
2-Chlorophenol	ug/kg	230 U	230 U	220 U	220 U
4-Chlorophenyl-phenylether	ug/kg	230 U	230 U	220 U	220 U
Chrysene	ug/kg	230 U	230 U	220 U	220 U
Di-n-butylphthalate	ug/kg	230 U	230 U	220 U	220 U
Di-n-octylphthalate	ug/kg	450 U	440 U	430 U	430 U
Dibenz(a,h)anthracene	ug/kg	230 U	230 U	220 U	220 U
Dibenzofuran	ug/kg	230 U	230 U	220 U	220 U
3,3'-Dichlorobenzidine	ug/kg	450 U	440 U	430 U	430 U
2,4-Dichlorophenol	ug/kg	230 U	230 U	220 U	220 U
Diethylphthalate	ug/kg	230 U	230 U	220 U	220 U
2,4-Dimethylphenol	ug/kg	230 U	230 U	220 U	220 U
Dimethylphthalate	ug/kg	900	890	480	730
4,6-Dinitro-2-methylphenol	ug/kg	450 U	440 U	430 U	430 U
2,4-Dinitrophenol	ug/kg	450 U	440 U	430 U	430 U
2,4-Dinitrotoluene	ug/kg	230 U	230 U	220 U	220 U
2,6-Dinitrotoluene	ug/kg	230 U	230 U	220 U	220 U
Fluoranthene	ug/kg	230 U	230 U	220 U	220 U
Fluorene	ug/kg	230 U	230 U	220 U	220 U
Hexachlorobenzene	ug/kg	230 U	230 U	220 U	220 U
Hexachlorobutadiene	ug/kg	230 U	230 U	220 U	220 U
Hexachlorocyclopentadiene	ug/kg	450 U	440 U	430 U	430 U
Hexachloroethane	ug/kg	230 U	230 U	220 U	220 U
Indeno(1,2,3-cd)pyrene	ug/kg	230 U	230 U	220 U	220 U
Isophorone	ug/kg	230 U	230 U	220 U	220 U
2-Methylnaphthalene	ug/kg	230 U	230 U	220 U	220 U
2-Methylphenol	ug/kg	450 U	440 U	430 U	430 U
4-Methylphenol	ug/kg	450 U	440 U	430 U	430 U
Naphthalene	ug/kg	230 U	230 U	220 U	220 U
2-Nitroaniline	ug/kg	230 U	230 U	220 U	220 U
3-Nitroaniline	ug/kg	450 U	440 U	430 U	430 U
4-Nitroaniline	ug/kg	450 U	440 U	430 U	430 U
Nitrobenzene	ug/kg	230 U	230 U	220 U	220 U
2-Nitrophenol	ug/kg	230 U	230 U	220 U	220 U
4-Nitrophenol	ug/kg	450 U	440 U	430 U	430 U
N-nitroso-di-n-propylamine	ug/kg	230 U	230 U	220 U	220 U
N-nitrosodiphenylamine	ug/kg	230 U	230 U	220 U	220 U
Pentachlorophenol	ug/kg	450 U	440 U	430 U	430 U
Phenanthrene	ug/kg	230 U	230 U	220 U	220 U
Phenol	ug/kg	450 U	440 U	430 U	430 U

Analysis/ Analyte	Units	13-__	14-__	15-__	16-__
Pyrene	ug/kg	230 U	230 U	220 U	220 U
1,2,4,5-Tetrachlorobenzene	ug/kg	230 U	230 U	220 U	220 U
2,4,5-Trichlorophenol	ug/kg	230 U	230 U	220 U	220 U
2,4,6-Trichlorophenol	ug/kg	230 U	230 U	220 U	220 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	11.2 U	11.1 U	10.9 U	11.8 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	14 U	22	35	24 U
Benzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Bromochloromethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Bromodichloromethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Bromoform	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Bromomethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
2-Butanone	ug/kg	14 U	13 U	13 U	24 U
Carbon Disulfide	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Carbon Tetrachloride	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Chlorobenzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Chloroethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Chloroform	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Chloromethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Cyclohexane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,2-Dibromo-3-Chloropropane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Dibromochloromethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,2-Dibromoethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,2-Dichlorobenzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,3-Dichlorobenzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,4-Dichlorobenzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Dichlorodifluoromethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,1-Dichloroethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,2-Dichloroethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,1-Dichloroethene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
cis-1,2-Dichloroethene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
trans-1,2-Dichloroethene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,2-Dichloropropane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
cis-1,3-Dichloropropene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
trans-1,3-Dichloropropene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Ethyl Benzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
2-Hexanone	ug/kg	14 U	13 U	13 U	24 U
Isopropylbenzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Methyl Acetate	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Methyl tert-butyl ether	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Methylcyclohexane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Methylene Chloride	ug/kg	6.9 U	6.4 U	6.6 U	12 U
4-Methyl-2-Pentanone	ug/kg	14 U	13 U	13 U	24 U
Styrene	ug/kg	6.9 U	6.4 U	6.6 U	12 U

Analysis/ Analyte	Units	13-__	14-__	15-__	16-__
1,1,2,2-Tetrachloroethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Tetrachloroethene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Toluene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,2,3-Trichlorobenzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,2,4-Trichlorobenzene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,1,1-Trichloroethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,1,2-Trichloroethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Trichloroethene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Trichlorofluoromethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1,1,2-Trichlorotrifluoroethane	ug/kg	6.9 U	6.4 U	6.6 U	12 U
Vinyl Chloride	ug/kg	6.9 U	6.4 U	6.6 U	12 U
m and/or p-Xylene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
o-Xylene	ug/kg	6.9 U	6.4 U	6.6 U	12 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.65 U	2.68 U	2.54 U	3.61 U

Analysis/ Analyte	Units	17-__	18-__	19-__	20-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.59 U	0.65 U	0.64 U	0.67 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	7840	8570	7090	6850
Antimony	mg/kg	2.5 U	2.7 U	2.5 U	2.6 U
Arsenic	mg/kg	6.3 U	6.7 U	8.6	6.4 U
Barium	mg/kg	114	158	206	192
Beryllium	mg/kg	1.3 U	1.3 U	1.3 U	1.3 U
Cadmium	mg/kg	1.3 U	1.3 U	1.5	1.3 U
Calcium	mg/kg	34200	29500	25400	25000
Chromium	mg/kg	9.8	11.3	9.1	8.7
Cobalt	mg/kg	5.7	6.8	7.1	6.5
Copper	mg/kg	16.6	20.8	21.0	11.4
Iron	mg/kg	13400	13600	14300	11900
Lead	mg/kg	22.8	10.3	66.3	8.5
Magnesium	mg/kg	4520	10100	11000	7930
Manganese	mg/kg	347	625	1000	509
Molybdenum	mg/kg	2.5 U	2.7 U	2.5 U	2.6 U
Nickel	mg/kg	17.8	21.8	21.2	17.7
Potassium	mg/kg	1250	1560	1330	1230
Selenium	mg/kg	12.5 U	13.3 U	12.6 U	12.9 U
Silver	mg/kg	2.5 U	2.7 U	2.5 U	2.6 U
Sodium	mg/kg	479	403	131	244
Thallium	mg/kg	12.5 U	13.3 U	12.6 U	12.9 U
Vanadium	mg/kg	21.8	22.7	19.6	18.5
Zinc	mg/kg	72.8	52.1	153	40.3
1 Percent Solid					
Solids, percent	%	79.6	73.6	77.6	77.0
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	200000	3500	220 U	230 U
Acenaphthylene	ug/kg	1400	260	220 U	230 U
Acetophenone	ug/kg	410 U	440 U	420 U	450 U
Anthracene	ug/kg	13000	1600	220 U	230 U
Atrazine	ug/kg	410 U	440 U	420 U	450 U
Benzaldehyde	ug/kg	410 U	440 U	420 U	450 U
Benzo(a)anthracene	ug/kg	8200	1000	220 U	230 U
Benzo(a)pyrene	ug/kg	4800	670	220 U	230 U
Benzo(b)fluoranthene	ug/kg	4200	570	220 U	230 U
Benzo(g,h,i)perylene	ug/kg	1700	240	220 U	230 U
Benzo(k)fluoranthene	ug/kg	1400	230 U	220 U	230 U
Biphenyl	ug/kg	7900	890	220 U	230 U
bis(2-Chloroethoxy)methane	ug/kg	210 U	230 U	220 U	230 U
bis(2-Chloroethyl)ether	ug/kg	410 U	440 U	420 U	450 U
bis(2-Chloroisopropyl)ether	ug/kg	410 U	440 U	420 U	450 U
bis(2-Ethylhexyl)phthalate	ug/kg	210 U	230 U	220 U	230 U
4-Bromophenyl-phenylether	ug/kg	210 U	230 U	220 U	230 U

Analysis/ Analyte	Units	17-__	18-__	19-__	20-__
Butylbenzylphthalate	ug/kg	210 U	230 U	220 U	230 U
Caprolactam	ug/kg	410 U	440 U	420 U	450 U
Carbazole	ug/kg	520	440 U	420 U	450 U
4-Chloro-3-methylphenol	ug/kg	210 U	230 U	220 U	230 U
4-Chloroaniline	ug/kg	410 U	440 U	420 U	450 U
2-Chloronaphthalene	ug/kg	210 U	230 U	220 U	230 U
2-Chlorophenol	ug/kg	210 U	230 U	220 U	230 U
4-Chlorophenyl-phenylether	ug/kg	210 U	230 U	220 U	230 U
Chrysene	ug/kg	7200	900	220 U	230 U
Di-n-butylphthalate	ug/kg	210 U	230 U	220 U	230 U
Di-n-octylphthalate	ug/kg	410 U	440 U	420 U	450 U
Dibenz(a,h)anthracene	ug/kg	630	230 U	220 U	230 U
Dibenzofuran	ug/kg	2000	390	220 U	230 U
3,3'-Dichlorobenzidine	ug/kg	410 U	440 U	420 U	450 U
2,4-Dichlorophenol	ug/kg	210 U	230 U	220 U	230 U
Diethylphthalate	ug/kg	210 U	230 U	220 U	230 U
2,4-Dimethylphenol	ug/kg	210 U	230 U	220 U	230 U
Dimethylphthalate	ug/kg	430	420	700	580
4,6-Dinitro-2-methylphenol	ug/kg	410 UJ	440 U	420 U	450 U
2,4-Dinitrophenol	ug/kg	410 U	440 U	420 U	450 U
2,4-Dinitrotoluene	ug/kg	210 U	230 U	220 U	230 U
2,6-Dinitrotoluene	ug/kg	210 U	230 U	220 U	230 U
Fluoranthene	ug/kg	16000 J	1800 J	220 U	230 U
Fluorene	ug/kg	17000	1800	220 U	230 U
Hexachlorobenzene	ug/kg	210 U	230 U	220 U	230 U
Hexachlorobutadiene	ug/kg	210 U	230 U	220 U	230 U
Hexachlorocyclopentadiene	ug/kg	410 U	440 U	420 U	450 U
Hexachloroethane	ug/kg	210 U	230 U	220 U	230 U
Indeno(1,2,3-cd)pyrene	ug/kg	1400	230 U	220 U	230 U
Isophorone	ug/kg	210 U	230 U	220 U	230 U
2-Methylnaphthalene	ug/kg	750000	13000	220 U	230 U
2-Methylphenol	ug/kg	410 U	440 U	420 U	450 U
4-Methylphenol	ug/kg	410 U	440 U	420 U	450 U
Naphthalene	ug/kg	1200000	25000	220 U	230 U
2-Nitroaniline	ug/kg	210 U	230 U	220 U	230 U
3-Nitroaniline	ug/kg	410 U	440 U	420 U	450 U
4-Nitroaniline	ug/kg	410 U	440 U	420 U	450 U
Nitrobenzene	ug/kg	210 U	230 U	220 U	230 U
2-Nitrophenol	ug/kg	210 U	230 U	220 U	230 U
4-Nitrophenol	ug/kg	410 U	440 U	420 U	450 U
N-nitroso-di-n-propylamine	ug/kg	210 U	230 U	220 U	230 U
N-nitrosodiphenylamine	ug/kg	210 U	230 U	220 U	230 U
Pentachlorophenol	ug/kg	410 U	440 U	420 U	450 U
Phenanthrene	ug/kg	310000	6200	220 U	230 U
Phenol	ug/kg	410 U	440 U	420 U	450 U

Analysis/ Analyte	Units	17-__	18-__	19-__	20-__
Pyrene	ug/kg	20000	2300	220 U	230 U
1,2,4,5-Tetrachlorobenzene	ug/kg	210 U	230 U	220 U	230 U
2,4,5-Trichlorophenol	ug/kg	210 U	230 U	220 U	230 U
2,4,6-Trichlorophenol	ug/kg	210 U	230 U	220 U	230 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	4140	572	10.7 U	11.2 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	3000 U	630 U	21	28
Benzene	ug/kg	5400	2600	9.8 U	5.9 U
Bromochloromethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
Bromodichloromethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
Bromoform	ug/kg	1500 U	320 U	9.8 U	5.9 U
Bromomethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
2-Butanone	ug/kg	3000 U	630 U	20 U	12 U
Carbon Disulfide	ug/kg	1500 U	320 U	9.8 U	5.9 U
Carbon Tetrachloride	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
Chlorobenzene	ug/kg	1500 U	320 U	9.8 U	5.9 U
Chloroethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
Chloroform	ug/kg	1500 U	320 U	9.8 U	5.9 U
Chloromethane	ug/kg	1500 UJ	320 UJ	9.8 U	5.9 U
Cyclohexane	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,2-Dibromo-3-Chloropropane	ug/kg	1500 U	320 U	9.8 U	5.9 U
Dibromochloromethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,2-Dibromoethane	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
1,2-Dichlorobenzene	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,3-Dichlorobenzene	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,4-Dichlorobenzene	ug/kg	1500 U	320 U	9.8 U	5.9 U
Dichlorodifluoromethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,1-Dichloroethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,2-Dichloroethane	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
1,1-Dichloroethene	ug/kg	1500 U	320 U	9.8 U	5.9 U
cis-1,2-Dichloroethene	ug/kg	1500 U	320 U	9.8 U	5.9 U
trans-1,2-Dichloroethene	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,2-Dichloropropane	ug/kg	1500 U	320 U	9.8 U	5.9 U
cis-1,3-Dichloropropene	ug/kg	1500 U	320 U	9.8 U	5.9 U
trans-1,3-Dichloropropene	ug/kg	1500 U	320 U	9.8 U	5.9 U
Ethyl Benzene	ug/kg	110000	35000	9.8 U	5.9 U
2-Hexanone	ug/kg	3000 U	630 U	20 U	12 U
Isopropylbenzene	ug/kg	8700	3400	9.8 U	5.9 U
Methyl Acetate	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
Methyl tert-butyl ether	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
Methylcyclohexane	ug/kg	1500	480	9.8 U	5.9 U
Methylene Chloride	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
4-Methyl-2-Pentanone	ug/kg	3000 U	630 U	20 U	12 U
Styrene	ug/kg	1500 U	320 U	9.8 U	5.9 U

Analysis/ Analyte	Units	17-__	18-__	19-__	20-__
1,1,2,2-Tetrachloroethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
Tetrachloroethene	ug/kg	1500 U	320 U	9.8 U	5.9 U
Toluene	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,2,3-Trichlorobenzene	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,2,4-Trichlorobenzene	ug/kg	1500 U	320 U	9.8 U	5.9 U
1,1,1-Trichloroethane	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
1,1,2-Trichloroethane	ug/kg	1500 U	320 U	9.8 U	5.9 U
Trichloroethene	ug/kg	1500 U	320 U	9.8 U	5.9 U
Trichlorofluoromethane	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
1,1,2-Trichlorotrifluoroethane	ug/kg	1500 U	320 U	9.8 U	5.9 UJ
Vinyl Chloride	ug/kg	1500 U	320 U	9.8 U	5.9 U
m and/or p-Xylene	ug/kg	25000	9600	9.8 U	5.9 U
o-Xylene	ug/kg	35000	12000	9.8 U	5.9 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	487	97.9	2.39 U	3.1 UJ

Analysis/ Analyte	Units	21-__	22-__	23-__	24-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.62 U	0.64 U	0.66 U	0.60 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	11600	11600	11800	1360
Antimony	mg/kg	2.6 U	2.7 U	2.3 UJ	2.2 U
Arsenic	mg/kg	8.4	11.4	6.2	5.6 U
Barium	mg/kg	155	171	226 J	28.5
Beryllium	mg/kg	1.3 U	1.4 U	1.2 U	1.1 U
Cadmium	mg/kg	1.3 U	1.4 U	1.2 U	1.1 U
Calcium	mg/kg	21300	25300	12900 J	25000
Chromium	mg/kg	14.6	15.4	14.5	2.2
Cobalt	mg/kg	6.6	8.5	6.7	1.2
Copper	mg/kg	17.0	20.3	31.8	4.9
Iron	mg/kg	15900	18900	18600 J	2760
Lead	mg/kg	12.8	10.3	32.2	10.2
Magnesium	mg/kg	8160	9300	5960	926
Manganese	mg/kg	500	548	387 J	54.9
Molybdenum	mg/kg	2.6 U	2.7 U	2.3 U	2.2 U
Nickel	mg/kg	19.4	24.0	20.8	3.1
Potassium	mg/kg	1960	1840	2250	434
Selenium	mg/kg	13.1 U	13.6 U	11.5 U	11.2 U
Silver	mg/kg	2.6 U	2.7 U	2.3 U	2.2 U
Sodium	mg/kg	364	499	944	345
Thallium	mg/kg	13.1 U	13.6 U	11.5 U	11.2 U
Vanadium	mg/kg	29.2	29.8	26.5	5.6 U
Zinc	mg/kg	60.5	59.7	146 J	20.3
1 Percent Solid					
Solids, percent	%	76.4	72.9	85.6	89.1
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	1200	360	14000	330
Acenaphthylene	ug/kg	230	230 U	6200	200 U
Acetophenone	ug/kg	410 U	440 U	380 U	390 U
Anthracene	ug/kg	600	400	9000	200 U
Atrazine	ug/kg	410 U	440 U	380 U	390 U
Benzaldehyde	ug/kg	410 U	440 U	380 U	390 U
Benzo(a)anthracene	ug/kg	340	350	6300	200 U
Benzo(a)pyrene	ug/kg	210 U	280	3800 J	200 U
Benzo(b)fluoranthene	ug/kg	210 U	230 U	3200 J	200 U
Benzo(g,h,i)perylene	ug/kg	210 U	230 U	1700	200 U
Benzo(k)fluoranthene	ug/kg	210 U	230 U	900	200 U
Biphenyl	ug/kg	430	320	660	200 U
bis(2-Chloroethoxy)methane	ug/kg	210 U	230 U	190 U	200 U
bis(2-Chloroethyl)ether	ug/kg	410 U	440 U	380 U	390 U
bis(2-Chloroisopropyl)ether	ug/kg	410 U	440 U	380 U	390 U
bis(2-Ethylhexyl)phthalate	ug/kg	210 U	230 U	190 U	200 U
4-Bromophenyl-phenylether	ug/kg	210 U	230 U	190 U	200 U

Analysis/ Analyte	Units	21-__	22-__	23-__	24-__
Butylbenzylphthalate	ug/kg	210 U	230 U	190 U	200 U
Caprolactam	ug/kg	410 U	440 U	380 U	390 U
Carbazole	ug/kg	410 U	440 U	380 U	390 U
4-Chloro-3-methylphenol	ug/kg	210 U	230 U	190 U	200 U
4-Chloroaniline	ug/kg	410 U	440 U	380 U	390 U
2-Chloronaphthalene	ug/kg	210 U	230 U	190 U	200 U
2-Chlorophenol	ug/kg	210 U	230 U	190 U	200 U
4-Chlorophenyl-phenylether	ug/kg	210 U	230 U	190 U	200 U
Chrysene	ug/kg	340	350	7000	200 U
Di-n-butylphthalate	ug/kg	210 U	230 U	190 U	200 U
Di-n-octylphthalate	ug/kg	410 U	440 U	380 U	390 U
Dibenz(a,h)anthracene	ug/kg	210 U	230 U	560	200 U
Dibenzofuran	ug/kg	210 U	230 U	1200	200 U
3,3'-Dichlorobenzidine	ug/kg	410 U	440 U	380 U	390 U
2,4-Dichlorophenol	ug/kg	210 U	230 U	190 U	200 U
Diethylphthalate	ug/kg	210 U	230 U	190 U	200 U
2,4-Dimethylphenol	ug/kg	210 U	230 U	190 U	200 U
Dimethylphthalate	ug/kg	390	650	250	480
4,6-Dinitro-2-methylphenol	ug/kg	410 U	440 U	380 UJ	390 U
2,4-Dinitrophenol	ug/kg	410 U	440 U	380 U	390 U
2,4-Dinitrotoluene	ug/kg	210 U	230 U	190 U	200 U
2,6-Dinitrotoluene	ug/kg	210 U	230 U	190 U	200 U
Fluoranthene	ug/kg	560	630	10000	310
Fluorene	ug/kg	790	530	11000	230
Hexachlorobenzene	ug/kg	210 U	230 U	190 U	200 U
Hexachlorobutadiene	ug/kg	210 U	230 U	190 U	200 U
Hexachlorocyclopentadiene	ug/kg	410 U	440 U	380 UJ	390 U
Hexachloroethane	ug/kg	210 U	230 U	190 U	200 U
Indeno(1,2,3-cd)pyrene	ug/kg	210 U	230 U	1300	200 U
Isophorone	ug/kg	210 U	230 U	190 U	200 U
2-Methylnaphthalene	ug/kg	8100	4700	41000	1300
2-Methylphenol	ug/kg	410 U	440 U	380 U	390 U
4-Methylphenol	ug/kg	410 U	440 U	380 U	390 U
Naphthalene	ug/kg	16000	11000	39000	1900
2-Nitroaniline	ug/kg	210 U	230 U	190 U	200 U
3-Nitroaniline	ug/kg	410 U	440 U	380 U	390 U
4-Nitroaniline	ug/kg	410 U	440 U	380 U	390 U
Nitrobenzene	ug/kg	210 U	230 U	190 U	200 U
2-Nitrophenol	ug/kg	210 U	230 U	190 U	200 U
4-Nitrophenol	ug/kg	410 U	440 U	380 U	390 U
N-nitroso-di-n-propylamine	ug/kg	210 U	230 U	190 U	200 U
N-nitrosodiphenylamine	ug/kg	210 U	230 U	190 U	200 U
Pentachlorophenol	ug/kg	410 U	440 U	380 U	390 U
Phenanthrene	ug/kg	2100	2000	36000	670
Phenol	ug/kg	410 U	440 U	380 U	390 U

Analysis/ Analyte	Units	21-__	22-__	23-__	24-__
Pyrene	ug/kg	840	840	22000	370
1,2,4,5-Tetrachlorobenzene	ug/kg	210 U	230 U	190 U	200 U
2,4,5-Trichlorophenol	ug/kg	210 U	230 U	190 U	200 U
2,4,6-Trichlorophenol	ug/kg	210 U	230 U	190 U	200 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	1750	572	1750	61.6
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	600 U	630 U	12	62
Benzene	ug/kg	580	4400	23	490 J
Bromochloromethane	ug/kg	300 U	310 U	3.9 U	8.1 U
Bromodichloromethane	ug/kg	300 U	310 U	3.9 U	8.1 U
Bromoform	ug/kg	300 U	310 U	3.9 U	8.1 UJ
Bromomethane	ug/kg	300 U	310 U	3.9 U	8.1 U
2-Butanone	ug/kg	600 U	630 U	7.9 U	16 U
Carbon Disulfide	ug/kg	300 U	310 U	3.9 U	8.1 U
Carbon Tetrachloride	ug/kg	300 U	310 U	3.9 U	8.1 U
Chlorobenzene	ug/kg	300 U	310 U	3.9 U	8.1 U
Chloroethane	ug/kg	300 U	310 U	3.9 U	8.1 U
Chloroform	ug/kg	300 U	310 U	3.9 U	8.1 U
Chloromethane	ug/kg	300 UJ	310 UJ	3.9 U	8.1 U
Cyclohexane	ug/kg	300 U	310 U	3.9 U	11
1,2-Dibromo-3-Chloropropane	ug/kg	300 U	310 U	3.9 U	8.1 U
Dibromochloromethane	ug/kg	300 U	310 U	3.9 U	8.1 U
1,2-Dibromoethane	ug/kg	300 U	310 U	3.9 U	8.1 U
1,2-Dichlorobenzene	ug/kg	300 U	310 U	3.9 U	8.1 U
1,3-Dichlorobenzene	ug/kg	300 U	310 U	3.9 U	8.1 U
1,4-Dichlorobenzene	ug/kg	300 U	310 U	3.9 U	8.1 U
Dichlorodifluoromethane	ug/kg	300 U	310 U	3.9 U	8.1 U
1,1-Dichloroethane	ug/kg	300 U	310 U	3.9 U	8.1 U
1,2-Dichloroethane	ug/kg	300 U	310 U	3.9 U	8.1 U
1,1-Dichloroethene	ug/kg	300 U	310 U	3.9 U	8.1 U
cis-1,2-Dichloroethene	ug/kg	300 U	310 U	3.9 U	8.1 U
trans-1,2-Dichloroethene	ug/kg	300 U	310 U	3.9 U	8.1 U
1,2-Dichloropropane	ug/kg	300 U	310 U	3.9 U	8.1 U
cis-1,3-Dichloropropene	ug/kg	300 U	310 U	3.9 U	8.1 U
trans-1,3-Dichloropropene	ug/kg	300 U	310 U	3.9 U	8.1 U
Ethyl Benzene	ug/kg	570	8100	22	880 J
2-Hexanone	ug/kg	600 U	630 U	7.9 U	16 U
Isopropylbenzene	ug/kg	300 U	350	3.9 U	170
Methyl Acetate	ug/kg	300 U	310 U	3.9 U	8.1 U
Methyl tert-butyl ether	ug/kg	300 U	310 U	3.9 U	8.1 U
Methylcyclohexane	ug/kg	300 U	340	3.9 U	29
Methylene Chloride	ug/kg	300 U	310 U	3.9 U	8.1 U
4-Methyl-2-Pentanone	ug/kg	600 U	630 U	7.9 U	16 U
Styrene	ug/kg	300 U	310 U	3.9 U	8.1 U

Analysis/ Analyte	Units	21-__	22-__	23-__	24-__
1,1,2,2-Tetrachloroethane	ug/kg	300 U	310 U	3.9 U	8.1 U
Tetrachloroethene	ug/kg	300 U	310 U	3.9 U	8.1 U
Toluene	ug/kg	300 U	310 U	3.9 U	180
1,2,3-Trichlorobenzene	ug/kg	300 U	310 U	3.9 U	8.1 U
1,2,4-Trichlorobenzene	ug/kg	300 U	310 U	3.9 U	8.1 U
1,1,1-Trichloroethane	ug/kg	300 U	310 U	3.9 U	8.1 U
1,1,2-Trichloroethane	ug/kg	300 U	310 U	3.9 U	8.1 U
Trichloroethene	ug/kg	300 U	310 U	3.9 U	8.1 U
Trichlorofluoromethane	ug/kg	300 U	310 U	3.9 U	8.1 U
1,1,2-Trichlorotrifluoroethane	ug/kg	300 U	310 U	3.9 U	8.1 U
Vinyl Chloride	ug/kg	300 U	310 U	3.9 U	8.1 U
m and/or p-Xylene	ug/kg	950	38000	7.0	290
o-Xylene	ug/kg	460	7400	7.0	1100 J
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	129	26.4	25	26.9

Analysis/ Analyte	Units	25-__	26-__	27-__	28-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.62 U	0.64 U	0.65 U	0.66 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	9490	11300	16000	13700
Antimony	mg/kg	2.5 U	2.6 U	2.6 U	2.7 U
Arsenic	mg/kg	13.8	12.2	7.8	6.8 U
Barium	mg/kg	202	134	178	185
Beryllium	mg/kg	1.2 U	1.3 U	1.3 U	1.4 U
Cadmium	mg/kg	1.2 U	1.3 U	1.3 U	1.4 U
Calcium	mg/kg	26800	5710	13200	16700
Chromium	mg/kg	13.6	14.3	18.7	16.7
Cobalt	mg/kg	6.4	6.6	8.1	7.5
Copper	mg/kg	25.8	14.5	20.9	17.8
Iron	mg/kg	15700	18200	21900	18700
Lead	mg/kg	43.9	10.6	12.9	10.6
Magnesium	mg/kg	8680	4200	7850	8650
Manganese	mg/kg	610	362	673	946
Molybdenum	mg/kg	2.5 U	2.6 U	2.6 U	2.7 U
Nickel	mg/kg	19.1	20.1	24.2	23.3
Potassium	mg/kg	1740	1990	2240	2050
Selenium	mg/kg	12.4 U	12.8 U	13.2 U	13.6 U
Silver	mg/kg	2.5 U	2.6 U	2.6 U	2.7 U
Sodium	mg/kg	770	521	358	386
Thallium	mg/kg	12.4 U	12.8 U	13.2 U	13.6 U
Vanadium	mg/kg	25.6	29.1	37.1	31.5
Zinc	mg/kg	185	60.3	70.6	66.2
1 Percent Solid					
Solids, percent	%	80.3	78.3	74.5	73.5
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	210 U	230 U	230 U	230 U
Acenaphthylene	ug/kg	210 U	230 U	230 U	230 U
Acetophenone	ug/kg	410 U	440 U	440 U	440 U
Anthracene	ug/kg	210 U	230 U	230 U	230 U
Atrazine	ug/kg	410 U	440 U	440 U	440 U
Benzaldehyde	ug/kg	410 U	440 U	440 U	440 U
Benzo(a)anthracene	ug/kg	210 U	230 U	230 U	230 U
Benzo(a)pyrene	ug/kg	210 U	230 U	230 U	230 U
Benzo(b)fluoranthene	ug/kg	210 U	230 U	230 U	230 U
Benzo(g,h,i)perylene	ug/kg	210 U	230 U	230 U	230 U
Benzo(k)fluoranthene	ug/kg	210 U	230 U	230 U	230 U
Biphenyl	ug/kg	210 U	230 U	230 U	230 U
bis(2-Chloroethoxy)methane	ug/kg	210 U	230 U	230 U	230 U
bis(2-Chloroethyl)ether	ug/kg	410 U	440 U	440 U	440 U
bis(2-Chloroisopropyl)ether	ug/kg	410 U	440 U	440 U	440 U
bis(2-Ethylhexyl)phthalate	ug/kg	210 U	230 U	230 U	230 U
4-Bromophenyl-phenylether	ug/kg	210 U	230 U	230 U	230 U

Analysis/ Analyte	Units	25-__	26-__	27-__	28-__
Butylbenzylphthalate	ug/kg	210 U	230 U	230 U	230 U
Caprolactam	ug/kg	410 U	440 U	440 U	440 U
Carbazole	ug/kg	410 U	440 U	440 U	440 U
4-Chloro-3-methylphenol	ug/kg	210 U	230 U	230 U	230 U
4-Chloroaniline	ug/kg	410 U	440 U	440 U	440 U
2-Chloronaphthalene	ug/kg	210 U	230 U	230 U	230 U
2-Chlorophenol	ug/kg	210 U	230 U	230 U	230 U
4-Chlorophenyl-phenylether	ug/kg	210 U	230 U	230 U	230 U
Chrysene	ug/kg	210 U	230 U	230 U	230 U
Di-n-butylphthalate	ug/kg	210 U	230 U	230 U	230 U
Di-n-octylphthalate	ug/kg	410 U	440 U	440 U	440 U
Dibenz(a,h)anthracene	ug/kg	210 U	230 U	230 U	230 U
Dibenzofuran	ug/kg	210 U	230 U	230 U	230 U
3,3'-Dichlorobenzidine	ug/kg	410 U	440 U	440 U	440 U
2,4-Dichlorophenol	ug/kg	210 U	230 U	230 U	230 U
Diethylphthalate	ug/kg	210 U	230 U	230 U	230 U
2,4-Dimethylphenol	ug/kg	210 U	230 U	230 U	230 U
Dimethylphthalate	ug/kg	420	770	540	400
4,6-Dinitro-2-methylphenol	ug/kg	410 U	440 U	440 U	440 U
2,4-Dinitrophenol	ug/kg	410 U	440 U	440 U	440 U
2,4-Dinitrotoluene	ug/kg	210 U	230 U	230 U	230 U
2,6-Dinitrotoluene	ug/kg	210 U	230 U	230 U	230 U
Fluoranthene	ug/kg	210 U	230 U	230 U	230 U
Fluorene	ug/kg	210 U	230 U	230 U	230 U
Hexachlorobenzene	ug/kg	210 U	230 U	230 U	230 U
Hexachlorobutadiene	ug/kg	210 U	230 U	230 U	230 U
Hexachlorocyclopentadiene	ug/kg	410 U	440 U	440 U	440 U
Hexachloroethane	ug/kg	210 U	230 U	230 U	230 U
Indeno(1,2,3-cd)pyrene	ug/kg	210 U	230 U	230 U	230 U
Isophorone	ug/kg	210 U	230 U	230 U	230 U
2-Methylnaphthalene	ug/kg	210 U	230 U	1300	510
2-Methylphenol	ug/kg	410 U	440 U	440 U	440 U
4-Methylphenol	ug/kg	410 U	440 U	440 U	440 U
Naphthalene	ug/kg	210 U	230 U	690	250
2-Nitroaniline	ug/kg	210 U	230 U	230 U	230 U
3-Nitroaniline	ug/kg	410 U	440 U	440 U	440 U
4-Nitroaniline	ug/kg	410 U	440 U	440 U	440 U
Nitrobenzene	ug/kg	210 U	230 U	230 U	230 U
2-Nitrophenol	ug/kg	210 U	230 U	230 U	230 U
4-Nitrophenol	ug/kg	410 U	440 U	440 U	440 U
N-nitroso-di-n-propylamine	ug/kg	210 U	230 U	230 U	230 U
N-nitrosodiphenylamine	ug/kg	210 U	230 U	230 U	230 U
Pentachlorophenol	ug/kg	410 U	440 U	440 U	440 U
Phenanthrene	ug/kg	210 U	230 U	230 U	230 U
Phenol	ug/kg	410 U	440 U	440 U	440 U

Analysis/ Analyte	Units	25-__	26-__	27-__	28-__
Pyrene	ug/kg	210 U	230 U	230 U	230 U
1,2,4,5-Tetrachlorobenzene	ug/kg	210 U	230 U	230 U	230 U
2,4,5-Trichlorophenol	ug/kg	210 U	230 U	230 U	230 U
2,4,6-Trichlorophenol	ug/kg	210 U	230 U	230 U	230 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	10.7 U	12.2 U	783	439
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	27	8.2 U	620 U	14 U
Benzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Bromochloromethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Bromodichloromethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Bromoform	ug/kg	6.0 U	4.1 U	310 U	6.9 UJ
Bromomethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
2-Butanone	ug/kg	12 U	8.2 U	620 U	14 U
Carbon Disulfide	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Carbon Tetrachloride	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Chlorobenzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Chloroethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Chloroform	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Chloromethane	ug/kg	6.0 U	4.1 U	310 UJ	6.9 U
Cyclohexane	ug/kg	6.0 U	4.1 U	530	4300
1,2-Dibromo-3-Chloropropane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Dibromochloromethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,2-Dibromoethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,2-Dichlorobenzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,3-Dichlorobenzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,4-Dichlorobenzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Dichlorodifluoromethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,1-Dichloroethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,2-Dichloroethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,1-Dichloroethene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
cis-1,2-Dichloroethene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
trans-1,2-Dichloroethene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,2-Dichloropropane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
cis-1,3-Dichloropropene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
trans-1,3-Dichloropropene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Ethyl Benzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
2-Hexanone	ug/kg	12 U	8.2 U	620 U	14 U
Isopropylbenzene	ug/kg	6.0 U	4.1 U	310 U	1200
Methyl Acetate	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Methyl tert-butyl ether	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Methylcyclohexane	ug/kg	6.0 U	4.1 U	2800	25000
Methylene Chloride	ug/kg	6.0 U	4.1 U	310 U	6.9 U
4-Methyl-2-Pentanone	ug/kg	12 U	8.2 U	620 U	14 U
Styrene	ug/kg	6.0 U	4.1 U	310 U	6.9 U

Analysis/ Analyte	Units	25-__	26-__	27-__	28-__
1,1,2,2-Tetrachloroethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Tetrachloroethene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Toluene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,2,3-Trichlorobenzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,2,4-Trichlorobenzene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,1,1-Trichloroethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,1,2-Trichloroethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Trichloroethene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Trichlorofluoromethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1,1,2-Trichlorotrifluoroethane	ug/kg	6.0 U	4.1 U	310 U	6.9 U
Vinyl Chloride	ug/kg	6.0 U	4.1 U	310 U	6.9 U
m and/or p-Xylene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
o-Xylene	ug/kg	6.0 U	4.1 U	310 U	6.9 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.18 U	2.6 U	206	58.6

Analysis/ Analyte	Units	29-__	30-__	31-__	32-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.63 U	0.63 U	0.61 U	0.71 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	13400	8280	9710	17200
Antimony	mg/kg	2.6 U	2.6 U	2.6 U	2.9 U
Arsenic	mg/kg	6.4 U	7.5	6.4 U	9.7
Barium	mg/kg	182	175	209	278
Beryllium	mg/kg	1.3 U	1.3 U	1.3 U	1.4 U
Cadmium	mg/kg	1.3 U	1.3 U	1.3 U	1.4 U
Calcium	mg/kg	8880	24600	31200	21300
Chromium	mg/kg	15.8	10.8	11.9	20.6
Cobalt	mg/kg	8.6	5.8	6.8	10.7
Copper	mg/kg	14.8	10.3	13.6	25.8
Iron	mg/kg	18400	13500	15600	23900
Lead	mg/kg	12.7	8.9	9.3	14.8
Magnesium	mg/kg	6210	6790	10400	8960
Manganese	mg/kg	683	347	485	754
Molybdenum	mg/kg	2.6 U	2.6 U	2.6 U	2.9 U
Nickel	mg/kg	22.3	16.0	17.9	27.9
Potassium	mg/kg	1860	1150	1740	3040
Selenium	mg/kg	12.8 U	12.8 U	12.8 U	14.3 U
Silver	mg/kg	2.6 U	2.6 U	2.6 U	2.9 U
Sodium	mg/kg	163	192	460	374
Thallium	mg/kg	12.8 U	12.8 U	12.8 U	14.3 U
Vanadium	mg/kg	30.9	22.9	26.4	39.9
Zinc	mg/kg	61.8	39.8	47.2	80.1
1 Percent Solid					
Solids, percent	%	77.4	77.3	77.4	69.6
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	220 U	220 U	220 U	240 U
Acenaphthylene	ug/kg	220 U	220 U	220 U	240 U
Acetophenone	ug/kg	420 U	420 U	420 U	460 U
Anthracene	ug/kg	220 U	220 U	220 U	240 U
Atrazine	ug/kg	420 U	420 U	420 U	460 U
Benzaldehyde	ug/kg	420 U	420 U	420 U	460 U
Benzo(a)anthracene	ug/kg	220 U	220 U	220 U	240 U
Benzo(a)pyrene	ug/kg	220 U	220 U	220 U	240 U
Benzo(b)fluoranthene	ug/kg	220 U	220 U	220 U	240 U
Benzo(g,h,i)perylene	ug/kg	220 U	220 U	220 U	240 U
Benzo(k)fluoranthene	ug/kg	220 U	220 U	220 U	240 U
Biphenyl	ug/kg	220 U	220 U	220 U	240 U
bis(2-Chloroethoxy)methane	ug/kg	220 U	220 U	220 U	240 U
bis(2-Chloroethyl)ether	ug/kg	420 U	420 U	420 U	460 U
bis(2-Chloroisopropyl)ether	ug/kg	420 U	420 U	420 U	460 U
bis(2-Ethylhexyl)phthalate	ug/kg	220 U	220 U	220 U	240 U
4-Bromophenyl-phenylether	ug/kg	220 U	220 U	220 U	240 U

Analysis/ Analyte	Units	29-__	30-__	31-__	32-__
Butylbenzylphthalate	ug/kg	220 U	220 U	220 U	240 U
Caprolactam	ug/kg	420 U	420 U	420 U	460 U
Carbazole	ug/kg	420 U	420 U	420 U	460 U
4-Chloro-3-methylphenol	ug/kg	220 U	220 U	220 U	240 U
4-Chloroaniline	ug/kg	420 U	420 U	420 U	460 U
2-Chloronaphthalene	ug/kg	220 U	220 U	220 U	240 U
2-Chlorophenol	ug/kg	220 U	220 U	220 U	240 U
4-Chlorophenyl-phenylether	ug/kg	220 U	220 U	220 U	240 U
Chrysene	ug/kg	220 U	220 U	220 U	240 U
Di-n-butylphthalate	ug/kg	220 U	220 U	220 U	240 U
Di-n-octylphthalate	ug/kg	420 U	420 U	420 U	460 U
Dibenz(a,h)anthracene	ug/kg	220 U	220 U	220 U	240 U
Dibenzofuran	ug/kg	220 U	220 U	220 U	240 U
3,3'-Dichlorobenzidine	ug/kg	420 U	420 U	420 U	460 U
2,4-Dichlorophenol	ug/kg	220 U	220 U	220 U	240 U
Diethylphthalate	ug/kg	220 U	220 U	220 U	240 U
2,4-Dimethylphenol	ug/kg	220 U	220 U	220 U	240 U
Dimethylphthalate	ug/kg	500	670	420	550
4,6-Dinitro-2-methylphenol	ug/kg	420 U	420 U	420 U	460 U
2,4-Dinitrophenol	ug/kg	420 U	420 U	420 U	460 U
2,4-Dinitrotoluene	ug/kg	220 U	220 U	220 U	240 U
2,6-Dinitrotoluene	ug/kg	220 U	220 U	220 U	240 U
Fluoranthene	ug/kg	220 U	220 U	220 U	240 U
Fluorene	ug/kg	220 U	220 U	220 U	240 U
Hexachlorobenzene	ug/kg	220 U	220 U	220 U	240 U
Hexachlorobutadiene	ug/kg	220 U	220 U	220 U	240 U
Hexachlorocyclopentadiene	ug/kg	420 U	420 U	420 U	460 U
Hexachloroethane	ug/kg	220 U	220 U	220 U	240 U
Indeno(1,2,3-cd)pyrene	ug/kg	220 U	220 U	220 U	240 U
Isophorone	ug/kg	220 U	220 U	220 U	240 U
2-Methylnaphthalene	ug/kg	220 U	220 U	220 U	240 U
2-Methylphenol	ug/kg	420 U	420 U	420 U	460 U
4-Methylphenol	ug/kg	420 U	420 U	420 U	460 U
Naphthalene	ug/kg	220 U	220 U	220 U	240 U
2-Nitroaniline	ug/kg	220 U	220 U	220 U	240 U
3-Nitroaniline	ug/kg	420 U	420 U	420 U	460 U
4-Nitroaniline	ug/kg	420 U	420 U	420 U	460 U
Nitrobenzene	ug/kg	220 U	220 U	220 U	240 U
2-Nitrophenol	ug/kg	220 U	220 U	220 U	240 U
4-Nitrophenol	ug/kg	420 U	420 U	420 U	460 U
N-nitroso-di-n-propylamine	ug/kg	220 U	220 U	220 U	240 U
N-nitrosodiphenylamine	ug/kg	220 U	220 U	220 U	240 U
Pentachlorophenol	ug/kg	420 U	420 U	420 U	460 U
Phenanthrene	ug/kg	220 U	220 U	220 U	240 U
Phenol	ug/kg	420 U	420 U	420 U	460 U

Analysis/ Analyte	Units	29-__	30-__	31-__	32-__
Pyrene	ug/kg	220 U	220 U	220 U	240 U
1,2,4,5-Tetrachlorobenzene	ug/kg	220 U	220 U	220 U	240 U
2,4,5-Trichlorophenol	ug/kg	220 U	220 U	220 U	240 U
2,4,6-Trichlorophenol	ug/kg	220 U	220 U	220 U	240 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	10.9 U	10.7 U	11.9 U	12.2 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	21	10 U	9.8 U	9.1 U
Benzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Bromochloromethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Bromodichloromethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Bromoform	ug/kg	5.5 U	5.1 UJ	4.9 U	4.5 U
Bromomethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
2-Butanone	ug/kg	11 U	10 U	9.8 U	9.1 U
Carbon Disulfide	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Carbon Tetrachloride	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Chlorobenzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Chloroethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Chloroform	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Chloromethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Cyclohexane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,2-Dibromo-3-Chloropropane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Dibromochloromethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,2-Dibromoethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,2-Dichlorobenzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,3-Dichlorobenzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,4-Dichlorobenzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Dichlorodifluoromethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,1-Dichloroethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,2-Dichloroethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,1-Dichloroethene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
cis-1,2-Dichloroethene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
trans-1,2-Dichloroethene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,2-Dichloropropane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
cis-1,3-Dichloropropene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
trans-1,3-Dichloropropene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Ethyl Benzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
2-Hexanone	ug/kg	11 U	10 U	9.8 U	9.1 U
Isopropylbenzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Methyl Acetate	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Methyl tert-butyl ether	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Methylcyclohexane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Methylene Chloride	ug/kg	5.5 U	5.6	4.9 U	4.5 U
4-Methyl-2-Pentanone	ug/kg	11 U	10 U	9.8 U	9.1 U
Styrene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U

Analysis/ Analyte	Units	29-__	30-__	31-__	32-__
1,1,2,2-Tetrachloroethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Tetrachloroethene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Toluene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,2,3-Trichlorobenzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,2,4-Trichlorobenzene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,1,1-Trichloroethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,1,2-Trichloroethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Trichloroethene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Trichlorofluoromethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1,1,2-Trichlorotrifluoroethane	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
Vinyl Chloride	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
m and/or p-Xylene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
o-Xylene	ug/kg	5.5 U	5.1 U	4.9 U	4.5 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	4.14	3.43 U	2.97 U	4.46 U

Analysis/ Analyte	Units	33-__	34-__	35-__	36-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.63 U	0.77 U	0.77 U	0.65 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	9400	11700	13700	10800
Antimony	mg/kg	2.5 U	2.6 U	2.5 U	2.7 U
Arsenic	mg/kg	6.4	7.4	7.1	6.7 U
Barium	mg/kg	175	195	180	193
Beryllium	mg/kg	1.3 U	1.3 U	1.3 U	1.3 U
Cadmium	mg/kg	1.3 U	1.3 U	1.3 U	1.3 U
Calcium	mg/kg	19000	15600	26200	18000
Chromium	mg/kg	12.4	13.8	16.2	13.8
Cobalt	mg/kg	6.9	6.7	8.1	6.6
Copper	mg/kg	31.8	17.1	25.0	15.0
Iron	mg/kg	19900	17000	22600	17000
Lead	mg/kg	46.9	22.6	20.9	10.6
Magnesium	mg/kg	6550	6820	7630	8330
Manganese	mg/kg	506	452	614	442
Molybdenum	mg/kg	2.5 U	2.6 U	2.5 U	2.7 U
Nickel	mg/kg	20.8	18.8	22.9	19.3
Potassium	mg/kg	1840	2540	2120	1670
Selenium	mg/kg	12.7 U	13.2 U	12.7 U	13.3 U
Silver	mg/kg	2.5 U	2.6 U	2.5 U	2.7 U
Sodium	mg/kg	237	190	257	257
Thallium	mg/kg	12.7 U	13.2 U	12.7 U	13.3 U
Vanadium	mg/kg	22.4	27.1	33.0	27.4
Zinc	mg/kg	109	73.0	101	54.2
1 Percent Solid					
Solids, percent	%	78.2	74.1	77.4	74.8
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	220 U	270 U	270 U	230 U
Acenaphthylene	ug/kg	220 U	270 U	270 U	230 U
Acetophenone	ug/kg	430 U	530 U	530 U	440 U
Anthracene	ug/kg	220 U	270 U	270 U	230 U
Atrazine	ug/kg	430 U	530 U	530 U	440 U
Benzaldehyde	ug/kg	430 U	530 U	530 U	440 U
Benzo(a)anthracene	ug/kg	220 U	270 U	270 U	230 U
Benzo(a)pyrene	ug/kg	220 U	270 U	270 U	230 U
Benzo(b)fluoranthene	ug/kg	220 U	270 U	270 U	230 U
Benzo(g,h,i)perylene	ug/kg	220 U	270 U	270 U	230 U
Benzo(k)fluoranthene	ug/kg	220 U	270 U	270 U	230 U
Biphenyl	ug/kg	220 U	270 U	270 U	230 U
bis(2-Chloroethoxy)methane	ug/kg	220 U	270 U	270 U	230 U
bis(2-Chloroethyl)ether	ug/kg	430 U	530 U	530 U	440 U
bis(2-Chloroisopropyl)ether	ug/kg	430 U	530 U	530 U	440 U
bis(2-Ethylhexyl)phthalate	ug/kg	220 U	270 U	270 U	230 U
4-Bromophenyl-phenylether	ug/kg	220 U	270 U	270 U	230 U

Analysis/ Analyte	Units	33-__	34-__	35-__	36-__
Butylbenzylphthalate	ug/kg	220 U	270 U	270 U	230 U
Caprolactam	ug/kg	430 U	530 U	530 U	440 U
Carbazole	ug/kg	430 U	530 U	530 U	440 U
4-Chloro-3-methylphenol	ug/kg	220 U	270 U	270 U	230 U
4-Chloroaniline	ug/kg	430 U	530 U	530 U	440 U
2-Chloronaphthalene	ug/kg	220 U	270 U	270 U	230 U
2-Chlorophenol	ug/kg	220 U	270 U	270 U	230 U
4-Chlorophenyl-phenylether	ug/kg	220 U	270 U	270 U	230 U
Chrysene	ug/kg	220 U	270 U	270 U	230 U
Di-n-butylphthalate	ug/kg	220 U	270 U	270 U	230 U
Di-n-octylphthalate	ug/kg	430 U	530 U	530 U	440 U
Dibenz(a,h)anthracene	ug/kg	220 U	270 U	270 U	230 U
Dibenzofuran	ug/kg	220 U	270 U	270 U	230 U
3,3'-Dichlorobenzidine	ug/kg	430 U	530 U	530 U	440 U
2,4-Dichlorophenol	ug/kg	220 U	270 U	270 U	230 U
Diethylphthalate	ug/kg	220 U	270 U	270 U	230 U
2,4-Dimethylphenol	ug/kg	220 U	270 U	270 U	230 U
Dimethylphthalate	ug/kg	820	660	370	770
4,6-Dinitro-2-methylphenol	ug/kg	430 U	530 U	530 U	440 U
2,4-Dinitrophenol	ug/kg	430 U	530 U	530 U	440 U
2,4-Dinitrotoluene	ug/kg	220 U	270 U	270 U	230 U
2,6-Dinitrotoluene	ug/kg	220 U	270 U	270 U	230 U
Fluoranthene	ug/kg	220 U	270 U	270 U	230 U
Fluorene	ug/kg	220 U	270 U	270 U	230 U
Hexachlorobenzene	ug/kg	220 U	270 U	270 U	230 U
Hexachlorobutadiene	ug/kg	220 U	270 U	270 U	230 U
Hexachlorocyclopentadiene	ug/kg	430 U	530 U	530 U	440 U
Hexachloroethane	ug/kg	220 U	270 U	270 U	230 U
Indeno(1,2,3-cd)pyrene	ug/kg	220 U	270 U	270 U	230 U
Isophorone	ug/kg	220 U	270 U	270 U	230 U
2-Methylnaphthalene	ug/kg	220 U	270 U	270 U	230 U
2-Methylphenol	ug/kg	430 U	530 U	530 U	440 U
4-Methylphenol	ug/kg	430 U	530 U	530 U	440 U
Naphthalene	ug/kg	220 U	270 U	270 U	230 U
2-Nitroaniline	ug/kg	220 U	270 U	270 U	230 U
3-Nitroaniline	ug/kg	430 U	530 U	530 U	440 U
4-Nitroaniline	ug/kg	430 U	530 U	530 U	440 U
Nitrobenzene	ug/kg	220 U	270 U	270 U	230 U
2-Nitrophenol	ug/kg	220 U	270 U	270 U	230 U
4-Nitrophenol	ug/kg	430 U	530 U	530 U	440 U
N-nitroso-di-n-propylamine	ug/kg	220 U	270 U	270 U	230 U
N-nitrosodiphenylamine	ug/kg	220 U	270 U	270 U	230 U
Pentachlorophenol	ug/kg	430 U	530 U	530 U	440 U
Phenanthrene	ug/kg	220 U	270 U	270 U	230 U
Phenol	ug/kg	430 U	530 U	530 U	440 U

Analysis/ Analyte	Units	33-__	34-__	35-__	36-__
Pyrene	ug/kg	220 U	270 U	270 U	230 U
1,2,4,5-Tetrachlorobenzene	ug/kg	220 U	270 U	270 U	230 U
2,4,5-Trichlorophenol	ug/kg	220 U	270 U	270 U	230 U
2,4,6-Trichlorophenol	ug/kg	220 U	270 U	270 U	230 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	27.9	28.3	11.1 U	10.9 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	31	46	19	12 U
Benzene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Bromochloromethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Bromodichloromethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Bromoform	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
Bromomethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
2-Butanone	ug/kg	16 U	14 U	13 U	12 U
Carbon Disulfide	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Carbon Tetrachloride	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
Chlorobenzene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
Chloroethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Chloroform	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Chloromethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Cyclohexane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
1,2-Dibromo-3-Chloropropane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Dibromochloromethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
1,2-Dibromoethane	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,2-Dichlorobenzene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,3-Dichlorobenzene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,4-Dichlorobenzene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
Dichlorodifluoromethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
1,1-Dichloroethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
1,2-Dichloroethane	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,1-Dichloroethene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
cis-1,2-Dichloroethene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
trans-1,2-Dichloroethene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,2-Dichloropropane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
cis-1,3-Dichloropropene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
trans-1,3-Dichloropropene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Ethyl Benzene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
2-Hexanone	ug/kg	16 U	14 U	13 U	12 U
Isopropylbenzene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Methyl Acetate	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
Methyl tert-butyl ether	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
Methylcyclohexane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Methylene Chloride	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
4-Methyl-2-Pentanone	ug/kg	16 U	14 U	13 U	12 U
Styrene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U

Analysis/ Analyte	Units	33-__	34-__	35-__	36-__
1,1,2,2-Tetrachloroethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Tetrachloroethene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Toluene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
1,2,3-Trichlorobenzene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,2,4-Trichlorobenzene	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,1,1-Trichloroethane	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,1,2-Trichloroethane	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Trichloroethene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
Trichlorofluoromethane	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
1,1,2-Trichlorotrifluoroethane	ug/kg	7.8 U	7.2 U	6.7 UJ	5.9 U
Vinyl Chloride	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
m and/or p-Xylene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
o-Xylene	ug/kg	7.8 U	7.2 U	6.7 U	5.9 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.83 U	2.81 U	2.57 U	2.32 U

Analysis/ Analyte	Units	37-__	38-__	39-__	40-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.63 U	0.64 U	0.77 U	0.70 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	10200	13100	9960	16500
Antimony	mg/kg	2.6 U	2.7 U	2.8 U	3.0 U
Arsenic	mg/kg	8.3	8.4	7.0 U	10.4
Barium	mg/kg	245	273	185	251
Beryllium	mg/kg	1.3 U	1.3 U	1.4 U	1.5 U
Cadmium	mg/kg	10.3	1.3 U	1.4 U	1.5 U
Calcium	mg/kg	27200	31100	27800	18700
Chromium	mg/kg	13.8	15.5	12.0	17.9
Cobalt	mg/kg	7.0	7.8	6.1	10.0
Copper	mg/kg	19.1	15.9	13.6	23.2
Iron	mg/kg	14600	17600	14500	22000
Lead	mg/kg	34.4	10.1	31.2	22.4
Magnesium	mg/kg	10200	8600	10500	8250
Manganese	mg/kg	445	556	488	679
Molybdenum	mg/kg	2.6 U	2.7 U	2.8 U	3.0 U
Nickel	mg/kg	19.7	21.3	15.2	26.9
Potassium	mg/kg	1990	1940	1880	2660
Selenium	mg/kg	12.8 U	13.5 U	14.0 U	14.8 U
Silver	mg/kg	2.6 U	2.7 U	2.8 U	3.0 U
Sodium	mg/kg	273	287	203	190
Thallium	mg/kg	12.8 U	13.5 U	14.0 U	14.8 U
Vanadium	mg/kg	28.0	30.3	22.0	36.5
Zinc	mg/kg	424	59.7	65.9	93.0
1 Percent Solid					
Solids, percent	%	78.2	73.0	70.6	66.6
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	220 U	230 U	270 U	250 U
Acenaphthylene	ug/kg	220 U	230 U	270 U	250 U
Acetophenone	ug/kg	420 U	440 U	520 U	480 U
Anthracene	ug/kg	220 U	230 U	270 U	250 U
Atrazine	ug/kg	420 U	440 U	520 U	480 U
Benzaldehyde	ug/kg	420 U	440 U	520 U	480 U
Benzo(a)anthracene	ug/kg	220 U	230 U	270 U	250 U
Benzo(a)pyrene	ug/kg	220 U	230 U	270 U	250 U
Benzo(b)fluoranthene	ug/kg	220 U	230 U	270 U	250 U
Benzo(g,h,i)perylene	ug/kg	220 U	230 U	270 U	250 U
Benzo(k)fluoranthene	ug/kg	220 U	230 U	270 U	250 U
Biphenyl	ug/kg	220 U	230 U	270 U	250 U
bis(2-Chloroethoxy)methane	ug/kg	220 U	230 U	270 U	250 U
bis(2-Chloroethyl)ether	ug/kg	420 U	440 U	520 U	480 U
bis(2-Chloroisopropyl)ether	ug/kg	420 U	440 U	520 U	480 U
bis(2-Ethylhexyl)phthalate	ug/kg	220 U	230 U	270 U	250 U
4-Bromophenyl-phenylether	ug/kg	220 U	230 U	270 U	250 U

Analysis/ Analyte	Units	37-__	38-__	39-__	40-__
Butylbenzylphthalate	ug/kg	220 U	230 U	270 U	250 U
Caprolactam	ug/kg	420 U	440 U	520 U	480 U
Carbazole	ug/kg	420 U	440 U	520 U	480 U
4-Chloro-3-methylphenol	ug/kg	220 U	230 U	270 U	250 U
4-Chloroaniline	ug/kg	420 U	440 U	520 U	480 U
2-Chloronaphthalene	ug/kg	220 U	230 U	270 U	250 U
2-Chlorophenol	ug/kg	220 U	230 U	270 U	250 U
4-Chlorophenyl-phenylether	ug/kg	220 U	230 U	270 U	250 U
Chrysene	ug/kg	220 U	230 U	270 U	250 U
Di-n-butylphthalate	ug/kg	220 U	230 U	270 U	250 U
Di-n-octylphthalate	ug/kg	420 U	440 U	520 U	480 U
Dibenz(a,h)anthracene	ug/kg	220 U	230 U	270 U	250 U
Dibenzofuran	ug/kg	220 U	230 U	270 U	250 U
3,3'-Dichlorobenzidine	ug/kg	420 U	440 U	520 U	480 U
2,4-Dichlorophenol	ug/kg	220 U	230 U	270 U	250 U
Diethylphthalate	ug/kg	220 U	230 U	270 U	250 U
2,4-Dimethylphenol	ug/kg	220 U	230 U	270 U	250 U
Dimethylphthalate	ug/kg	580	490	660	310
4,6-Dinitro-2-methylphenol	ug/kg	420 U	440 U	520 U	480 U
2,4-Dinitrophenol	ug/kg	420 U	440 U	520 U	480 U
2,4-Dinitrotoluene	ug/kg	220 U	230 U	270 U	250 U
2,6-Dinitrotoluene	ug/kg	220 U	230 U	270 U	250 U
Fluoranthene	ug/kg	220 U	230 U	270 U	250 U
Fluorene	ug/kg	220 U	230 U	270 U	250 U
Hexachlorobenzene	ug/kg	220 U	230 U	270 U	250 U
Hexachlorobutadiene	ug/kg	220 U	230 U	270 U	250 U
Hexachlorocyclopentadiene	ug/kg	420 UJ	440 U	520 UJ	480 UJ
Hexachloroethane	ug/kg	220 U	230 U	270 U	250 U
Indeno(1,2,3-cd)pyrene	ug/kg	220 U	230 U	270 U	250 U
Isophorone	ug/kg	220 U	230 U	270 U	250 U
2-Methylnaphthalene	ug/kg	220 U	230 U	270 U	250 U
2-Methylphenol	ug/kg	420 U	440 U	520 U	480 U
4-Methylphenol	ug/kg	420 U	440 U	520 U	480 U
Naphthalene	ug/kg	220 U	230 U	270 U	250 U
2-Nitroaniline	ug/kg	220 U	230 U	270 U	250 U
3-Nitroaniline	ug/kg	420 U	440 U	520 U	480 U
4-Nitroaniline	ug/kg	420 U	440 U	520 U	480 U
Nitrobenzene	ug/kg	220 U	230 U	270 U	250 U
2-Nitrophenol	ug/kg	220 U	230 U	270 U	250 U
4-Nitrophenol	ug/kg	420 U	440 U	520 U	480 U
N-nitroso-di-n-propylamine	ug/kg	220 U	230 U	270 U	250 U
N-nitrosodiphenylamine	ug/kg	220 U	230 U	270 U	250 U
Pentachlorophenol	ug/kg	420 U	440 U	520 U	480 U
Phenanthrene	ug/kg	220 U	230 U	270 U	250 U
Phenol	ug/kg	420 U	440 U	520 U	480 U

Analysis/ Analyte	Units	37-__	38-__	39-__	40-__
Pyrene	ug/kg	220 U	230 U	270 U	250 U
1,2,4,5-Tetrachlorobenzene	ug/kg	220 U	230 U	270 U	250 U
2,4,5-Trichlorophenol	ug/kg	220 U	230 U	270 U	250 U
2,4,6-Trichlorophenol	ug/kg	220 U	230 U	270 U	250 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	10.6 U	12.1 U	14 UJ	13.4 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	130	19	28	27
Benzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Bromochloromethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Bromodichloromethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Bromoform	ug/kg	6.5 UJ	5.7 U	6.8 U	8.2 U
Bromomethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
2-Butanone	ug/kg	28	11 U	14 U	16 U
Carbon Disulfide	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Carbon Tetrachloride	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Chlorobenzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Chloroethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Chloroform	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Chloromethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Cyclohexane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,2-Dibromo-3-Chloropropane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Dibromochloromethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,2-Dibromoethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,2-Dichlorobenzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,3-Dichlorobenzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,4-Dichlorobenzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Dichlorodifluoromethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,1-Dichloroethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,2-Dichloroethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,1-Dichloroethene	ug/kg	6.5 UJ	5.7 U	6.8 U	8.2 U
cis-1,2-Dichloroethene	ug/kg	6.5 UJ	5.7 U	6.8 U	8.2 U
trans-1,2-Dichloroethene	ug/kg	6.5 UJ	5.7 U	6.8 U	8.2 U
1,2-Dichloropropane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
cis-1,3-Dichloropropene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
trans-1,3-Dichloropropene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Ethyl Benzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
2-Hexanone	ug/kg	13 U	11 U	14 U	16 U
Isopropylbenzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Methyl Acetate	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Methyl tert-butyl ether	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Methylcyclohexane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Methylene Chloride	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
4-Methyl-2-Pentanone	ug/kg	13 U	11 U	14 U	16 U
Styrene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U

Analysis/ Analyte	Units	37-__	38-__	39-__	40-__
1,1,2,2-Tetrachloroethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Tetrachloroethene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Toluene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,2,3-Trichlorobenzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,2,4-Trichlorobenzene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,1,1-Trichloroethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,1,2-Trichloroethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Trichloroethene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Trichlorofluoromethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1,1,2-Trichlorotrifluoroethane	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
Vinyl Chloride	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
m and/or p-Xylene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
o-Xylene	ug/kg	6.5 U	5.7 U	6.8 U	8.2 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.36 U	2.72 U	4.46 U	3.31 U

Analysis/ Analyte	Units	41-__	42-__	43-__	44-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.64 U	0.68 U	0.69 U	0.68 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	7300	12200	8130	13200
Antimony	mg/kg	2.6 U	2.8 U	2.7 U	2.8 U
Arsenic	mg/kg	9.4	8.3	7.1	7.1 U
Barium	mg/kg	285	211	223	288
Beryllium	mg/kg	1.3 U	1.4 U	1.4 U	1.4 U
Cadmium	mg/kg	1.3 U	1.4 U	1.4 U	1.4 U
Calcium	mg/kg	56400	19500	31200	33100
Chromium	mg/kg	9.0	14.8	10.8	14.8
Cobalt	mg/kg	7.0	8.9	8.2	9.1
Copper	mg/kg	13.6	23.2	16.2	24.7
Iron	mg/kg	13900	18800	14000	20400
Lead	mg/kg	8.3	16.7	13.8	15.4
Magnesium	mg/kg	12600	8000	11700	7370
Manganese	mg/kg	1400	660	498	849
Molybdenum	mg/kg	2.6 U	2.8 U	2.7 U	2.8 U
Nickel	mg/kg	17.2	24.4	18.7	23.5
Potassium	mg/kg	1830	2440	1770	2930
Selenium	mg/kg	12.8 U	13.9 U	13.5 U	14.1 U
Silver	mg/kg	2.6 U	2.8 U	2.7 U	2.8 U
Sodium	mg/kg	300	317	262	262
Thallium	mg/kg	12.8 U	13.9 U	13.5 U	14.1 U
Vanadium	mg/kg	20.6	27.5	23.2	30.6
Zinc	mg/kg	46.9	81.8	56.6	76.6
1 Percent Solid					
Solids, percent	%	77.6	72.0	73.5	70.8
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	220 U	240 U	240 U	230 U
Acenaphthylene	ug/kg	220 U	240 U	240 U	230 U
Acetophenone	ug/kg	420 U	460 U	470 U	450 U
Anthracene	ug/kg	220 U	240 U	240 U	230 U
Atrazine	ug/kg	420 U	460 U	470 U	450 U
Benzaldehyde	ug/kg	420 U	460 U	470 U	450 U
Benzo(a)anthracene	ug/kg	220 U	240 U	240 U	230 U
Benzo(a)pyrene	ug/kg	220 U	240 U	240 U	230 U
Benzo(b)fluoranthene	ug/kg	220 U	240 U	240 U	230 U
Benzo(g,h,i)perylene	ug/kg	220 U	240 U	240 U	230 U
Benzo(k)fluoranthene	ug/kg	220 U	240 U	240 U	230 U
Biphenyl	ug/kg	220 U	240 U	240 U	230 U
bis(2-Chloroethoxy)methane	ug/kg	220 U	240 U	240 U	230 U
bis(2-Chloroethyl)ether	ug/kg	420 U	460 U	470 U	450 U
bis(2-Chloroisopropyl)ether	ug/kg	420 U	460 U	470 U	450 U
bis(2-Ethylhexyl)phthalate	ug/kg	220 U	240 U	240 U	230 U
4-Bromophenyl-phenylether	ug/kg	220 U	240 U	240 U	230 U

Analysis/ Analyte	Units	41-__	42-__	43-__	44-__
Butylbenzylphthalate	ug/kg	220 U	240 U	240 U	230 U
Caprolactam	ug/kg	420 U	460 U	470 U	450 U
Carbazole	ug/kg	420 U	460 U	470 U	450 U
4-Chloro-3-methylphenol	ug/kg	220 U	240 U	240 U	230 U
4-Chloroaniline	ug/kg	420 U	460 U	470 U	450 U
2-Chloronaphthalene	ug/kg	220 U	240 U	240 U	230 U
2-Chlorophenol	ug/kg	220 U	240 U	240 U	230 U
4-Chlorophenyl-phenylether	ug/kg	220 U	240 U	240 U	230 U
Chrysene	ug/kg	220 U	240 U	240 U	230 U
Di-n-butylphthalate	ug/kg	220 U	240 U	240 U	230 U
Di-n-octylphthalate	ug/kg	420 U	460 U	470 U	450 U
Dibenz(a,h)anthracene	ug/kg	220 U	240 U	240 U	230 U
Dibenzofuran	ug/kg	220 U	240 U	240 U	230 U
3,3'-Dichlorobenzidine	ug/kg	420 U	460 U	470 U	450 U
2,4-Dichlorophenol	ug/kg	220 U	240 U	240 U	230 U
Diethylphthalate	ug/kg	220 U	240 U	240 U	230 U
2,4-Dimethylphenol	ug/kg	220 U	240 U	240 U	230 U
Dimethylphthalate	ug/kg	740	650	950	640
4,6-Dinitro-2-methylphenol	ug/kg	420 U	460 U	470 U	450 U
2,4-Dinitrophenol	ug/kg	420 U	460 U	470 U	450 U
2,4-Dinitrotoluene	ug/kg	220 U	240 U	240 U	230 U
2,6-Dinitrotoluene	ug/kg	220 U	240 U	240 U	230 U
Fluoranthene	ug/kg	220 U	240 U	240 U	230 U
Fluorene	ug/kg	220 U	240 U	240 U	230 U
Hexachlorobenzene	ug/kg	220 U	240 U	240 U	230 U
Hexachlorobutadiene	ug/kg	220 U	240 U	240 U	230 U
Hexachlorocyclopentadiene	ug/kg	420 U	460 U	470 U	450 U
Hexachloroethane	ug/kg	220 U	240 U	240 U	230 U
Indeno(1,2,3-cd)pyrene	ug/kg	220 U	240 U	240 U	230 U
Isophorone	ug/kg	220 U	240 U	240 U	230 U
2-Methylnaphthalene	ug/kg	220 U	240 U	240 U	230 U
2-Methylphenol	ug/kg	420 U	460 U	470 U	450 U
4-Methylphenol	ug/kg	420 U	460 U	470 U	450 U
Naphthalene	ug/kg	220 U	240 U	240 U	230 U
2-Nitroaniline	ug/kg	220 U	240 U	240 U	230 U
3-Nitroaniline	ug/kg	420 U	460 U	470 U	450 U
4-Nitroaniline	ug/kg	420 U	460 U	470 U	450 U
Nitrobenzene	ug/kg	220 U	240 U	240 U	230 U
2-Nitrophenol	ug/kg	220 U	240 U	240 U	230 U
4-Nitrophenol	ug/kg	420 U	460 U	470 U	450 U
N-nitroso-di-n-propylamine	ug/kg	220 U	240 U	240 U	230 U
N-nitrosodiphenylamine	ug/kg	220 U	240 U	240 U	230 U
Pentachlorophenol	ug/kg	420 U	460 U	470 U	450 U
Phenanthrene	ug/kg	220 U	240 U	240 U	230 U
Phenol	ug/kg	420 U	460 U	470 U	450 U

Analysis/ Analyte	Units	41-__	42-__	43-__	44-__
Pyrene	ug/kg	220 U	240 U	240 U	230 U
1,2,4,5-Tetrachlorobenzene	ug/kg	220 U	240 U	240 U	230 U
2,4,5-Trichlorophenol	ug/kg	220 U	240 U	240 U	230 U
2,4,6-Trichlorophenol	ug/kg	220 U	240 U	240 U	230 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	11.8 U	11.8 U	12.6 U	11.4 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	17	40	22	77
Benzene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Bromochloromethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Bromodichloromethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Bromoform	ug/kg	5.4 UJ	7.0 UJ	7.6 UJ	7.4 UJ
Bromomethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
2-Butanone	ug/kg	11 U	14 U	15 U	15 U
Carbon Disulfide	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Carbon Tetrachloride	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
Chlorobenzene	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
Chloroethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Chloroform	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Chloromethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Cyclohexane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1,2-Dibromo-3-Chloropropane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Dibromochloromethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1,2-Dibromoethane	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
1,2-Dichlorobenzene	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
1,3-Dichlorobenzene	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
1,4-Dichlorobenzene	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
Dichlorodifluoromethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1,1-Dichloroethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1,2-Dichloroethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1,1-Dichloroethene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
cis-1,2-Dichloroethene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
trans-1,2-Dichloroethene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1,2-Dichloropropane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
cis-1,3-Dichloropropene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
trans-1,3-Dichloropropene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Ethyl Benzene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
2-Hexanone	ug/kg	11 U	14 U	15 U	15 U
Isopropylbenzene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Methyl Acetate	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
Methyl tert-butyl ether	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
Methylcyclohexane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Methylene Chloride	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
4-Methyl-2-Pentanone	ug/kg	11 U	14 U	15 U	15 U
Styrene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U

Analysis/ Analyte	Units	41-__	42-__	43-__	44-__
1,1,2,2-Tetrachloroethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Tetrachloroethene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Toluene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1,2,3-Trichlorobenzene	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
1,2,4-Trichlorobenzene	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
1,1,1-Trichloroethane	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
1,1,2-Trichloroethane	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Trichloroethene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
Trichlorofluoromethane	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
1,1,2-Trichlorotrifluoroethane	ug/kg	5.4 U	7.0 UJ	7.6 U	7.4 U
Vinyl Chloride	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
m and/or p-Xylene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
o-Xylene	ug/kg	5.4 U	7.0 U	7.6 U	7.4 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.76 U	3.04 U	2.81 U	2.71 U

Analysis/ Analyte	Units	45-__	46-__	47-__	48-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.66 U	1.7	0.59 U	0.64 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	8960	12000	10800	9530
Antimony	mg/kg	2.6 U	2.7 U	2.4 U	2.6 U
Arsenic	mg/kg	7.1	8.2	9.9	6.7
Barium	mg/kg	215	206	206	145
Beryllium	mg/kg	1.3 U	1.4 U	1.2 U	1.3 U
Cadmium	mg/kg	1.3 U	1.4 U	1.2 U	1.3 U
Calcium	mg/kg	27200	20900	16000	20100
Chromium	mg/kg	11.7	15.2	13.2	11.7
Cobalt	mg/kg	7.6	9.1	7.4	6.6
Copper	mg/kg	17.2	22.7	20.4	14.5
Iron	mg/kg	17000	17500	15500	14700
Lead	mg/kg	12.3	13.1	85.6	16.9
Magnesium	mg/kg	10600	8580	7380	6180
Manganese	mg/kg	844	640	552	506
Molybdenum	mg/kg	2.6 U	2.7 U	2.4 U	2.6 U
Nickel	mg/kg	20.3	21.1	18.3	18.1
Potassium	mg/kg	1680	1890	1560	1350
Selenium	mg/kg	13.2 U	13.6 U	12.0 U	12.9 U
Silver	mg/kg	2.6 U	2.7 U	2.4 U	2.6 U
Sodium	mg/kg	792	383	1490	524
Thallium	mg/kg	13.2 U	13.6 U	12.0 U	12.9 U
Vanadium	mg/kg	24.8	28.3	26.0	23.5
Zinc	mg/kg	56.9	78.6	119	55.3
1 Percent Solid					
Solids, percent	%	75.1	73.2	83.5	77.3
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	230 U	230 U	200 U	230 U
Acenaphthylene	ug/kg	230 U	230 U	200 U	230 U
Acetophenone	ug/kg	440 U	450 U	400 U	440 U
Anthracene	ug/kg	230 U	230 U	200 U	230 U
Atrazine	ug/kg	440 U	450 U	400 U	440 U
Benzaldehyde	ug/kg	440 U	450 U	400 U	440 U
Benzo(a)anthracene	ug/kg	230 U	230 U	200 U	230 U
Benzo(a)pyrene	ug/kg	230 U	230 U	200 U	230 U
Benzo(b)fluoranthene	ug/kg	230 U	230 U	200 U	230 U
Benzo(g,h,i)perylene	ug/kg	230 U	230 U	200 U	230 U
Benzo(k)fluoranthene	ug/kg	230 U	230 U	200 U	230 U
Biphenyl	ug/kg	230 U	230 U	200 U	230 U
bis(2-Chloroethoxy)methane	ug/kg	230 U	230 U	200 U	230 U
bis(2-Chloroethyl)ether	ug/kg	440 U	450 U	400 U	440 U
bis(2-Chloroisopropyl)ether	ug/kg	440 U	450 U	400 U	440 U
bis(2-Ethylhexyl)phthalate	ug/kg	230 U	230 U	200 U	230 U
4-Bromophenyl-phenylether	ug/kg	230 U	230 U	200 U	230 U

Analysis/ Analyte	Units	45-__	46-__	47-__	48-__
Butylbenzylphthalate	ug/kg	230 U	230 U	200 U	230 U
Caprolactam	ug/kg	440 U	450 U	400 U	440 U
Carbazole	ug/kg	440 U	450 U	400 U	440 U
4-Chloro-3-methylphenol	ug/kg	230 U	230 U	200 U	230 U
4-Chloroaniline	ug/kg	440 U	450 U	400 U	440 U
2-Chloronaphthalene	ug/kg	230 U	230 U	200 U	230 U
2-Chlorophenol	ug/kg	230 U	230 U	200 U	230 U
4-Chlorophenyl-phenylether	ug/kg	230 U	230 U	200 U	230 U
Chrysene	ug/kg	230 U	230 U	200 U	230 U
Di-n-butylphthalate	ug/kg	230 U	230 U	200 U	230 U
Di-n-octylphthalate	ug/kg	440 U	450 U	400 U	440 U
Dibenz(a,h)anthracene	ug/kg	230 U	230 U	200 U	230 U
Dibenzofuran	ug/kg	230 U	230 U	200 U	230 U
3,3'-Dichlorobenzidine	ug/kg	440 U	450 U	400 U	440 U
2,4-Dichlorophenol	ug/kg	230 U	230 U	200 U	230 U
Diethylphthalate	ug/kg	230 U	230 U	200 U	230 U
2,4-Dimethylphenol	ug/kg	230 U	230 U	200 U	230 U
Dimethylphthalate	ug/kg	530	570	340	570
4,6-Dinitro-2-methylphenol	ug/kg	440 U	450 U	400 U	440 U
2,4-Dinitrophenol	ug/kg	440 U	450 U	400 U	440 U
2,4-Dinitrotoluene	ug/kg	230 U	230 U	200 U	230 U
2,6-Dinitrotoluene	ug/kg	230 U	230 U	200 U	230 U
Fluoranthene	ug/kg	230 U	230 U	200 U	230 U
Fluorene	ug/kg	230 U	230 U	200 U	230 U
Hexachlorobenzene	ug/kg	230 U	230 U	200 U	230 U
Hexachlorobutadiene	ug/kg	230 U	230 U	200 U	230 U
Hexachlorocyclopentadiene	ug/kg	440 U	450 U	400 U	440 U
Hexachloroethane	ug/kg	230 U	230 U	200 U	230 U
Indeno(1,2,3-cd)pyrene	ug/kg	230 U	230 U	200 U	230 U
Isophorone	ug/kg	230 U	230 U	200 U	230 U
2-Methylnaphthalene	ug/kg	230 U	230 U	200 U	230 U
2-Methylphenol	ug/kg	440 U	450 U	400 U	440 U
4-Methylphenol	ug/kg	440 U	450 U	400 U	440 U
Naphthalene	ug/kg	230 U	230 U	200 U	230 U
2-Nitroaniline	ug/kg	230 U	230 U	200 U	230 U
3-Nitroaniline	ug/kg	440 U	450 U	400 U	440 U
4-Nitroaniline	ug/kg	440 U	450 U	400 U	440 U
Nitrobenzene	ug/kg	230 U	230 U	200 U	230 U
2-Nitrophenol	ug/kg	230 U	230 U	200 U	230 U
4-Nitrophenol	ug/kg	440 U	450 U	400 U	440 U
N-nitroso-di-n-propylamine	ug/kg	230 U	230 U	200 U	230 U
N-nitrosodiphenylamine	ug/kg	230 U	230 U	200 U	230 U
Pentachlorophenol	ug/kg	440 U	450 U	400 U	440 U
Phenanthrene	ug/kg	230 U	230 U	230	230 U
Phenol	ug/kg	440 U	450 U	400 U	440 U

Analysis/ Analyte	Units	45-__	46-__	47-__	48-__
Pyrene	ug/kg	230 U	230 U	200 U	230 U
1,2,4,5-Tetrachlorobenzene	ug/kg	230 U	230 U	200 U	230 U
2,4,5-Trichlorophenol	ug/kg	230 U	230 U	200 U	230 U
2,4,6-Trichlorophenol	ug/kg	230 U	230 U	200 U	230 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	11.4 U	11.8 U	9.84 U	11 U
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	69 J	11 U	16	9.6 U
Benzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Bromochloromethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Bromodichloromethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Bromoform	ug/kg	N/A R	5.7 UJ	5.3 UJ	4.8 UJ
Bromomethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
2-Butanone	ug/kg	N/A R	11 U	11 U	9.6 U
Carbon Disulfide	ug/kg	30 J	5.7 U	5.3 U	4.8 U
Carbon Tetrachloride	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Chlorobenzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Chloroethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Chloroform	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Chloromethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Cyclohexane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,2-Dibromo-3-Chloropropane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Dibromochloromethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,2-Dibromoethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,2-Dichlorobenzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,3-Dichlorobenzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,4-Dichlorobenzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Dichlorodifluoromethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,1-Dichloroethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,2-Dichloroethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,1-Dichloroethene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
cis-1,2-Dichloroethene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
trans-1,2-Dichloroethene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,2-Dichloropropane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
cis-1,3-Dichloropropene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
trans-1,3-Dichloropropene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Ethyl Benzene	ug/kg	N/A R	5.7 U	5.3	4.8 U
2-Hexanone	ug/kg	N/A R	11 U	11 U	9.6 U
Isopropylbenzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Methyl Acetate	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Methyl tert-butyl ether	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Methylcyclohexane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Methylene Chloride	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
4-Methyl-2-Pentanone	ug/kg	N/A R	11 U	11 U	9.6 U
Styrene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U

Analysis/ Analyte	Units	45-__	46-__	47-__	48-__
1,1,2,2-Tetrachloroethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Tetrachloroethene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Toluene	ug/kg	6.5 J	5.7 U	5.3 U	4.8 U
1,2,3-Trichlorobenzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,2,4-Trichlorobenzene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,1,1-Trichloroethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,1,2-Trichloroethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Trichloroethene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Trichlorofluoromethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1,1,2-Trichlorotrifluoroethane	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
Vinyl Chloride	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
m and/or p-Xylene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
o-Xylene	ug/kg	N/A R	5.7 U	5.3 U	4.8 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	77.8	4.06	1.93 U	2.96 U

Analysis/ Analyte	Units	49-__	50-__	51-__	52-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	0.69 U	0.62 U	0.62 U	0.67 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	11600	10700	5760	7340
Antimony	mg/kg	2.9 U	2.5 U	2.3 U	2.4 U
Arsenic	mg/kg	9.9	7.5	9.7	14.2
Barium	mg/kg	196	164	116	110
Beryllium	mg/kg	1.4 U	1.3 U	1.1 U	1.2 U
Cadmium	mg/kg	1.4 U	1.3 U	1.6	2.5
Calcium	mg/kg	28100	4370	46200	43400
Chromium	mg/kg	16.6	14.0	9.2	11.6
Cobalt	mg/kg	9.3	7.5	5.4	5.7
Copper	mg/kg	79.9	14.1	38.5	53.4
Iron	mg/kg	33400	17500	14000	17400
Lead	mg/kg	21.3	12.8	116	183
Magnesium	mg/kg	4330	3970	4520	4510
Manganese	mg/kg	425	300	296	237
Molybdenum	mg/kg	2.9 U	2.5 U	2.3 U	2.4 U
Nickel	mg/kg	23.5	21.5	16.9	20.0
Potassium	mg/kg	2340	1510	1020	1330
Selenium	mg/kg	14.4 U	12.6 U	11.3 U	12.2 U
Silver	mg/kg	2.9 U	2.5 U	2.3 U	2.4 U
Sodium	mg/kg	132	145	275	341
Thallium	mg/kg	14.4 U	12.6 U	11.3 U	12.2 U
Vanadium	mg/kg	31.2	28.8	15.7	17.8
Zinc	mg/kg	84.3	51.4	256	337
1 Percent Solid					
Solids, percent	%	69.3	79.3	87.6	79.7
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	970	220 U	210 U	42000
Acenaphthylene	ug/kg	2700	220 U	610	2300
Acetophenone	ug/kg	470 U	420 U	410 U	410 U
Anthracene	ug/kg	8100	220 U	260	17000
Atrazine	ug/kg	470 U	420 U	410 U	410 U
Benzaldehyde	ug/kg	470 U	420 U	410 U	410 U
Benzo(a)anthracene	ug/kg	32000	220 U	500	9400
Benzo(a)pyrene	ug/kg	21000	220 U	1200	24000 J
Benzo(b)fluoranthene	ug/kg	32000	220 U	1100	19000 J
Benzo(g,h,i)perylene	ug/kg	18000	220 U	970	2400
Benzo(k)fluoranthene	ug/kg	12000	220 U	210 U	1600
Biphenyl	ug/kg	900	220 U	210 U	9000
bis(2-Chloroethoxy)methane	ug/kg	240 U	220 U	210 U	210 U
bis(2-Chloroethyl)ether	ug/kg	470 U	420 U	410 U	410 U
bis(2-Chloroisopropyl)ether	ug/kg	470 U	420 U	410 U	410 U
bis(2-Ethylhexyl)phthalate	ug/kg	240 U	220 U	210 U	210 U
4-Bromophenyl-phenylether	ug/kg	240 U	220 U	210 U	210 U

Analysis/ Analyte	Units	49-__	50-__	51-__	52-__
Butylbenzylphthalate	ug/kg	240 U	220 U	210 U	210 U
Caprolactam	ug/kg	470 U	420 U	410 U	410 U
Carbazole	ug/kg	470 U	420 U	410 U	410 U
4-Chloro-3-methylphenol	ug/kg	240 U	220 U	210 U	210 U
4-Chloroaniline	ug/kg	470 U	420 U	410 U	410 U
2-Chloronaphthalene	ug/kg	240 U	220 U	210 U	210 U
2-Chlorophenol	ug/kg	240 U	220 U	210 U	210 U
4-Chlorophenyl-phenylether	ug/kg	240 U	220 U	210 U	210 U
Chrysene	ug/kg	33000	220 U	660	9300
Di-n-butylphthalate	ug/kg	240 U	220 U	210 U	210 U
Di-n-octylphthalate	ug/kg	470 U	420 U	410 U	410 U
Dibenz(a,h)anthracene	ug/kg	4700 J	220 U	260	770
Dibenzofuran	ug/kg	250	220 U	210 U	2300
3,3'-Dichlorobenzidine	ug/kg	470 U	420 U	410 U	410 U
2,4-Dichlorophenol	ug/kg	240 U	220 U	210 U	210 U
Diethylphthalate	ug/kg	240 U	220 U	210 U	210 U
2,4-Dimethylphenol	ug/kg	240 U	220 U	210 U	210 U
Dimethylphthalate	ug/kg	460	700	360	280
4,6-Dinitro-2-methylphenol	ug/kg	470 UJ	420 U	410 U	410 UJ
2,4-Dinitrophenol	ug/kg	470 UJ	420 U	410 U	410 UJ
2,4-Dinitrotoluene	ug/kg	240 U	220 U	210 U	210 U
2,6-Dinitrotoluene	ug/kg	240 U	220 U	210 U	210 U
Fluoranthene	ug/kg	49000	220 U	530	18000
Fluorene	ug/kg	7600	220 U	320	24000
Hexachlorobenzene	ug/kg	240 U	220 U	210 U	210 U
Hexachlorobutadiene	ug/kg	240 U	220 U	210 U	210 U
Hexachlorocyclopentadiene	ug/kg	470 UJ	420 U	410 UJ	410 UJ
Hexachloroethane	ug/kg	240 U	220 U	210 U	210 U
Indeno(1,2,3-cd)pyrene	ug/kg	14000	220 U	670	1800
Isophorone	ug/kg	240 UJ	220 U	210 U	210 U
2-Methylnaphthalene	ug/kg	1900	220 U	1200	440000 J
2-Methylphenol	ug/kg	470 U	420 U	410 U	410 U
4-Methylphenol	ug/kg	470 U	420 U	410 U	410 U
Naphthalene	ug/kg	1400	220 U	1900	570000 J
2-Nitroaniline	ug/kg	240 UJ	220 U	210 U	210 UJ
3-Nitroaniline	ug/kg	470 UJ	420 U	410 U	410 UJ
4-Nitroaniline	ug/kg	470 UJ	420 U	410 U	410 UJ
Nitrobenzene	ug/kg	240 U	220 U	210 U	210 U
2-Nitrophenol	ug/kg	240 U	220 U	210 U	210 U
4-Nitrophenol	ug/kg	470 UJ	420 U	410 U	410 UJ
N-nitroso-di-n-propylamine	ug/kg	240 U	220 U	210 U	210 U
N-nitrosodiphenylamine	ug/kg	240 U	220 U	210 U	210 U
Pentachlorophenol	ug/kg	470 U	420 U	410 U	410 U
Phenanthrene	ug/kg	65000	220 U	1200	74000
Phenol	ug/kg	470 U	420 U	410 U	410 U

Analysis/ Analyte	Units	49-__	50-__	51-__	52-__
Pyrene	ug/kg	84000	220 U	1100	30000
1,2,4,5-Tetrachlorobenzene	ug/kg	240 U	220 U	210 U	210 U
2,4,5-Trichlorophenol	ug/kg	240 U	220 U	210 U	210 U
2,4,6-Trichlorophenol	ug/kg	240 U	220 U	210 U	210 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	1270	10.6 U	240	2930 J
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	22	12	61	3000 U
Benzene	ug/kg	7.0 U	6.0 U	640	3300
Bromochloromethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
Bromodichloromethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
Bromoform	ug/kg	7.0 UJ	6.0 UJ	300 U	1500 U
Bromomethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
2-Butanone	ug/kg	14 U	12 U	28 U	3000 U
Carbon Disulfide	ug/kg	7.0 U	6.0 U	14 U	1500 U
Carbon Tetrachloride	ug/kg	7.0 U	6.0 U	14 U	1500 U
Chlorobenzene	ug/kg	7.0 U	6.0 UJ	14 U	1500 U
Chloroethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
Chloroform	ug/kg	7.0 U	6.0 U	14 U	1500 U
Chloromethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
Cyclohexane	ug/kg	7.0 U	6.0 U	15 J	1500 U
1,2-Dibromo-3-Chloropropane	ug/kg	7.0 U	6.0 U	300 U	1500 U
Dibromochloromethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,2-Dibromoethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,2-Dichlorobenzene	ug/kg	7.0 U	6.0 UJ	300 U	1500 U
1,3-Dichlorobenzene	ug/kg	7.0 U	6.0 UJ	300 U	1500 U
1,4-Dichlorobenzene	ug/kg	7.0 U	6.0 UJ	300 U	1500 U
Dichlorodifluoromethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,1-Dichloroethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,2-Dichloroethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,1-Dichloroethene	ug/kg	7.0 U	6.0 U	14 U	1500 U
cis-1,2-Dichloroethene	ug/kg	7.0 U	6.0 U	14 U	1500 U
trans-1,2-Dichloroethene	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,2-Dichloropropane	ug/kg	7.0 U	6.0 U	14 U	1500 U
cis-1,3-Dichloropropene	ug/kg	7.0 U	6.0 U	14 U	1500 U
trans-1,3-Dichloropropene	ug/kg	7.0 U	6.0 U	14 U	1500 U
Ethyl Benzene	ug/kg	7.0 U	6.0 U	16	8400
2-Hexanone	ug/kg	14 U	12 U	28 U	3000 U
Isopropylbenzene	ug/kg	7.0 U	6.0 U	63	1500 U
Methyl Acetate	ug/kg	7.0 U	6.0 U	14 U	1500 U
Methyl tert-butyl ether	ug/kg	7.0 U	6.0 U	14 U	1500 U
Methylcyclohexane	ug/kg	7.0 U	6.0 U	25	1500 U
Methylene Chloride	ug/kg	7.0 U	6.0 U	14 U	1500 U
4-Methyl-2-Pentanone	ug/kg	14 U	12 U	28 U	3000 U
Styrene	ug/kg	7.0 U	6.0 U	14 U	1500 U

Analysis/ Analyte	Units	49-__	50-__	51-__	52-__
1,1,2,2-Tetrachloroethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
Tetrachloroethene	ug/kg	7.0 U	6.0 U	14 U	1500 U
Toluene	ug/kg	7.0 U	6.0 U	49	1500
1,2,3-Trichlorobenzene	ug/kg	7.0 U	6.0 UJ	300 U	1500 U
1,2,4-Trichlorobenzene	ug/kg	7.0 U	6.0 UJ	300 U	1500 U
1,1,1-Trichloroethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,1,2-Trichloroethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
Trichloroethene	ug/kg	7.0 U	6.0 U	14 U	1500 U
Trichlorofluoromethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
1,1,2-Trichlorotrifluoroethane	ug/kg	7.0 U	6.0 U	14 U	1500 U
Vinyl Chloride	ug/kg	7.0 U	6.0 U	14 U	1500 U
m and/or p-Xylene	ug/kg	7.0 U	6.0 U	240	5300
o-Xylene	ug/kg	7.0 U	6.0 U	64	5700
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.86 U	2.4 U	27.2	35.9

Analysis/ Analyte	Units	53-__	54-__	55-__	56-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	7.1	0.70 U	2.1	0.53 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	4400	9300	9220	6890
Antimony	mg/kg	2.3 U	2.8 U	3.3 U	2.3 UJ
Arsenic	mg/kg	11.4	15.2	8.2 U	5.8 U
Barium	mg/kg	92.7	144	88.8	135
Beryllium	mg/kg	1.2 U	1.9	1.6 U	1.2 U
Cadmium	mg/kg	1.6	3.9	1.6 U	1.2 U
Calcium	mg/kg	98600	21800	114000	30400 J
Chromium	mg/kg	31.9	14.8	9.5	10.2
Cobalt	mg/kg	5.0	9.5	6.2	5.6
Copper	mg/kg	117	114	26.2	12.0
Iron	mg/kg	41300	22200	38500	12000
Lead	mg/kg	124	178	43.2	26.9
Magnesium	mg/kg	5940	1110	4430	5220
Manganese	mg/kg	286	169	390	348
Molybdenum	mg/kg	2.3 U	2.8 U	3.3 U	2.3 U
Nickel	mg/kg	17.1	32.2	20.5	14.6
Potassium	mg/kg	791	1030	1610	1120
Selenium	mg/kg	11.7 U	14.0 U	17.6	11.6 U
Silver	mg/kg	2.3 U	2.8 U	3.3 U	2.3 U
Sodium	mg/kg	180	467	189	146
Thallium	mg/kg	11.7 U	14.0 U	16.4 U	11.6 U
Vanadium	mg/kg	18.5	21.4	20.5	18.0
Zinc	mg/kg	127	782	124	82.4
1 Percent Solid					
Solids, percent	%	84.4	70.8	58.6	83.9
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	190 U	260	360	190 U
Acenaphthylene	ug/kg	630	490	550	270
Acetophenone	ug/kg	360 U	470 U	530 U	370 U
Anthracene	ug/kg	330	610	1100	190 U
Atrazine	ug/kg	360 U	470 U	530 U	370 U
Benzaldehyde	ug/kg	360 U	470 U	530 U	370 U
Benzo(a)anthracene	ug/kg	1800	3200	2100	460
Benzo(a)pyrene	ug/kg	2400	3300	2200	660
Benzo(b)fluoranthene	ug/kg	2800	4900	2500	700
Benzo(g,h,i)perylene	ug/kg	2300	1900	1200	460
Benzo(k)fluoranthene	ug/kg	890	1300	770	190
Biphenyl	ug/kg	190 U	240 U	270 U	190 U
bis(2-Chloroethoxy)methane	ug/kg	190 U	240 U	270 U	190 U
bis(2-Chloroethyl)ether	ug/kg	360 U	470 U	530 U	370 U
bis(2-Chloroisopropyl)ether	ug/kg	360 U	470 U	530 U	370 U
bis(2-Ethylhexyl)phthalate	ug/kg	190 U	240 U	270 U	190 U
4-Bromophenyl-phenylether	ug/kg	190 U	240 U	270 U	190 U

Analysis/ Analyte	Units	53-__	54-__	55-__	56-__
Butylbenzylphthalate	ug/kg	190 U	240 U	270 U	190 U
Caprolactam	ug/kg	360 U	470 U	530 U	370 U
Carbazole	ug/kg	360 U	470 U	530 U	370 U
4-Chloro-3-methylphenol	ug/kg	190 U	240 U	270 U	190 U
4-Chloroaniline	ug/kg	360 U	470 U	530 U	370 U
2-Chloronaphthalene	ug/kg	190 U	240 U	270 U	190 U
2-Chlorophenol	ug/kg	190 U	240 U	270 U	190 U
4-Chlorophenyl-phenylether	ug/kg	190 U	240 U	270 U	190 U
Chrysene	ug/kg	2300	4900	2700	560
Di-n-butylphthalate	ug/kg	190 U	240 U	270 U	190 U
Di-n-octylphthalate	ug/kg	360 U	470 U	530 U	370 U
Dibenz(a,h)anthracene	ug/kg	570	570	380	190 U
Dibenzofuran	ug/kg	190 U	240 U	270 U	190 U
3,3'-Dichlorobenzidine	ug/kg	360 U	470 U	530 U	370 U
2,4-Dichlorophenol	ug/kg	190 U	240 U	270 U	190 U
Diethylphthalate	ug/kg	190 U	240 U	270 U	190 U
2,4-Dimethylphenol	ug/kg	190 U	240 U	270 U	190 U
Dimethylphthalate	ug/kg	270	250	290	320
4,6-Dinitro-2-methylphenol	ug/kg	360 U	470 U	530 U	370 U
2,4-Dinitrophenol	ug/kg	360 U	470 U	530 U	370 U
2,4-Dinitrotoluene	ug/kg	190 U	240 U	270 U	190 U
2,6-Dinitrotoluene	ug/kg	190 U	240 U	270 U	190 U
Fluoranthene	ug/kg	2000	3700	4100	330
Fluorene	ug/kg	190 U	280	1300	190 U
Hexachlorobenzene	ug/kg	190 U	240 U	270 U	190 U
Hexachlorobutadiene	ug/kg	190 U	240 U	270 U	190 U
Hexachlorocyclopentadiene	ug/kg	360 UJ	470 UJ	530 UJ	370 UJ
Hexachloroethane	ug/kg	190 U	240 U	270 U	190 U
Indeno(1,2,3-cd)pyrene	ug/kg	1500	1500	1000	340
Isophorone	ug/kg	190 U	240 U	270 U	190 U
2-Methylnaphthalene	ug/kg	260	270	270 U	190 U
2-Methylphenol	ug/kg	360 U	470 U	530 U	370 U
4-Methylphenol	ug/kg	360 U	470 U	530 U	370 U
Naphthalene	ug/kg	510	330	270 U	220
2-Nitroaniline	ug/kg	190 U	240 U	270 U	190 U
3-Nitroaniline	ug/kg	360 U	470 U	530 U	370 U
4-Nitroaniline	ug/kg	360 U	470 U	530 U	370 U
Nitrobenzene	ug/kg	190 U	240 U	270 U	190 U
2-Nitrophenol	ug/kg	190 U	240 U	270 U	190 U
4-Nitrophenol	ug/kg	360 U	470 U	530 U	370 U
N-nitroso-di-n-propylamine	ug/kg	190 U	240 U	270 U	190 U
N-nitrosodiphenylamine	ug/kg	190 U	240 U	270 U	190 U
Pentachlorophenol	ug/kg	360 U	470 U	530 U	370 U
Phenanthrene	ug/kg	1300	3100	6100	190 U
Phenol	ug/kg	360 U	470 U	530 U	370 U

Analysis/ Analyte	Units	53-__	54-__	55-__	56-__
Pyrene	ug/kg	3000	7500	6400	790
1,2,4,5-Tetrachlorobenzene	ug/kg	190 U	240 U	270 U	190 U
2,4,5-Trichlorophenol	ug/kg	190 U	240 U	270 U	190 U
2,4,6-Trichlorophenol	ug/kg	190 U	240 U	270 U	190 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	308	130	5950	94.8
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	29	29	92	25
Benzene	ug/kg	6.1 U	9.0 U	13 U	4.8 U
Bromochloromethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Bromodichloromethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Bromoform	ug/kg	6.1 UJ	N/A R	13 UJ	4.8 UJ
Bromomethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
2-Butanone	ug/kg	12 U	17 U	26 U	9.5 U
Carbon Disulfide	ug/kg	6.1 U	8.4 U	48	4.8 U
Carbon Tetrachloride	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Chlorobenzene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Chloroethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Chloroform	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Chloromethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Cyclohexane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,2-Dibromo-3-Chloropropane	ug/kg	6.1 U	N/A R	13 U	4.8 U
Dibromochloromethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,2-Dibromoethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,2-Dichlorobenzene	ug/kg	6.1 U	N/A R	13 U	4.8 U
1,3-Dichlorobenzene	ug/kg	6.1 U	N/A R	13 U	4.8 U
1,4-Dichlorobenzene	ug/kg	6.1 U	N/A R	13 U	4.8 U
Dichlorodifluoromethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,1-Dichloroethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,2-Dichloroethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,1-Dichloroethene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
cis-1,2-Dichloroethene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
trans-1,2-Dichloroethene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,2-Dichloropropane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
cis-1,3-Dichloropropene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
trans-1,3-Dichloropropene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Ethyl Benzene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
2-Hexanone	ug/kg	12 U	17 U	26 U	9.5 U
Isopropylbenzene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Methyl Acetate	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Methyl tert-butyl ether	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Methylcyclohexane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Methylene Chloride	ug/kg	6.1 U	8.4 U	13 U	4.8 U
4-Methyl-2-Pentanone	ug/kg	12 U	17 U	26 U	9.5 U
Styrene	ug/kg	6.1 U	8.4 U	13 U	4.8 U

Analysis/ Analyte	Units	53-__	54-__	55-__	56-__
1,1,2,2-Tetrachloroethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Tetrachloroethene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Toluene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,2,3-Trichlorobenzene	ug/kg	6.1 U	N/A R	13 U	4.8 U
1,2,4-Trichlorobenzene	ug/kg	6.1 U	N/A R	13 U	4.8 U
1,1,1-Trichloroethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,1,2-Trichloroethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Trichloroethene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Trichlorofluoromethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1,1,2-Trichlorotrifluoroethane	ug/kg	6.1 U	8.4 U	13 U	4.8 U
Vinyl Chloride	ug/kg	6.1 U	8.4 U	13 U	4.8 U
m and/or p-Xylene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
o-Xylene	ug/kg	6.1 U	8.4 U	13 U	4.8 U
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	2.45 U	4.01 U	47.9	2.62 U

Analysis/ Analyte	Units	57-__	58-__	59-__	60-__
1 Cyanide, Total in Soil					
Cyanide	mg/kg	4.1	0.84	0.74	0.71 U
1 Metals in Solids by ICP-AES					
Aluminum	mg/kg	5860	6120	8490	15100
Antimony	mg/kg	2.9 U	2.3 U	2.7 U	2.9 U
Arsenic	mg/kg	38.6	10.1	7.7	7.1 U
Barium	mg/kg	83.1	112	87.7	312
Beryllium	mg/kg	1.5 U	1.2 U	1.4 U	1.4 U
Cadmium	mg/kg	9.0	2.5	2.1	1.4 U
Calcium	mg/kg	8340	57400	65800	18700
Chromium	mg/kg	7.5	11.1	11.2	19.7
Cobalt	mg/kg	10.1	5.0	4.6	8.9
Copper	mg/kg	54.0	39.6	20.9	27.0
Iron	mg/kg	15000	14500	13800	21500
Lead	mg/kg	97.4	246	91.7	14.2
Magnesium	mg/kg	1050	5300	5010	9380
Manganese	mg/kg	203	275	168	472
Molybdenum	mg/kg	2.9 U	2.3 U	2.7 U	2.9 U
Nickel	mg/kg	24.2	17.4	13.6	24.7
Potassium	mg/kg	667	855	1130	2210
Selenium	mg/kg	14.6 U	11.7 U	13.7 U	14.3 U
Silver	mg/kg	2.9 U	2.3 U	2.7 U	2.9 U
Sodium	mg/kg	207	234	230	212
Thallium	mg/kg	14.6 U	11.7 U	13.7 U	14.3 U
Vanadium	mg/kg	21.8	18.3	18.8	31.6
Zinc	mg/kg	469	374	376	82.0
1 Percent Solid					
Solids, percent	%	65.0	85.4	73.0	69.9
1 Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg	280	190 U	910	1400 J
Acenaphthylene	ug/kg	1200	560	460	340
Acetophenone	ug/kg	460 U	370 U	440 U	480 U
Anthracene	ug/kg	1600	920	1200	910
Atrazine	ug/kg	460 U	370 U	440 U	480 U
Benzaldehyde	ug/kg	460 U	370 U	440 U	480 U
Benzo(a)anthracene	ug/kg	1200	5600	2200	630
Benzo(a)pyrene	ug/kg	930	5400	1700	550
Benzo(b)fluoranthene	ug/kg	1000	6600	1500	440
Benzo(g,h,i)perylene	ug/kg	420	3500	760	250 U
Benzo(k)fluoranthene	ug/kg	350	1900	380	250 U
Biphenyl	ug/kg	380	190 U	230 U	580
bis(2-Chloroethoxy)methane	ug/kg	240 U	190 U	230 U	250 U
bis(2-Chloroethyl)ether	ug/kg	460 U	370 U	440 U	480 U
bis(2-Chloroisopropyl)ether	ug/kg	460 U	370 U	440 U	480 U
bis(2-Ethylhexyl)phthalate	ug/kg	240 U	190 U	230 U	250 U
4-Bromophenyl-phenylether	ug/kg	240 U	190 U	230 U	250 U

Analysis/ Analyte	Units	57-__	58-__	59-__	60-__
Butylbenzylphthalate	ug/kg	240 U	190 U	230 U	250 U
Caprolactam	ug/kg	460 U	370 U	440 U	480 U
Carbazole	ug/kg	510	370 U	440 U	480 U
4-Chloro-3-methylphenol	ug/kg	240 U	190 U	230 U	250 U
4-Chloroaniline	ug/kg	460 U	370 U	440 U	480 U
2-Chloronaphthalene	ug/kg	240 U	190 U	230 U	250 U
2-Chlorophenol	ug/kg	240 U	190 U	230 U	250 U
4-Chlorophenyl-phenylether	ug/kg	240 U	190 U	230 U	250 U
Chrysene	ug/kg	970	5500	2200	570
Di-n-butylphthalate	ug/kg	240 U	190 U	230 U	250 U
Di-n-octylphthalate	ug/kg	460 U	370 U	440 U	480 U
Dibenz(a,h)anthracene	ug/kg	240 U	880	240	250 U
Dibenzofuran	ug/kg	1100	190 U	230 U	250 U
3,3'-Dichlorobenzidine	ug/kg	460 U	370 U	440 U	480 U
2,4-Dichlorophenol	ug/kg	240 U	190 U	230 U	250 U
Diethylphthalate	ug/kg	240 U	190 U	230 U	250 U
2,4-Dimethylphenol	ug/kg	360	190 U	230 U	250 U
Dimethylphthalate	ug/kg	240 U	250	230	270
4,6-Dinitro-2-methylphenol	ug/kg	460 U	370 U	440 U	480 U
2,4-Dinitrophenol	ug/kg	460 U	370 U	440 U	480 U
2,4-Dinitrotoluene	ug/kg	240 U	190 U	230 U	250 U
2,6-Dinitrotoluene	ug/kg	240 U	190 U	230 U	250 U
Fluoranthene	ug/kg	2500	8300	3000	1100
Fluorene	ug/kg	1500	280	970	1300
Hexachlorobenzene	ug/kg	240 U	190 U	230 U	250 U
Hexachlorobutadiene	ug/kg	240 U	190 U	230 U	250 U
Hexachlorocyclopentadiene	ug/kg	460 UJ	370 UJ	440 UJ	480 UJ
Hexachloroethane	ug/kg	240 U	190 U	230 U	250 U
Indeno(1,2,3-cd)pyrene	ug/kg	420	2600	580	250 U
Isophorone	ug/kg	240 U	190 U	230 U	250 U
2-Methylnaphthalene	ug/kg	2200	290	230 U	250 U
2-Methylphenol	ug/kg	460 U	370 U	440 U	480 U
4-Methylphenol	ug/kg	1100	370 U	440 U	480 U
Naphthalene	ug/kg	7300	380	960	690
2-Nitroaniline	ug/kg	240 U	190 U	230 U	250 U
3-Nitroaniline	ug/kg	460 U	370 U	440 U	480 U
4-Nitroaniline	ug/kg	460 U	370 U	440 U	480 U
Nitrobenzene	ug/kg	240 U	190 U	230 U	250 U
2-Nitrophenol	ug/kg	240 U	190 U	230 U	250 U
4-Nitrophenol	ug/kg	460 U	370 U	440 U	480 U
N-nitroso-di-n-propylamine	ug/kg	240 U	190 U	230 U	250 U
N-nitrosodiphenylamine	ug/kg	240 U	190 U	230 U	250 U
Pentachlorophenol	ug/kg	460 U	370 U	440 U	480 U
Phenanthrene	ug/kg	4900	4300	3200	3900
Phenol	ug/kg	1000	370 U	440 U	480 U

Analysis/ Analyte	Units	57-__	58-__	59-__	60-__
Pyrene	ug/kg	2200	9900	6900	1700 J
1,2,4,5-Tetrachlorobenzene	ug/kg	240 U	190 U	230 U	250 U
2,4,5-Trichlorophenol	ug/kg	240 U	190 U	230 U	250 U
2,4,6-Trichlorophenol	ug/kg	240 U	190 U	230 U	250 U
1 Semi-Volatile TPH (DRO & ORO) in Soil by GC/FID					
TPH DRO	mg/kg	50600	286	2100	698 J
1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap					
Acetone	ug/kg	6400 U	18	86	31
Benzene	ug/kg	44000	7.2 U	130	720
Bromochloromethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
Bromodichloromethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
Bromoform	ug/kg	3200 U	7.2 UJ	310 U	8.1 UJ
Bromomethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
2-Butanone	ug/kg	6400 U	14 U	31 U	16 U
Carbon Disulfide	ug/kg	3200 U	7.2 U	27	8.1 U
Carbon Tetrachloride	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
Chlorobenzene	ug/kg	3200 U	7.2 U	15 U	8.1 U
Chloroethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
Chloroform	ug/kg	3200 U	7.2 U	15 U	8.1 U
Chloromethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
Cyclohexane	ug/kg	3200 U	7.2 U	15 U	8.1 U
1,2-Dibromo-3-Chloropropane	ug/kg	3200 U	7.2 U	310 U	8.1 U
Dibromochloromethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
1,2-Dibromoethane	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
1,2-Dichlorobenzene	ug/kg	3200 U	7.2 U	310 U	8.1 U
1,3-Dichlorobenzene	ug/kg	3200 U	7.2 U	310 U	8.1 U
1,4-Dichlorobenzene	ug/kg	3200 U	7.2 U	310 U	8.1 U
Dichlorodifluoromethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
1,1-Dichloroethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
1,2-Dichloroethane	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
1,1-Dichloroethene	ug/kg	3200 U	7.2 U	15 U	8.1 U
cis-1,2-Dichloroethene	ug/kg	3200 U	7.2 U	15 U	8.1 U
trans-1,2-Dichloroethene	ug/kg	3200 U	7.2 U	15 U	8.1 U
1,2-Dichloropropane	ug/kg	3200 U	7.2 U	15 U	8.1 U
cis-1,3-Dichloropropene	ug/kg	3200 U	7.2 U	15 U	8.1 U
trans-1,3-Dichloropropene	ug/kg	3200 U	7.2 U	15 U	8.1 U
Ethyl Benzene	ug/kg	5300	7.2 U	1500 J	3900
2-Hexanone	ug/kg	6400 U	14 U	31 U	16 U
Isopropylbenzene	ug/kg	3200 U	7.2 U	680 J	630
Methyl Acetate	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
Methyl tert-butyl ether	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
Methylcyclohexane	ug/kg	3200 U	7.2 U	18 J	8.1 U
Methylene Chloride	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
4-Methyl-2-Pentanone	ug/kg	6400 U	14 U	31 U	16 U
Styrene	ug/kg	21000	7.2 U	15 U	8.1 U

Analysis/ Analyte	Units	57-__	58-__	59-__	60-__
1,1,2,2-Tetrachloroethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
Tetrachloroethene	ug/kg	3200 U	7.2 U	15 U	8.1 U
Toluene	ug/kg	74000	7.2 U	210	22
1,2,3-Trichlorobenzene	ug/kg	3200 U	7.2 U	310 U	8.1 U
1,2,4-Trichlorobenzene	ug/kg	3200 U	7.2 U	310 U	8.1 U
1,1,1-Trichloroethane	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
1,1,2-Trichloroethane	ug/kg	3200 U	7.2 U	15 U	8.1 U
Trichloroethene	ug/kg	3200 U	7.2 U	15 U	8.1 U
Trichlorofluoromethane	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
1,1,2-Trichlorotrifluoroethane	ug/kg	3200 U	7.2 UJ	15 U	8.1 U
Vinyl Chloride	ug/kg	3200 U	7.2 U	15 U	8.1 U
m and/or p-Xylene	ug/kg	72000	7.2 U	470	56
o-Xylene	ug/kg	26000	7.2 U	950 J	2300
1 Volatile TPH in Soil by GC/MS					
TPH GRO	mg/kg	1850	2.53 U	6.61	16.6

Analysis/ Analyte	Units	101-__	102-__	103-__	104-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.01 U	0.01 U	0.014	0.01 U
1 Metals in Water by ICP-AES					
Aluminum	ug/L	18800	1710	20900	3910
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	25 U	25 U	25 U	25 U
Barium	ug/L	366	211	533	109
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	173	252	198	191
Chromium	ug/L	22	15 U	29	15 U
Cobalt	ug/L	10 U	10 U	14	10 U
Copper	ug/L	25	8	25	8
Iron	ug/L	19300	21900	25800	4480
Lead	ug/L	50 U	50 U	50 U	50 U
Magnesium	mg/L	78.8	108	62.0	49.1
Manganese	ug/L	1830	799	4380	5140
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	20 U	20 U	22	20 U
Potassium	mg/L	13.3	10.9	17.7	6.88
Selenium	ug/L	50 U	101	50 U	50 U
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	241	93.2	96.8	51.7
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	369	42	422	76
Vanadium	ug/L	45	10 U	48	10 U
Zinc	ug/L	80	25 U	100	34
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetophenone	ug/L	10 U	10 U	10 U	10 U
Anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	101-__	102-__	103-__	104-__
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
Naphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	ug/L	10 U	10 U	10 U	10 U
Pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	101-__	102-__	103-__	104-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.5 U	0.5 U	0.5 U	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U		5.0 U	5.0 U
Benzene	ug/L	5.0 U		5.0 U	5.0 U
Bromodichloromethane	ug/L	5.0 U		5.0 U	5.0 U
Bromoform	ug/L	5.0 U		5.0 U	5.0 U
Bromomethane	ug/L	5.0 U		5.0 U	5.0 U
2-Butanone	ug/L	5.0 U		5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U		5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U		5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U		5.0 U	5.0 U
Chloroethane	ug/L	5.0 U		5.0 U	5.0 U
Chloroform	ug/L	5.0 U		5.0 U	5.0 U
Chloromethane	ug/L	5.0 U		5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U		5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U		5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U		5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U		5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U		5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U		5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U		5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U		5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U		5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U		5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U		5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	50		5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U		5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U		5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U		5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U		5.0 U	5.0 U
Ethyl Benzene	ug/L	5.0 U		5.0 U	5.0 U
2-Hexanone	ug/L	5.0 U		5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U		5.0 U	5.0 U
Methyl Acetate	ug/L	5.0 U		5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U		10 U	10 U
Methylcyclohexane	ug/L	5.0 U		5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U		5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U		5.0 U	5.0 U
Naphthalene	ug/L	10 U		10 U	10 U
Styrene	ug/L	5.0 U		5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U		5.0 U	5.0 U

Analysis/ Analyte	Units	101-__	102-__	103-__	104-__
Tetrachloroethene	ug/L	5.0 U		5.0 U	5.0 U
Toluene	ug/L	5.0 U		5.0 U	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U		5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U		5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U		5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U		5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U		5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U		5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U		5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U		5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U		10 U	10 U
o-Xylene	ug/L	5.0 U		5.0 U	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.04 U	0.04 U	0.04 U	0.04 U

Analysis/ Analyte	Units	105-__	106-__	107-__	108-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.0227	0.01 U	0.01 U	0.066
1 Metals in Water by ICP-AES					
Aluminum	ug/L	58800	15100	6930	8370
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	39	25 U	25 U	113
Barium	ug/L	1220	255	193	254
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	224	188	179	499
Chromium	ug/L	79	32	15 U	15 U
Cobalt	ug/L	40	10 U	10 U	10 U
Copper	ug/L	104	19	11	13
Iron	ug/L	89400	17500	8270	39800
Lead	ug/L	52	50 U	50 U	50 U
Magnesium	mg/L	107	58.9	58.8	140
Manganese	ug/L	5780	6300	113	4210
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	86	20 U	20 U	20 U
Potassium	mg/L	16.6	9.08	5.24	13.0
Selenium	ug/L	67	54	50 U	236
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	99.2	58.1	33.0	349
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	798	294	160	167
Vanadium	ug/L	152	39	23	26
Zinc	ug/L	278	118	39	39
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	5.0 U	5.0 U	5.0 U	17
Acenaphthylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetophenone	ug/L	10 U	10 U	10 U	10 U
Anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	105-__	106-__	107-__	108-__
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
Naphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	ug/L	10 U	10 U	10 U	10 U
Pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	105-__	106-__	107-__	108-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.5 U	0.5 U	0.5 U	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	10 U	10 U	10 U	10 U
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	105-__	106-__	107-__	108-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U	10 U	10 U	10 U
o-Xylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.04 U	N/A O		0.04 U

Analysis/ Analyte	Units	109-__	110-__	111-__	112-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.01 U	0.01 U	0.0701	0.0685
1 Metals in Water by ICP-AES					
Aluminum	ug/L	53900	19400	17300	15800
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	42	37	57	52
Barium	ug/L	1090	387	5360	5490
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	212	103	1280	377
Chromium	ug/L	64	38	15 U	15 U
Cobalt	ug/L	25	10 U	12	10 U
Copper	ug/L	76	22	38	63
Iron	ug/L	76700	23300	116000	81700
Lead	ug/L	52	50 U	50 U	127
Magnesium	mg/L	83.0	26.0	428	97.7
Manganese	ug/L	2080	1000	5750	2340
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	66	20 U	20 U	20 U
Potassium	mg/L	17.4	7.40	26.3	141
Selenium	ug/L	81	50 U	744	175
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	74.2	83.4	960	1330
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	1130	453	350	317
Vanadium	ug/L	140	44	29	34
Zinc	ug/L	276	91	66	235
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	200	47	50	61
Acenaphthylene	ug/L	9.7	54	6.1	9.1
Acetophenone	ug/L	10 U	10 U	14	15
Anthracene	ug/L	19	9.8	7.6	6.3
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	6.8	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	54	44	46	20
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	109-__	110-__	111-__	112-__
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	20	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	6.1	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	12	8.0	6.0	5.7
3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	5.0 U	47	110
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	15	5.0 U	5.0 U	5.0 U
Fluorene	ug/L	53	38	38	20
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	390	5.3	400	470
2-Methylphenol	ug/L	10 U	10 U	16	10 U
4-Methylphenol	ug/L	10 U	10 U	73	10 U
Naphthalene	ug/L	5600	20	6200	3000
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	100	48	44	29
Phenol	ug/L	10 U	10 U	21	10 U
Pyrene	ug/L	19	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	109-__	110-__	111-__	112-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	8.32	1.46	8.12	8.84
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	680	5.0 U	6900	11000
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	6.4	5.0 U	9.0	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	8.6	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	1900	5.0 U	2600	2200
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	110	5.0 U	85	160
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	5.0 U	13	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	6300	25	9200	3700 J
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	109-__	110-__	111-__	112-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	57	5.0 U	140	490 J
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	290	10 U	2200	900
o-Xylene	ug/L	780	5.0 U	1300	880
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	15.3	0.103	47.9	90.8

Analysis/ Analyte	Units	113-__	114-__	115-__	116-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.01 U	0.01 U	0.0175	0.01 U
1 Metals in Water by ICP-AES					
Aluminum	ug/L	865	22600	1370	15600
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	25 U	150	25 U	25 U
Barium	ug/L	78	6150	31	371
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	225	884	662	292
Chromium	ug/L	15 U	15 U	15 U	15 U
Cobalt	ug/L	10 U	21	14	13
Copper	ug/L	5 U	42	11	24
Iron	ug/L	1060	100000	2790	19400
Lead	ug/L	50 U	50 U	50 U	50 U
Magnesium	mg/L	61.8	355	362	69.0
Manganese	ug/L	224	2840	5550	5370
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	20 U	24	20 U	23
Potassium	mg/L	14.7	19.6	9.06	43.5
Selenium	ug/L	80	484	352	108
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	340	715	214	126
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	23	469	39	378
Vanadium	ug/L	10 U	47	12	38
Zinc	ug/L	25 U	97	25 U	79
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	5.0 U	6.4	5.0 U	5.0 U
Acenaphthylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetophenone	ug/L	10 U	10 U	10 U	10 U
Anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	113-__	114-__	115-__	116-__
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	33	5.0 U	5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	5.0 U	32	5.0 U	5.0 U
2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
Naphthalene	ug/L	20	80	5.0 U	5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	ug/L	10 U	10 U	10 U	10 U
Pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	113-__	114-__	115-__	116-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.5 U	0.822	0.5 U	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	70	81	8.6	5.0 U
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	180	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	15	14	5.0 U	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U	23	5.0 U	5.0 U
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	93	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	24	130	10 U	10 U
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	113-__	114-__	115-__	116-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	8.4	11	5.0 U	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U	16	10 U	10 U
o-Xylene	ug/L	6.4	8.6	5.0 U	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.348	3.07	0.0671	0.04 U

Analysis/ Analyte	Units	117-__	118-__	119-__	120-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.01 U	0.01 U	0.01 U	0.01 U
1 Metals in Water by ICP-AES					
Aluminum	ug/L	30800	21200	94900	14000
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	26	25 U	99	108
Barium	ug/L	644	455	2140	815
Beryllium	ug/L	3 U	3 U	5	3 U
Cadmium	ug/L	3 U	3 U	3 U	5
Calcium	mg/L	224	258	436	230
Chromium	ug/L	42	42	104	15 U
Cobalt	ug/L	19	13	63	15
Copper	ug/L	64	44	165	246
Iron	ug/L	37000	33800	181000	28300
Lead	ug/L	50 U	50 U	96	66
Magnesium	mg/L	84.8	96.7	161	74.0
Manganese	ug/L	6040	5700	8570	9830
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	33	34	169	20 U
Potassium	mg/L	15.8	11.6	22.0	13.0
Selenium	ug/L	108	75	226	65
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	66.4	102	99.2	23.2
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	637	493	1520	202
Vanadium	ug/L	67 J	53 J	262 J	26 J
Zinc	ug/L	155	113	485	87
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	5.0 U	5.0 U		5.0 U
Acenaphthylene	ug/L	5.0 U	5.0 U		5.0 U
Acetophenone	ug/L	10 U	10 U		10 U
Anthracene	ug/L	5.0 U	5.0 U		5.0 U
Atrazine	ug/L	10 U	10 U		10 U
Benzaldehyde	ug/L	10 U	10 U		10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U		5.0 U
Biphenyl	ug/L	5.0 U	5.0 U		5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U		5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U		10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U		10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U		5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U		5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U		5.0 U

Analysis/ Analyte	Units	117-__	118-__	119-__	120-__
Caprolactam	ug/L	10 U	10 U		10 U
Carbazole	ug/L	10 U	10 U		10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U		5.0 U
4-Chloroaniline	ug/L	10 U	10 U		10 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U		5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U		5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U		5.0 U
Chrysene	ug/L	5.0 U	5.0 U		5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U		5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U		10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U		5.0 U
Dibenzofuran	ug/L	5.0 U	5.0 U		5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U		10 U
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U		5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U		5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	5.0 U		5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U		5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U		10 U
2,4-Dinitrophenol	ug/L	10 U	10 U		10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U		5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U		5.0 U
Fluoranthene	ug/L	5.0 U	5.0 U		5.0 U
Fluorene	ug/L	5.0 U	5.0 U		5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U		5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U		5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U		10 U
Hexachloroethane	ug/L	5.0 U	5.0 U		5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U		5.0 U
Isophorone	ug/L	5.0 U	5.0 U		5.0 U
2-Methylnaphthalene	ug/L	5.0 U	5.0 U		5.0 U
2-Methylphenol	ug/L	10 U	10 U		10 U
4-Methylphenol	ug/L	10 U	10 U		10 U
Naphthalene	ug/L	5.0 U	5.0 U		5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U		5.0 U
3-Nitroaniline	ug/L	10 U	10 U		10 U
4-Nitroaniline	ug/L	10 U	10 U		10 U
Nitrobenzene	ug/L	5.0 U	5.0 U		5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U		5.0 U
4-Nitrophenol	ug/L	10 U	10 U		10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U		5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U		5.0 U
Pentachlorophenol	ug/L	10 U	10 U		10 U
Phenanthrene	ug/L	5.0 U	5.0 U		5.0 U
Phenol	ug/L	10 U	10 U		10 U
Pyrene	ug/L	5.0 U	5.0 U		5.0 U

Analysis/ Analyte	Units	117-__	118-__	119-__	120-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U		5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U		5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U		5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.5 U	0.5 U	0.5 U	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	10 U	10 U	10 U	10 U
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	117-__	118-__	119-__	120-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U	10 U	10 U	10 U
o-Xylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.04 U	0.04 U	0.04 U	0.04 U

Analysis/ Analyte	Units	121-__	122-__	123-__	124-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.01 U	0.01 U	0.01 U	0.01 U
1 Metals in Water by ICP-AES					
Aluminum	ug/L	252000	22100	23600	54100
Antimony	ug/L	50 UJ	50 U	50 U	50 U
Arsenic	ug/L	164	90	66	27
Barium	ug/L	5220	803	529	1110
Beryllium	ug/L	13 J	3 U	3 U	3 U
Cadmium	ug/L	10 J	3 U	3 U	3 U
Calcium	mg/L	880	318	252	415
Chromium	ug/L	274	26	33	65
Cobalt	ug/L	153 J	17	15	24
Copper	ug/L	392	48	28	66
Iron	ug/L	395000	61400	41300	78900
Lead	ug/L	247 J	50 U	50 U	50 U
Magnesium	mg/L	343	90.5	84.0	140
Manganese	ug/L	20000	6520	5520	3240
Molybdenum	ug/L	15 UJ	15 U	15 U	15 U
Nickel	ug/L	416 J	34	74	76
Potassium	mg/L	58.1 J	32.1	11.2	15.7
Selenium	ug/L	526	146	133	210
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	120	81.9	64.0	121
Thallium	ug/L	50 UJ	50 U	50 U	50 U
Titanium	ug/L	2180 J	532	520	1010
Vanadium	ug/L	634	60	54	142
Zinc	ug/L	1290	136	117	273
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	5.0 U	5.0 U		5.0 U
Acenaphthylene	ug/L	5.0 U	5.0 U		5.0 U
Acetophenone	ug/L	10 U	10 U		10 U
Anthracene	ug/L	5.0 U	5.0 U		5.0 U
Atrazine	ug/L	10 U	10 U		10 U
Benzaldehyde	ug/L	10 U	10 U		10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U		5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U		5.0 U
Biphenyl	ug/L	5.0 U	5.0 U		5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U		5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U		10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U		10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U		5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U		5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U		5.0 U

Analysis/ Analyte	Units	121-__	122-__	123-__	124-__
Caprolactam	ug/L	10 U	10 U		10 U
Carbazole	ug/L	10 U	10 U		10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U		5.0 U
4-Chloroaniline	ug/L	10 U	10 U		10 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U		5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U		5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U		5.0 U
Chrysene	ug/L	5.0 U	5.0 U		5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U		5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U		10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U		5.0 U
Dibenzofuran	ug/L	5.0 U	5.0 U		5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U		10 U
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U		5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U		5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	5.0 U		5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U		5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U		10 U
2,4-Dinitrophenol	ug/L	10 U	10 U		10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U		5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U		5.0 U
Fluoranthene	ug/L	5.0 U	5.0 U		5.0 U
Fluorene	ug/L	5.0 U	5.0 U		5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U		5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U		5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U		10 U
Hexachloroethane	ug/L	5.0 U	5.0 U		5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U		5.0 U
Isophorone	ug/L	5.0 U	5.0 U		5.0 U
2-Methylnaphthalene	ug/L	5.0 U	5.0 U		5.0 U
2-Methylphenol	ug/L	10 U	10 U		10 U
4-Methylphenol	ug/L	10 U	10 U		10 U
Naphthalene	ug/L	5.0 U	5.0 U		5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U		5.0 U
3-Nitroaniline	ug/L	10 U	10 U		10 U
4-Nitroaniline	ug/L	10 U	10 U		10 U
Nitrobenzene	ug/L	5.0 U	5.0 U		5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U		5.0 U
4-Nitrophenol	ug/L	10 U	10 U		10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U		5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U		5.0 U
Pentachlorophenol	ug/L	10 U	10 U		10 U
Phenanthrene	ug/L	5.0 U	5.0 U		5.0 U
Phenol	ug/L	10 U	10 U		10 U
Pyrene	ug/L	5.0 U	5.0 U		5.0 U

Analysis/ Analyte	Units	121-__	122-__	123-__	124-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U		5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U		5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U		5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.5 U	0.5 U	0.5 U	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	10 U	10 U	10 U	10 U
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	121-__	122-__	123-__	124-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U	10 U	10 U	10 U
o-Xylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.04 U	0.04 U	0.04 U	0.04 U

Analysis/ Analyte	Units	125-__	126-__	127-__	128-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.0204	0.206	0.02	0.0307
1 Metals in Water by ICP-AES					
Aluminum	ug/L	12300	3870	157	1930
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	89	25 U	25 U	25 U
Barium	ug/L	254	328	146	69
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	299	164	294	149
Chromium	ug/L	15 U	15 U	15 U	15 U
Cobalt	ug/L	10 U	10 U	10 U	10 U
Copper	ug/L	12	28	5 U	13
Iron	ug/L	39700	17200	14500	4840
Lead	ug/L	50 U	98	50 U	50 U
Magnesium	mg/L	104	45.4	21.8	27.8
Manganese	ug/L	3320	548	894	126
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	20 U	20 U	20 U	20 U
Potassium	mg/L	7.36	30.4	15.3	8.25
Selenium	ug/L	147	50 U	146	78
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	63.0	107	28.3	18.8
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	224	109	20 U	51
Vanadium	ug/L	23	14	10 U	11
Zinc	ug/L	47	209	203	121
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	9.5	160 J	67	5.0 U
Acenaphthylene	ug/L	5.0 U	34	12	5.0 U
Acetophenone	ug/L	10 U	10 U	10 U	10 U
Anthracene	ug/L	5.0 U	20	5.0 U	5.0 U
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	5.0 U	49	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	125-__	126-__	127-__	128-__
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	10 U	13	10 U	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	5.0 U	13	5.0 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	37	5.0 U	5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	5.0 U	11	5.0 U	5.0 U
Fluorene	ug/L	5.0 U	67	12	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	5.0 U	1000	5.0 U	5.0 U
2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
Naphthalene	ug/L	5.0 U	4600	32	5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	5.0 U	80	5.0 U	5.0 U
Phenol	ug/L	10 U	10 U	10 U	10 U
Pyrene	ug/L	5.0 U	14	5.0 U	5.0 U

Analysis/ Analyte	Units	125-__	126-__	127-__	128-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.5 U	9.88	0.676	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	5.0 U	3000	430	5.0 U
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	5.0 U	800	100	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U	48	12	5.0 U
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	10 U	4900 J	46	10 U
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	125-__	126-__	127-__	128-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	5.0 U	350	15	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U	440	10 U	10 U
o-Xylene	ug/L	5.0 U	370	68	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.04 U	19.2	2.66	0.042

Analysis/ Analyte	Units	129-__	130-__	131-__	132-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.01 U	0.0128	0.01 U	0.01 U
1 Metals in Water by ICP-AES					
Aluminum	ug/L	2540	1050	52900	50 U
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	36	25 U	27	25 U
Barium	ug/L	86	107	965	10 U
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	159	196	624	2.00 U
Chromium	ug/L	15 U	15 U	36	15 U
Cobalt	ug/L	10 U	10 U	27	10 U
Copper	ug/L	32	12	62	5 U
Iron	ug/L	4680	1430	77400	94
Lead	ug/L	64	50 U	50 U	50 U
Magnesium	mg/L	12.1	23.6	124	2.00 U
Manganese	ug/L	126	93	5830	5 U
Molybdenum	ug/L	17	15 U	15 U	15 U
Nickel	ug/L	20 U	20 U	65	20 U
Potassium	mg/L	7.44	18.2	19.1	2.00 U
Selenium	ug/L	63	65	361	50 U
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	18.5	45.2	34.6	5.00 U
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	91	31	1190	20 U
Vanadium	ug/L	14	11	141	10 U
Zinc	ug/L	360	151	261	25 U
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	6.0	5.0 U	250	5.0 U
Acenaphthylene	ug/L	25	5.0 U	70	5.0 U
Acetophenone	ug/L	10 U	10 U	10 U	10 U
Anthracene	ug/L	5.0 U	5.0 U	19	5.0 U
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	7.1	5.0 U	73	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	129-__	130-__	131-__	132-__
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	12	10 U	33	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 U	10 U	10 UJ	10 UJ
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	13	5.0 U	16	5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 UJ	10 UJ
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	79	5.0 U	5.0 U	5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	5.0 U	5.0 U	7.8	5.0 U
Fluorene	ug/L	14	5.0 U	94 J	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 UJ	10 UJ
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ
2-Methylnaphthalene	ug/L	38	5.0 U	8.2	5.0 U
2-Methylphenol	ug/L	110	10 U	10 U	10 U
4-Methylphenol	ug/L	190	10 U	10 U	10 U
Naphthalene	ug/L	340	5.0 U	990	5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 UJ
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	17	5.0 U	97 J	5.0 U
Phenol	ug/L	140	10 U	10 U	10 U
Pyrene	ug/L	5.0 U	5.0 U	8.9	5.0 U

Analysis/ Analyte	Units	129-__	130-__	131-__	132-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.534	0.5 U	5.49	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	7.4 J
Benzene	ug/L	51	5.0 U	61	5.0 U
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	5.0 U	5.0 U	1400	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U	5.0 U	96	5.0 U
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	140	10 U	1100 J	10 U
Styrene	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	129-__	130-__	131-__	132-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	9.2	5.0 U	14	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U	10 U	73	10 U
o-Xylene	ug/L	8.6	5.0 U	520	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.293	0.04 U	9.79	0.04 U

Analysis/ Analyte	Units	133-__	134-__	135-__	136-__
1 Cyanide, Total in Water					
Cyanide	mg/L	0.01 U	0.0737	0.01 U	0.0138
1 Metals in Water by ICP-AES					
Aluminum	ug/L	50 U	50 U	50 U	50 U
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	25 U	50	41	25 U
Barium	ug/L	267	324	1540	917
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	307	297	192	114
Chromium	ug/L	15 U	15 U	15 U	15 U
Cobalt	ug/L	10 U	10 U	10 U	10 U
Copper	ug/L	5 U	5 U	5 U	5 U
Iron	ug/L	423	34500	23900	17800
Lead	ug/L	50 U	50 U	50 U	50 U
Magnesium	mg/L	105	102	68.7	41.1
Manganese	ug/L	8370	1410	1530	418
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	20 U	20 U	20 U	20 U
Potassium	mg/L	6.15	6.31	7.79	10.8
Selenium	ug/L	154	139	85	50 U
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	215	43.8	43.0	61.3
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	20 U	20 U	20 U	20 U
Vanadium	ug/L	10 U	10 U	10 U	10 U
Zinc	ug/L	25 U	25 U	25 U	25 U
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	5.0 U	5.0 U	5.0 U	8.6
Acenaphthylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Acetophenone	ug/L	10 U	10 U	10 U	10 U
Anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	133-__	134-__	135-__	136-__
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 U	10 UJ	10 U	10 UJ
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 UJ	10 U	10 UJ
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 U	10 UJ	10 U	10 UJ
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	5.0 U	5.0 U	5.0 U	16
2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
Naphthalene	ug/L	5.0 U	5.0 U	5.0 U	2500
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 UJ	5.0 U	5.0 U
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	ug/L	10 U	10 U	10 U	10 U
Pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	133-__	134-__	135-__	136-__
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	0.5 U	0.5 U	0.5 U	4.23
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	ug/L	5.0 U	5.0 U	5.0 U	360
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	5.0 U	5.0 U	5.0 U	110
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	5.0 U	5.0 U	5.0 U	74
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	10 U	10 U	10 U	3600 J
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	133-__	134-__	135-__	136-__
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	10 U	10 U	10 U	48
o-Xylene	ug/L	5.0 U	5.0 U	5.0 U	8.4
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	0.04 U	0.04 U	0.04 U	2.65

Analysis/ Analyte	Units	137-__	138-__	139-__	140-FB
1 Cyanide, Total in Water					
Cyanide	mg/L	0.0199	0.01 U	0.01 U	0.01 U
1 Metals in Water by ICP-AES					
Aluminum	ug/L	50 U	50 U	72	50 U
Antimony	ug/L	50 U	50 U	50 U	50 U
Arsenic	ug/L	25 U	29	25 U	25 U
Barium	ug/L	841	284	656	10 U
Beryllium	ug/L	3 U	3 U	3 U	3 U
Cadmium	ug/L	3 U	3 U	3 U	3 U
Calcium	mg/L	98.9	195	159	2.00 U
Chromium	ug/L	15 U	15 U	15 U	15 U
Cobalt	ug/L	10 U	10 U	10 U	10 U
Copper	ug/L	5 U	5 U	5 U	5 U
Iron	ug/L	15700	15600	12000	50 U
Lead	ug/L	50 U	50 U	50 U	50 U
Magnesium	mg/L	37.4	74.2	64.4	2.00 U
Manganese	ug/L	727	1040	1070	5 U
Molybdenum	ug/L	15 U	15 U	15 U	15 U
Nickel	ug/L	20 U	20 U	20 U	20 U
Potassium	mg/L	8.59	7.47	8.90	2.00 U
Selenium	ug/L	53	75	50 U	50 U
Silver	ug/L	25 U	25 U	25 U	25 U
Sodium	mg/L	79.3	50.8	67.0	5.00 U
Thallium	ug/L	50 U	50 U	50 U	50 U
Titanium	ug/L	20 U	20 U	20 U	20 U
Vanadium	ug/L	10 U	10 U	10 U	10 U
Zinc	ug/L	25 U	25 U	25 U	25 U
1 Semi-Volatile Organic Compounds in Water					
Acenaphthene	ug/L	1000 U	5.0 U	51	5.0 U
Acenaphthylene	ug/L	7.8	5.0 U	5.0 U	5.0 U
Acetophenone	ug/L	10 U	10 U	10 U	10 U
Anthracene	ug/L	14	5.0 U	5.0 U	5.0 U
Atrazine	ug/L	10 U	10 U	10 U	10 U
Benzaldehyde	ug/L	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Biphenyl	ug/L	59	5.0 U	12	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)ether	ug/L	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	137-__	138-__	139-__	140-FB
Caprolactam	ug/L	10 U	10 U	10 U	10 U
Carbazole	ug/L	26	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	ug/L	10 UJ	10 U	10 UJ	10 UJ
2-Chloronaphthalene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenylether	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-butylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzofuran	ug/L	7.8	5.0 U	5.0 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	10 UJ	10 U	10 UJ	10 UJ
2,4-Dichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4,6-Dinitro-2-methylphenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	ug/L	7.0	5.0 U	5.0 U	5.0 U
Fluorene	ug/L	72	5.0 U	18	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclopentadiene	ug/L	10 UJ	10 U	10 UJ	10 UJ
Hexachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	1000 U	5.0 U	97 J	5.0 U
2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
Naphthalene	ug/L	8900	16	1600	5.0 U
2-Nitroaniline	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
N-nitrosodiphenylamine	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Pentachlorophenol	ug/L	10 U	10 U	10 U	10 U
Phenanthrene	ug/L	78	5.0 U	24	5.0 U
Phenol	ug/L	10 U	10 U	10 U	10 U
Pyrene	ug/L	7.6	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	137-__	138-__	139-__	140-FB
1,2,4,5-Tetrachlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID					
TPH DRO	mg/L	11.2	0.5 U	2.76	0.5 U
1 VOCs in Water by GC/MS					
Acetone	ug/L	5.0 U	5.0 U	190 J	5.0 U
Benzene	ug/L	1500	5.0 U	330	5.0 U
Bromodichloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	ug/L	5.0 U	5.0 U	170 J	5.0 U
Carbon Disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethyl Benzene	ug/L	1800	5.0 U	290	5.0 U
2-Hexanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	ug/L	91	5.0 U	27	5.0 U
Methyl Acetate	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	ug/L	10 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	5.6	5.0 U	5.0 U	5.0 U
Methylene Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	ug/L	10000 J	29	3200 J	10 U
Styrene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U

Analysis/ Analyte	Units	137-__	138-__	139-__	140-FB
Tetrachloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	ug/L	61	5.0 U	17	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
m and/or p-Xylene	ug/L	480	10 U	110	10 U
o-Xylene	ug/L	350	5.0 U	73	5.0 U
1 Volatile TPH in Water by GC/MS					
TPH GRO	mg/L	19.6	0.04 U	3.31	0.04 U

Analysis/ Analyte	Units	141-FB
1 VOCs in Water by GC/MS		
Acetone	ug/L	5.0 U
Benzene	ug/L	5.0 U
Bromodichloromethane	ug/L	5.0 U
Bromoform	ug/L	5.0 U
Bromomethane	ug/L	5.0 U
2-Butanone	ug/L	5.0 U
Carbon Disulfide	ug/L	5.0 U
Carbon Tetrachloride	ug/L	5.0 U
Chlorobenzene	ug/L	5.0 U
Chloroethane	ug/L	5.0 U
Chloroform	ug/L	5.0 U
Chloromethane	ug/L	5.0 U
Cyclohexane	ug/L	5.0 U
1,2-Dibromo-3-Chloropropane	ug/L	5.0 U
Dibromochloromethane	ug/L	5.0 U
1,2-Dibromoethane	ug/L	5.0 U
1,2-Dichlorobenzene	ug/L	5.0 U
1,3-Dichlorobenzene	ug/L	5.0 U
1,4-Dichlorobenzene	ug/L	5.0 U
Dichlorodifluoromethane	ug/L	5.0 U
1,1-Dichloroethane	ug/L	5.0 U
1,2-Dichloroethane	ug/L	5.0 U
1,1-Dichloroethene	ug/L	5.0 U
cis-1,2-Dichloroethene	ug/L	5.0 U
trans-1,2-Dichloroethene	ug/L	5.0 U
1,2-Dichloropropane	ug/L	5.0 U
cis-1,3-Dichloropropene	ug/L	5.0 U
trans-1,3-Dichloropropene	ug/L	5.0 U
Ethyl Benzene	ug/L	5.0 U
2-Hexanone	ug/L	5.0 U
Isopropylbenzene	ug/L	5.0 U
Methyl Acetate	ug/L	5.0 U
Methyl tert-butyl ether	ug/L	10 U
Methylcyclohexane	ug/L	5.0 U
Methylene Chloride	ug/L	5.0 U
4-Methyl-2-Pentanone	ug/L	5.0 U
Naphthalene	ug/L	10 U
Styrene	ug/L	5.0 U
1,1,2,2-Tetrachloroethane	ug/L	5.0 U
Tetrachloroethene	ug/L	5.0 U
Toluene	ug/L	5.0 U
1,2,3-Trichlorobenzene	ug/L	5.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U
1,1,1-Trichloroethane	ug/L	5.0 U
1,1,2-Trichloroethane	ug/L	5.0 U

Analysis/ Analyte	Units	141-FB
Trichloroethene	ug/L	5.0 U
Trichlorofluoromethane	ug/L	5.0 U
1,1,2-Trichlorotrifluoroethane	ug/L	5.0 U
Vinyl Chloride	ug/L	5.0 U
m and/or p-Xylene	ug/L	10 U
o-Xylene	ug/L	5.0 U
1 Volatile TPH in Water by GC/MS		
TPH GRO	mg/L	0.04 U

United States Environmental Protection Agency
Region VII
300 Minnesota Avenue
Kansas City, KS 66101

Transmittal Date: __/__/____

Subject: Data Disposition/Sample Disposition for ASR : 7007

Project ID: KL07HY

Project Description: Citizens Gas & Electric Co. sampling

From: Kevin Larson
SUPR/ERNB

To: Alisha Claycamp
ENST/LTAB/LABS

I have received and reviewed the Transmittal of Sample Analysis Results for the above-referenced Analytical Services Request(ASR) and have indicated my findings below by checking one of the boxes for Data Disposition and Sample Disposition.

I understand all samples will be disposed of unless samples are requested to be held. If I do not return this form within **30** days of the transmittal all samples will have a waste determination made and scheduled for disposal.

Data Disposition

☐ "RELEASED" - Read-only to all Region 7 employees and contractors that have R7LIMS "Customer" account. All Samples may be disposed of upon receipt of this form if not requested to

☐ "Project Manager Accessible" - Available on the LAN in R7LIMS for my use only. All Samples may be disposed of upon receipt of this form if not requested to be held.

☐ "Archived" - THIS DATA IS OF A SENSITIVE NATURE. Any future reports must be requested through the laboratory. All samples may be disposed of upon receipt of the form if not requested to be held.

Sample Disposition

☐ No longer need samples for site characterization

☐ Hold Samples - I have determined that the samples need to be held until _____, after which time they will be disposed of in accordance with applicable regulations.
The reason for the hold is:

☐ Samples are associated with a legal proceeding.

☐ Question/Concern with data - possible reanalysis requested.

☐ Other:_____