



April 25, 2016


Mr. Kevin Larson  
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11201 Renner Boulevard  
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**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,

  
*for* Laura Moore, RG, CHMM  
START Project Manager

  
 PG, CHMM  
START Program Manager

Enclosures

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



40561642

**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  
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April 25, 2016

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## **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.

## **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  $\frac{1}{4}$  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

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. 8<sup>th</sup> Street, and 1218 S. 6<sup>th</sup> 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.

### **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).

### **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 6<sup>th</sup> 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 ( $\mu\text{g/kg}$ ), naphthalene at 8,900  $\mu\text{g/kg}$ , 2-methylnaphthalene at 2,270  $\mu\text{g/kg}$ , and phenanthrene at 1,740  $\mu\text{g/kg}$ . 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 ( $\mu\text{g/L}$ ) and naphthalene at 638,200  $\mu\text{g/L}$  (Thiele Geotech, Inc. 2003).

### **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

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<sub>3</sub>) 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

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.

## 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

(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)

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 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 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 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

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.

### 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 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 its RSL (tap water) of

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.

**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.

## **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.

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.

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

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 6<sup>th</sup> Street and south of 11<sup>th</sup> Avenue. Groundwater contamination may be more widespread at depth. The 2003 Phase II ESA completed for 1001 6<sup>th</sup> 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]).

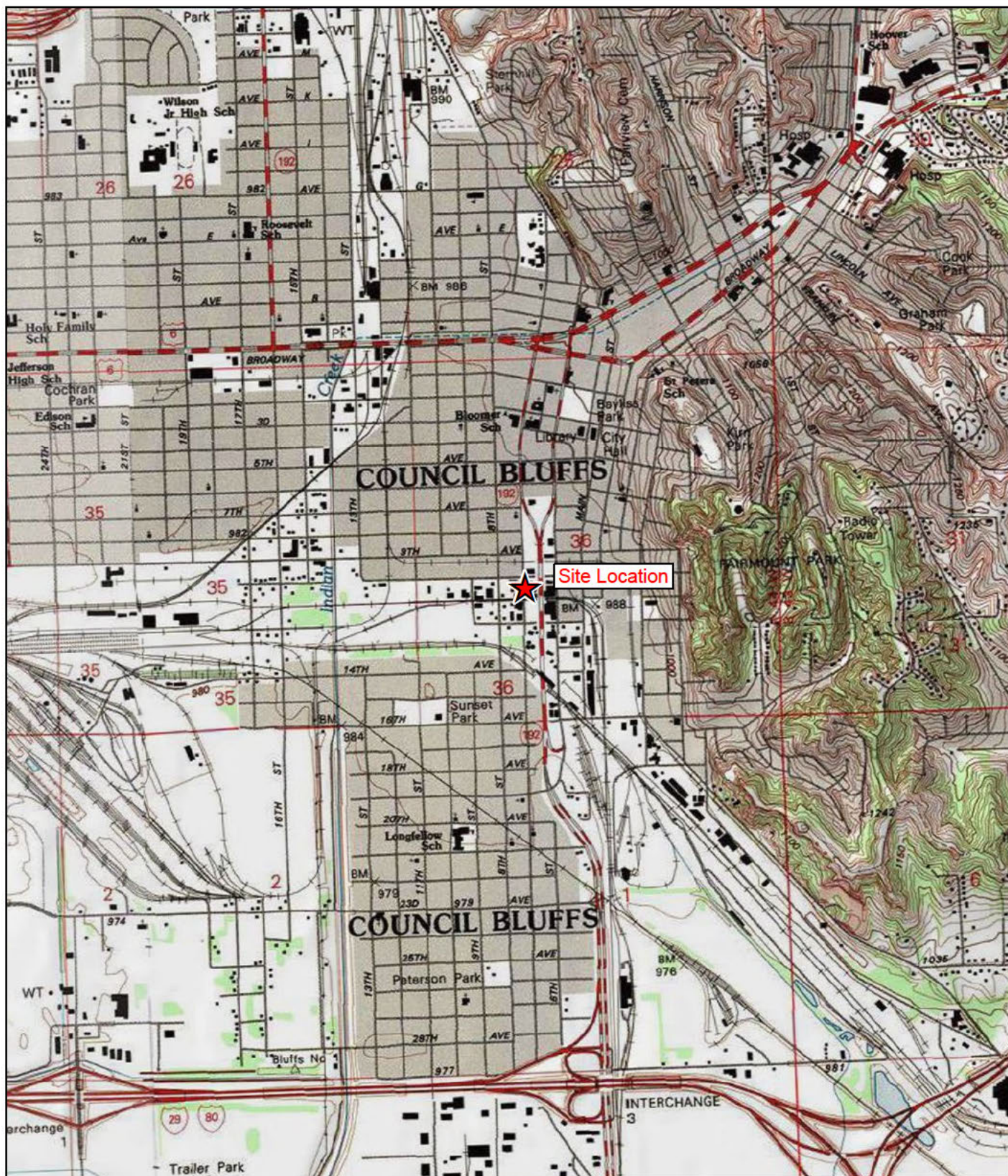
An EPA-funded PA was conducted in 1990. An Expanded Site Inspection was conducted by the Potentially Responsible Party from 1994 to 1996 (EPA 2016).

## 6.0 REFERENCES

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**APPENDIX A**

**FIGURES**



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

**Figure 1**  
Site Location Map



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

Date 10/23/2015

Drawn By Clayton Hayes

Project No X9025.16.0112.000



**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

**Scale**

0 75 150 Feet

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

**Figure 2**  
Sample Location Map

TETRA TECH

X:\0020112000\000\Project\Map\Figure2\_122916.mxd

**APPENDIX B**  
**PHOTOGRAPHIC DOCUMENTATION**

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



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

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



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

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



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

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



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

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



|  |              |   |                   |
|--|--------------|---|-------------------|
| <b>TETRA TECH<br/>PROJECT NO.<br/>X9025.16.0112.000</b><br><br>Direction: Down | 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<br>12/8/2015 |
|  | PHOTOGRAPHER | Keith Brown   |                   |

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



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

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



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

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



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

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



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



|   |              |   |                    |
|---|--------------|---|--------------------|
| <b>TETRA TECH<br/>PROJECT NO.<br/>X9025.16.0112.000</b><br><br>Direction: South | 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<br>12/14/2015 |
|   | PHOTOGRAPHER | Keith Brown   |                    |

**Citizen's Gas & Electric Site  
Council Bluffs, Iowa**



|   |              |   |                    |
|---|--------------|---|--------------------|
| <p>TETRA TECH<br/>PROJECT NO.<br/>X9025.16.0112.000</p> <p>Direction: Southeast</p> | 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<br>12/14/2015 |
|   | PHOTOGRAPHER | Keith Brown   |                    |

**APPENDIX C**  
**SITE LOGBOOK**

KS 1514



*Rite in the Rain®*

ALL-WEATHER

**LEVEL**

Nº 311FX

*Citizens Gas  
& Electric*

[illegible]

12/1/15

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.

KAB

12/1/15

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

KAB

Rite in the Rain.

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 for KC

*[Handwritten signature/initials]*

12/7/15

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

0900 - Arrive on site. Quan Do, Seagull Environmental arrives on site.

0915 - setting up at background location. (NE corner of 7<sup>th</sup> Street + 9<sup>th</sup> 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

*[Handwritten initials]*

*Rite in the 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  
 + 5/5 20

- 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 |
|------|----------|

ZB

12/8/15

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 3'. Bottom  
of soil liner smells like  
coal tar/naphthalene. move

1450 - 8' E + 15' S.

1515 - collect 

|               |         |
|---------------|---------|
| SB-9 (12-14') | 7007-17 |
|---------------|---------|

Highest PID @ 13' = 20 ppm

1525 - collect 

|               |         |
|---------------|---------|
| SB-9 (18-20') | 7007-18 |
|---------------|---------|

1545 - collect 

|      |          |
|------|----------|
| GW-9 | 7007-109 |
|------|----------|

SWL = 11' bgs

Screened from 20-24' bgs  
coal tar/naphthalene 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

ZB

Rite in 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 ~~+2-16'~~ <sup>KB</sup> bgs  
16-20'

*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

1430 - 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 <sup>18'</sup>16-20' bgs  
18-22'

1600 - depart site for storage shed

Pack 8 coolers with soil &amp; GW

samples collected on 12/7-8/15

Iced all coolers.

1730 - depart for Federal Express  
in Omaha1800 - arrive at Federal Express  
ship 8 coolers of samples to  
EPA Region 7 Lab.

Lab

12/10/15

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 |
|----------------|---------|

Lab Rite in the 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

*FB*

12/11/15

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 = 4.6 ppm @ 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 - RB wet  
at 16' bgs; drove GW sampler  
to 20', exposed screen 16-20', no  
GW encountered, pulled up 2 feet

*FB*

*Rite in the Rain*

12/11/15

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' sp.

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

<sup>1510</sup>  
~~1510~~ 1510 - collect SB-26 (6-8') | 7007-52

core from 8-12' is saturated  
coal tar / brick flat all <sup>fell</sup> out  
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

12/11/15

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 6-8' bgs

1853 - depart site for storage  
unit

1930 - finish sample prep & restock  
supplies

*[Signature]*

*Rite in the Rain.*

12/12/15

- 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  
     P112 = 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 rinseate  
     sample through DPT macro-  
     core sampler ER-132 KD  
     ER 7007-132  
 1430 - setting up at MW-1  
     SWL = 11'5" TOL

ZB

12/12/15

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

| 1508 - MW-1 Parameters |                     |                              |      | Vol.                        |
|------------------------|---------------------|------------------------------|------|-----------------------------|
| Initial                | Temp.               | Cond.                        | pH   |                             |
| ↳                      | 14.37°C             | 1803 $\mu\text{S}/\text{cm}$ | 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 |                              |      | <u>MW-1</u> <u>7007-133</u> |
| 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                      |

ZB

Rite in the Rain.

12/12/15

## mw-2 Parameters cont

Temp Cond pH Vol.

1730 - 12.84 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  $\approx 29' = 4.93 \text{ gal}$ 1 well vol.  $\uparrow$ 

3 well vol. = 14.79 gal

SWL after sampling = 17' BTOC

1815 - depart site for storage shed

stage/prepare samples and  
load supplies for tomorrow

1930 - Finish day

~~gab~~

12/13/15

0900 - Arrive at site; Raining  
steady since  $\approx 10:00 \text{ pm}$   
last night.

0920 - setting up at MW-4

SWL = 13' BTOC

casing stickup = 14"

TD = 44' BTOC

31' = water col.

 $\times .17$ 

5.27 gal = 1 well vol.

 $\times 3$ 

15.81 gal = 3 well vol.

1005 - begin purging mw-4

## mw-4 parameters

Temp<sup>oc</sup> Cond<sup>us/cm</sup> 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~~gab~~

Rite in the Rain.

12/13/15

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 | Initial |
| 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 <span style="border: 1px solid black;">MW-6 7007-136</span> |      |      |         |

SWL = 12' 9" after purge/sampling

2015

12/13/15 23

1607 - Setting up at MW-3

MW-3 has a 1-1.5" plastic pipe  $\approx$  45' long that was in the well upon opening with a string attached to the top with a  $\approx$  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 proper. We will purge  $\approx$  15 gallons & sample

1630 - Begin purging MW-3  
Purge  $\approx$  15 gal

1750 - collect MW-3 7007-137

1855 - depart site/Finish day

Mark

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 |      |         |
|-------|--------|-----------|------|---------|
|       | Temp   | cond      | pH   | Vol.    |
| 0905- | 12.66' | 1122      | 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

Zalt

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-FB1305 - 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 - took KB Repack samples on ice.

1900 - Arrive in K.C.; Finish for day.

Zalt

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 = RB*

*screened from 16-20' bgs RB*

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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

External Sample Number: \_\_\_\_\_

Expected Conc: (or Circle One: Low Medium High) Date Time(24 hr)  
Latitude: \_\_\_\_\_ Sample Collection: Start: 12/7/15 16:00  
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: 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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<sup>KA</sup>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: 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)**  
**Latitude:** \_\_\_\_\_    **Sample Collection: Start:** 12/8/15    10:05  
**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: 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)**  
**Latitude:** \_\_\_\_\_    **Sample Collection: Start:** 12/8/15    10:20  
**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:** 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)**  
**Latitude:** \_\_\_\_\_    **Sample Collection: Start:** 12/8/15    12:40  
**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:** 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)**  
**Latitude:** \_\_\_\_\_    **Sample Collection: Start:** 12/8/15    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)

**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)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_

**Sample Collection: Start:** 12/8/15    15:15

**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:** 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)**  
**Latitude:** \_\_\_\_    **Sample Collection: Start:** 12/8/15    15:25  
**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)

*PID = 4ppm*

**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)    **Date**    **Time(24 hr)**  
**Latitude:** \_\_\_\_\_    **Sample Collection: Start:** 12/8/15    16:45  
**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:** 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 Z - 40mL VOA vial                  | 4 Deg C                                      | 14 Days      | 1 Volatile TPH in Soil by GC/MS                                     |
| 8 # - 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<sup>KB</sup> SB-11 (14-16')

**External Sample Number:** \_\_\_\_\_

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

**Latitude:** \_\_\_\_    **Sample Collection: Start:** 12/9/15    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)

PID = 60ppm  
coal tar 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_\_

**Sample Collection: Start:** 12/9/15    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)

**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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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

External Sample Number: \_\_\_\_\_

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

Latitude: \_\_\_\_\_

Sample Collection: Start: 12/9/15 11:25

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: 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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)

*PIA = 500 ppm  
coal tar/naphthalene 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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)

*PIA = 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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

External Sample Number: \_\_\_\_\_

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

Latitude: \_\_\_\_\_

Sample Collection: Start: 12/9/15 14:45

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:** 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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-1P (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)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_

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

**Latitude:** \_\_\_\_\_

**Sample Collection: Start:** 12/10/15    12:50

**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:** 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-2D (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  |
|---|--|--------------|---|
| <del>6</del> 1 - 40mL VOA vial                  | 4 Deg C                                      | 14 Days      | 1 Volatile TPH in Soil by GC/MS                                     |
| <del>8</del> 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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

External Sample Number: \_\_\_\_\_

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

Latitude: \_\_\_\_\_

Sample Collection: Start: 12/10/15 14:10

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: 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_

**Sample Collection: Start:** 12/10/15    15:10

**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: 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)**

**Latitude:** \_\_\_\_

**Sample Collection: Start:** 12/11/15    08:05

**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:** 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:** SR-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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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

External Sample Number: \_\_\_\_\_

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

Latitude: \_\_\_\_\_

Sample Collection: Start: 12/11/15 09:35

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:** 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)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_\_

**Sample Collection: Start:** 12/11/15    13:20

**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: 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)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_\_

**Sample Collection: Start:** 12/11/15    13:35

**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: 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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

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

**External Sample Number:** \_\_\_\_\_

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

**Latitude:** \_\_\_\_

**Sample Collection: Start:** 12/11/15    15:10

**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 = 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:** 12/11/13    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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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)

PIIS = 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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  |
|--|--|--------------|---|
| <del>6A</del> - 40mL VOA vial                  | 4 Deg C                                      | 14 Days      | 1 Volatile TPH in Soil by GC/MS                                     |
| <del>8A</del> - 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**Location Desc:** GW-5

**External Sample Number:** \_\_\_\_\_

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

**Latitude:** \_\_\_\_

**Sample Collection: Start:** 12/7/15    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 = 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

**US EPA Region 7  
Kansas City, KS**

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

**External Sample Number:** \_\_\_\_\_

Sample Collection: Start: 12/8/15 10:40

End:     /   /   \_   \_   :   \_

| 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                   |

(N/A)

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

1 of 1

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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                          |
| <del>2</del> <del>1</del> - 128oz amber glass | 4 Deg C               | 7 Days       | 1 Semi-Volatile Organic Compounds in Water         |
| <del>2</del> <del>1</del> - 128oz amber glass | 4 Deg C               | 7 Days       | 1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID |
| <del>6</del> <del>2</del> - 40mL VOA vial     | 4 Deg C, HCL to pH<2  | 14 Days      | 1 VOCs in Water by GC/MS                           |
| <del>6</del> <del>2</del> - 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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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/naphthalene 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/mst~~ 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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 <sup>28</sup>~~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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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~~<sup>16-18</sup> bgs  
18-22'

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_\_

**Sample Collection: Start:** 12/10/15    11:10

**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 = 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**Location Desc:**                     GW - 20                    

**External Sample Number:** \_\_\_\_\_

**Expected Conc:**                      (or Circle One: Low Medium High)                      **Date**                      **Time(24 hr)**  
**Latitude:** \_\_\_\_\_                      **Sample Collection: Start:** 12/10/15                      14:25  
**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 = 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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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)

*SW L = 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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 <sup>KA</sup> 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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**Location Desc:** GW-30

**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                          |
| <del>2</del> 1 - 128oz amber glass | 4 Deg C               | 7 Days       | 1 Semi-Volatile Organic Compounds in Water         |
| <del>2</del> 1 - 128oz amber glass | 4 Deg C               | 7 Days       | 1 Semi-Volatile TPH (DRO & ORO) in Water by GC/FID |
| <del>6</del> 1 - 40mL VOA vial     | 4 Deg C, HCL to pH<2  | 14 Days      | 1 VOCs in Water by GC/MS                           |
| <del>6</del> 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 = 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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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  
Rinse 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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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' BTOL  
TD = 24'10.5" BTOL  
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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

Location Desc: MW-2

External Sample Number: \_\_\_\_\_

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

Latitude: \_\_\_\_\_

Sample Collection: Start: 12/12/05 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" BTOL  
TD = 45'2" BTOL  
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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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' BTDC  
TD = 44' BTDC  
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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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 Site ID: 07HY Site OU: 00  
EVALUATION/DISPOSITION

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" b+oc  
TD = 40' b+oc  
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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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:** <sup>141</sup>~~143~~ <sub>KS</sub>    **QC Code:** FB    **Matrix:** Water    **Tag ID:** 7007-<sup>141</sup>~~143~~-FB <sub>KS</sub>

**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    **Site ID:** 07HY    **Site OU:** 00  
EVALUATION/DISPOSITION

**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                                 | <b>5.4</b> | 3 U        | 1.5 U            | 1.5 U       | <b>110</b>    | 8.7              | 1.5               | 1.5 U              | 25                 | 35       | 1.5 U    | 1.5 U    | <b>487</b>  |
| SB-9 (18-20')  | 0.63 U                              | 2.6        | 0.63 U     | 0.32 U           | 0.32 U      | <b>35</b>     | 3.4              | 0.48              | 0.32 U             | 9.6                | 12       | 0.32 U   | 0.32 U   | <b>97.9</b> |
| 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    | <b>129</b>  |
| 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   | <b>206</b>  |
| 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 | <b>58.6</b> |
| 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 | <b>77.8</b>  |
| 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  | <b>47.9</b>  |
| 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                               | <b>44</b> | 6.4 U      | 3.2 U            | 3.2 U       | 5.3           | 3.2 U            | 3.2 U             | 3.2 U              | 72                 | 26       | 21       | 74       | <b>1,850</b> |
| 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) |                                     |           |            |                  |             |               |                  |                   |                    |                    |          |          |          |              |
| <b>EPA RSL</b>           | 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

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                               | <b>8.3</b>  | 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                               | <b>8.7</b>  | 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                              | <b>10.9</b> | 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                              | <b>8.3</b>  | 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                               | <b>6.4</b>  | 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                               | <b>7.9</b>  | 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                              | <b>7.2</b>  | 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                              | <b>8.7</b>  | 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                               | <b>8.7</b>  | 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                               | <b>7.4</b>  | 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                              | <b>7.5</b>  | 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                              | <b>9.1</b>  | 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                               | <b>7</b>    | 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                               | <b>8.6</b>  | 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                              | <b>8.4</b>  | 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                              | <b>11.4</b> | 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                              | <b>6.2</b>  | 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                               | <b>13.8</b> | 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                              | <b>12.2</b> | 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                              | <b>7.8</b>  | 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                               | <b>7.5</b>  | 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                              | <b>9.7</b>  | 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                               | <b>6.4</b>  | 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                              | <b>7.4</b>  | 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                              | <b>7.1</b>  | 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                              | <b>8.3</b>  | 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                              | <b>8.4</b>  | 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                              | <b>10.4</b> | 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                               | <b>9.4</b>  | 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                              | <b>8.3</b>  | 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                               | <b>7.1</b>  | 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                               | <b>7.1</b>  | 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                              | <b>8.2</b>  | 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                              | <b>9.9</b>  | 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                               | <b>6.7</b>  | 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                              | <b>9.9</b>  | 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                              | <b>7.5</b>  | 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                               | <b>9.7</b>  | 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                               | <b>14.2</b> | 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                               | <b>11.4</b> | 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                               | <b>15.2</b> | 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                               | <b>38.6</b> | 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                               | <b>10.1</b> | 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                               | <b>7.7</b>  | 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)                              |                                     |             |         |           |         |          |                        |        |        |         |      |           |           |        |           |          |        |          |         |
| <b>USGS Mean Background Concentration<sup>a</sup></b> | 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    |
| <b>EPA RSL</b>  | 1,100,000                           | 3           | 220,000 | 2,300     | 980     | NE       | 1,800,000 <sup>b</sup> | 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.

<sup>a</sup> For Pottawattamie County soils<sup>b</sup> 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**

| <b>Sample Number</b>            | <b>Cyanide Sample Results (mg/kg)</b> |
|---------------------------------|---------------------------------------|
| 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                                |
| <b>Screening Values (mg/kg)</b> |                                       |
| <b>EPA RSL</b>                  | 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) |                                    |         |                        |             |              |                  |                     |          |                   |             |         |                  |
| <b>EPA MCL</b>          | NE                                 | 5       | 70                     | NE          | 700          | NE               | 10,000 <sup>a</sup> |          | NE                | NE          | 1,000   | NE               |
| <b>EPA RSL</b>          | 14,000                             | 0.46    | 3.6                    | 13,000      | 1.5          | 450              | 19                  | 19       | NE                | NE          | 110     | 3.3 <sup>b</sup> |

Notes:

Bold value indicates result is greater than a screening level.

GW-1 was off-site background location.

<sup>a</sup> Represents MCL for total xylenes<sup>b</sup> 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 <sup>a</sup> |

Notes:

Bold value indicates result is greater than a screening level.  
GW-1 was off-site background location.

<sup>a</sup> 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 <sup>a</sup> | 6      | 80     | 14,000  | 15    | NE        | 430       | 100        | 390 <sup>b</sup> | NE        | 10       | NE        | NE       | 86       | 600   |

Notes:

Bold value indicates result is greater than a screening level.

GW-1 was off-site background location.

- <sup>a</sup>Represents the screening level for chromium (III)
- <sup>b</sup>Represents the screening level for nickel soluble salts
- DPTDirect-push technology
- EPAU.S. Environmental Protection Agency
- JConcentration is an approximate value
- MCLMaximum contaminant level

- µg/LMicrograms per liter
- NENone established
- RSLRegional Screening Level (tap water)
- UAnalyte not detected above method detection limit, which is the value presented
- UJAnalyte 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                           | <b>14</b>                     |
| GW-4                           | 10 U                          |
| GW-5                           | <b>22.7</b>                   |
| GW-6                           | 10 U                          |
| GW-7                           | 10 U                          |
| GW-8                           | <b>66</b>                     |
| GW-9                           | 10 U                          |
| GW-10                          | 10 U                          |
| GW-11                          | 70.1                          |
| GW-12                          | <b>68.5</b>                   |
| GW-13                          | 10 U                          |
| GW-14                          | 10 U                          |
| GW-15                          | <b>17.5</b>                   |
| 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                          | <b>20.4</b>                   |
| GW-26                          | <b>206</b>                    |
| GW-27                          | <b>20</b>                     |
| GW-28                          | <b>30.7</b>                   |
| GW-29                          | 10 U                          |
| GW-30                          | <b>12.8</b>                   |
| GW-31                          | 10 U                          |
| Rinsate Blank                  | 10 U                          |
| Field Blank                    | 10 U                          |
| <b>Screening Values (µg/L)</b> |                               |
| <b>EPA MCL</b>                 | 200                           |
| <b>EPA RSL</b>                 | 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   | <b>1,500</b> | <b>1,800</b> | 91               | <b>480</b>          | <b>350</b> | 5.6               | 10,000 J    | 61      | <b>19,600</b>    |
| 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   | <b>360</b>   | <b>110</b>   | 74               | <b>48</b>           | <b>8.4</b> | 5.0 U             | 3,600 J     | 5.0 U   | <b>2,650</b>     |
| 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   | <b>330</b>   | <b>290</b>   | 27               | <b>110</b>          | <b>73</b>  | 5.0 U             | 3,200 J     | 17      | <b>3,310</b>     |
| Screening Values (µg/L) |                                    |         |              |              |                  |                     |            |                   |             |         |                  |
| <b>EPA MCL</b>          | NE                                 | NE      | 5            | 700          | NE               | 10,000 <sup>a</sup> |            | NE                | NE          | 1,000   | NE               |
| <b>EPA RSL</b>          | 5,600                              | 14,000  | 0.46         | 1.5          | 450              | 19                  | 19         | NE                | NE          | 110     | 3.3 <sup>b</sup> |

Notes:

Bold value indicates result is greater than a screening level.

<sup>a</sup> Represents MCL for total xylenes<sup>b</sup> 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         | <b>59</b> | 26        | 7.8          | 7.0          | 72       | 8,900       | 78           | 7.6    | <b>11,200</b>    |
| 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  | <b>4,230</b>     |
| 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                     | <b>97 J</b>                        | 51           | 5.0 U          | 5.0 U      | <b>12</b> | 10 U      | 5.0 U        | 5.0 U        | 18       | 1,600       | 24           | 5.0 U  | <b>2,760</b>     |
| Screening Values (µg/L) |                                    |              |                |            |           |           |              |              |          |             |              |        |                  |
| <b>EPA MCL</b>          | NE                                 | NE           | NE             | NE         | NE        | NE        | NE           | NE           | NE       | NE          | NE           | NE     | NE               |
| <b>EPA RSL</b>          | 36                                 | 530          | NE             | 1,800      | 0.83      | NE        | NE           | 800          | 290      | NE          | NE           | 120    | 5.5 <sup>a</sup> |

Notes:

Bold value indicates result is greater than a screening level.

|              |   |
|--------------|---|
| <sup>a</sup> | 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       | <b>8,370</b> | 6,150     | <b>154</b> | 215,000 |
| MW-2                    | 50 U                               | <b>50</b> | 324          | 297     | <b>34,500</b> | 102       | <b>1,410</b> | 6,310     | <b>139</b> | 43,800  |
| MW-3                    | 50 U                               | 25 U      | <b>841</b>   | 98.9    | <b>15,700</b> | 37.4      | <b>727</b>   | 8,590     | <b>53</b>  | 79,300  |
| MW-4                    | 50 U                               | <b>41</b> | <b>1,540</b> | 192     | <b>23,900</b> | 68.7      | <b>1,530</b> | 7,790     | <b>85</b>  | 43,000  |
| MW-6                    | 50 U                               | 25 U      | <b>917</b>   | 114     | <b>17,800</b> | 41.1      | 418          | 10,800    | 50 U       | 61,300  |
| MW-8                    | 50 U                               | <b>29</b> | 284          | 195     | <b>15,600</b> | 74.2      | <b>1,040</b> | 7,470     | <b>75</b>  | 50,800  |
| IDW                     | 72                                 | 25 U      | <b>656</b>   | 159     | 12,000        | 64.4      | <b>1,070</b> | 8,900     | 50 U       | 67,000  |
| Screening Values (µg/L) |                                    |           |              |         |               |           |              |           |            |         |
| <b>EPA MCL</b>          | NE                                 | 10        | 2,000        | NE      | NE            | NE        | NE           | NE        | 50         | NE      |
| <b>EPA RSL</b>          | 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                           | <b>73.7</b>                   |
| MW-3                           | <b>19.9</b>                   |
| MW-4                           | 10 U                          |
| MW-6                           | <b>13.8</b>                   |
| MW-8                           | 10 U                          |
| IDW                            | 10 U                          |
| <b>Screening Values (µg/L)</b> |                               |
| <b>EPA MCL</b>                 | 200                           |
| <b>EPA RSL</b>                 | 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)<br>Kevin Larson |   | NAME OF SURVEY OR ACTIVITY<br>Citizens Gas & Electric |        | DATE OF COLLECTION<br>7-8 12 2015<br>DAY MONTH YEAR |                         | SHEET<br>1 of 2                             |      |          |      |   |        |
| CONTENTS OF SHIPMENT                   |   |   |        |   |                         |   |      |          |      |   |        |
| SAMPLE<br>NUMBER                       | TYPE OF CONTAINERS                      |   |        |   |                         | SAMPLED MEDIA                               |      |          |      | RECEIVING LABORATORY<br>REMARKS/OTHER INFORMATION<br>(condition of samples upon receipt,<br>other sample numbers, etc.) |        |
|  | CUBITAINER                              | BOTTLE  | BOTTLE | BOTTLE  | VOA SET<br>(2 VIALS EA) | water                                       | soil | sediment | dust |   | other  |
|  | 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                |   |   |        |   |                         | MODE OF SHIPMENT                            |      |          |      |   |        |
| PIECE(S) CONSISTING OF BOX(ES)         |   |   |        |   |                         | X COMMERCIAL CARRIER: Fed Ex                |      |          |      |   |        |
| ICE CHEST(S); OTHER                    |   |   |        |   |                         | COURIER                                     |      |          |      |   |        |
|  |   |   |        |   |                         | SAMPLER CONVEYED (SHIPPING DOCUMENT NUMBER) |      |          |      |   |        |
| PERSONNEL CUSTODY RECORD               |   |   |        |   |                         |   |      |          |      |   |        |
| RELINQUISHED BY (SAMPLER)              |   | DATE  | TIME   | RECEIVED BY   |                         | REASON FOR CHANGE OF CUSTODY                |      |          |      |   |        |
| Karl Brown                             |   | 12/9/15   | 1720   | Fed Ex  |                         | Ship samples to Lab                         |      |          |      |   |        |
| SEALED UNSEALED                        |   |   |        | SEALED UNSEALED                                     |                         |   |      |          |      |   |        |
| RELINQUISHED BY                        |   | DATE  | TIME   | RECEIVED BY   |                         | REASON FOR CHANGE OF CUSTODY                |      |          |      |   |        |
| SEALED UNSEALED                        |   |   |        | SEALED UNSEALED                                     |                         |   |      |          |      |   |        |
| RELINQUISHED BY                        |   | DATE  | TIME   | RECEIVED BY   |                         | REASON FOR CHANGE OF CUSTODY                |      |          |      |   |        |
| SEALED UNSEALED                        |   |   |        | SEALED UNSEALED                                     |                         |   |      |          |      |   |        |

|  |   |   |                 |  |
|--|---|---|-----------------|--|
| ACTIVITY LEADER(Print)<br>Kevin Larson | NAME OF SURVEY OR ACTIVITY<br>Citizens Gas & Electric | DATE OF COLLECTION<br>7-8 12 2015<br>DAY MONTH YEAR | SHEET<br>2 of 2 |  |
|--|---|---|-----------------|--|

[illegible]

|   |                        |                     |   |  |
|---|------------------------|---------------------|---|--|
| RELINQUISHED BY (SAMPLER)<br><i>Tim Brown</i>                                     | DATE<br><i>12/9/15</i> | TIME<br><i>1720</i> | RECEIVED BY<br><i>Fed Ex</i>  | REASON FOR CHANGE OF CUSTODY<br><i>Ship samples to Lab</i> |
| <input checked="" type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/> |                        |                     | <input checked="" type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/> |  |
| RELINQUISHED BY   | DATE                   | TIME                | RECEIVED BY   | REASON FOR CHANGE OF CUSTODY                               |
| <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |                        |                     | <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |  |
| RELINQUISHED BY   | DATE                   | TIME                | RECEIVED BY   | REASON FOR CHANGE OF CUSTODY                               |
| <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |                        |                     | <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |  |

**CHAIN OF CUSTODY RECORD  
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

|   |  |   |                               |
|---|--|---|-------------------------------|
| ACTIVITY LEADER(Print)<br><u>Kevin Larson</u> | NAME OF SURVEY OR ACTIVITY<br><u>Citizens Gas &amp; Electric</u> | DATE OF COLLECTION<br><u>9-10</u> <u>12</u> <u>2015</u><br>DAY MONTH YEAR | SHEET<br><u>1</u> of <u>2</u> |
|---|--|---|-------------------------------|

**CONTENTS OF SHIPMENT**

| SAMPLE NUMBER           | TYPE OF CONTAINERS <u>VBA</u> |        |        |                          |                         | SAMPLED MEDIA |      |          |      |       | RECEIVING LABORATORY<br>REMARKS/OTHER INFORMATION<br>(condition of samples upon receipt,<br>other sample numbers, etc.) |
|-------------------------|-------------------------------|--------|--------|--------------------------|-------------------------|---------------|------|----------|------|-------|---|
|                         | CUBITAINER                    | BOTTLE | BOTTLE | SBT 4 VIALS<br>BOTTLE EA | VOA SET<br>(2 VIALS EA) | water         | soil | sediment | dust | other |   |
|                         |                               |        |        |                          |                         |               |      |          |      |       |   |
| 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             |      |          |      |       |   |
| <u>ASR NOT COMPLETE</u> |                               |        |        |                          |                         |               |      |          |      |       |   |

|  |  |
|--|--|
| DESCRIPTION OF SHIPMENT<br><br>_____ PIECE(S) CONSISTING OF _____ BOX(ES)<br><br>_____ ICE CHEST(S); OTHER _____ | MODE OF SHIPMENT<br><br><input checked="" type="checkbox"/> COMMERCIAL CARRIER <u>Federal Express</u><br><input type="checkbox"/> COURIER<br><input type="checkbox"/> SAMPLER CONVEYED _____<br>(SHIPPING DOCUMENT NUMBER) |
|--|--|

| PERSONNEL CUSTODY RECORD  |  |                     |                                       |
|---|--|---------------------|---------------------------------------|
| RELINQUISHED BY (SAMPLER)<br><u>Kevin Brown</u>                                   | DATE<br><u>12-10-15</u>  | TIME<br><u>1815</u> | RECEIVED BY<br><u>Federal Express</u> |
| <input checked="" type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/> | REASON FOR CHANGE OF CUSTODY<br><u>Shipping samples to Lab</u> |                     |                                       |
| RELINQUISHED BY   | DATE   | TIME                | RECEIVED BY                           |
| <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |  |                     |                                       |
| RELINQUISHED BY   | DATE   | TIME                | RECEIVED BY                           |
| <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |  |                     |                                       |
| RELINQUISHED BY   | DATE   | TIME                | RECEIVED BY                           |
| <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |  |                     |                                       |

**CHAIN OF CUSTODY RECORD  
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

|   |  |   |                               |
|---|--|---|-------------------------------|
| ACTIVITY LEADER(Print)<br><u>Kevin Larson</u> | NAME OF SURVEY OR ACTIVITY<br><u>Citizens Gas &amp; Electric</u> | DATE OF COLLECTION<br><u>9-10</u> / <u>12</u> / <u>2015</u><br>DAY MONTH YEAR | SHEET<br><u>2</u> of <u>2</u> |
|---|--|---|-------------------------------|

**CONTENTS OF SHIPMENT**

| SAMPLE NUMBER  | TYPE OF CONTAINERS |        |        |        | VOA SET<br>(2 VIALS EA) | SAMPLED MEDIA |      |          |      |       | RECEIVING LABORATORY<br>REMARKS OTHER INFORMATION<br>(condition of samples upon receipt,<br>other sample numbers, etc.) |
|--|--------------------|--------|--------|--------|-------------------------|---------------|------|----------|------|-------|---|
|  | CUBITAINER         | 8002   | 1-L    | BOTTLE |                         | water         | soil | sediment | dust | other |   |
|  |                    | BOTTLE | BOTTLE |        |                         |               |      |          |      |       |   |
| 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             |      |          |      |       |   |
| <div style="transform: rotate(-30deg); font-size: 2em; opacity: 0.5;">             ASR NOT COMPLETE           </div> |                    |        |        |        |                         |               |      |          |      |       |   |

|   |   |
|---|---|
| <b>DESCRIPTION OF SHIPMENT</b><br><br>_____ PIECE(S) CONSISTING OF _____ BOX(ES)<br><u>10</u> ICE CHEST(S); OTHER _____ | <b>MODE OF SHIPMENT</b><br><br><input checked="" type="checkbox"/> COMMERCIAL CARRIER: <u>Federal Express</u><br>_____ COURIER<br>_____ SAMPLER CONVEYED _____ (SHIPPING DOCUMENT NUMBER) |
|---|---|

| PERSONNEL CUSTODY RECORD  |                         |                     |   |
|---|-------------------------|---------------------|---|
| RELINQUISHED BY (SAMPLER)<br><u>Bob Brown</u>                                     | DATE<br><u>12-10-15</u> | TIME<br><u>1815</u> | RECEIVED BY<br><u>Federal Express</u>   |
| <input checked="" type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/> |                         |                     | <input checked="" type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/> |
| REASON FOR CHANGE OF CUSTODY<br><u>shipping samples to Lab</u>                    |                         |                     |   |
| RELINQUISHED BY   | DATE                    | TIME                | RECEIVED BY   |
| <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |                         |                     | <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |
| REASON FOR CHANGE OF CUSTODY  |                         |                     |   |
| RELINQUISHED BY   | DATE                    | TIME                | RECEIVED BY   |
| <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |                         |                     | <input type="checkbox"/> SEALED      UNSEALED <input type="checkbox"/>            |
| REASON FOR CHANGE OF CUSTODY  |                         |                     |   |

**CHAIN OF CUSTODY RECORD  
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

|   |  |  |  |
|---|--|--|--|
| ACTIVITY LEADER(Print)<br><i>Kevin Larson</i> | NAME OF SURVEY OR ACTIVITY<br><i>Citizens Gas &amp; Electric</i> | DATE OF COLLECTION<br><div style="display: flex; justify-content: space-between;"> <span><i>11-12</i><br/>DAY</span> <span><i>12</i><br/>MONTH</span> <span><i>2015</i><br/>YEAR</span> </div> | SHEET<br><div style="display: flex; justify-content: space-between;"> <span><i>1</i> of <i>2</i></span> </div> |
|---|--|--|--|

**CONTENTS OF SHIPMENT**

| SAMPLE NUMBER  | TYPE OF CONTAINERS |             |        |                   |                      | SAMPLED MEDIA |      |          |      |       | RECEIVING LABORATORY<br>REMARKS/OTHER INFORMATION<br>(condition of samples upon receipt,<br>other sample numbers, etc.) |
|--|--------------------|-------------|--------|-------------------|----------------------|---------------|------|----------|------|-------|---|
|  | CUBITAINER         | 8 oz BOTTLE | BOTTLE | 4 VIALS ea BOTTLE | VOA SET (2 VIALS ea) | water         | soil | sediment | dust | other |   |
|  |                    |             |        |                   |                      |               |      |          |      |       |   |
| 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  |
| <div style="position: relative; width: 100%; height: 100%;"> <span style="position: absolute; top: 0; left: 0; font-size: 2em; opacity: 0.5;">ASR</span> <span style="position: absolute; bottom: 0; right: 0; font-size: 3em; opacity: 0.5;">NOT COMPLETE</span> </div> |                    |             |        |                   |                      |               |      |          |      |       |   |

|   |   |
|---|---|
| <b>DESCRIPTION OF SHIPMENT</b><br><br>_____ PIECE(S) CONSISTING OF _____ BOX(ES)<br><br>_____ ICE CHEST(S); OTHER _____ | <b>MODE OF SHIPMENT</b><br><br>_____ COMMERCIAL CARRIER _____<br>_____ COURIER _____<br><input checked="" type="checkbox"/> SAMPLER CONVEYED _____ (SHIPPING DOCUMENT NUMBER) |
|---|---|

| PERSONNEL CUSTODY RECORD   |  |                      |                                    |
|--|--|----------------------|------------------------------------|
| RELINQUISHED BY (SAMPLER)<br><i>Kevin Brown</i>                              | DATE<br><i>12-15-15</i>                      | TIME<br><i>1353p</i> | RECEIVED BY<br><i>Nicole Rohly</i> |
| <input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED | REASON FOR CHANGE OF CUSTODY<br><i>Analy</i> |                      |                                    |
| RELINQUISHED BY  | DATE   | TIME                 | RECEIVED BY                        |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            | REASON FOR CHANGE OF CUSTODY                 |                      |                                    |
| RELINQUISHED BY  | DATE   | TIME                 | RECEIVED BY                        |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            | REASON FOR CHANGE OF CUSTODY                 |                      |                                    |

**CHAIN OF CUSTODY RECORD  
ENVIRONMENTAL PROTECTION AGENCY REGION VII**

|   |  |  |                               |
|---|--|--|-------------------------------|
| ACTIVITY LEADER(Print)<br><u>Kevin Larson</u> | NAME OF SURVEY OR ACTIVITY<br><u>Citizens Gas &amp; Electric</u> | DATE OF COLLECTION<br><u>11-14</u> <u>12</u> <u>2015</u><br>DAY MONTH YEAR | SHEET<br><u>2</u> of <u>2</u> |
|---|--|--|-------------------------------|

**CONTENTS OF SHIPMENT**

| SAMPLE NUMBER                           | TYPE OF CONTAINERS |        |        |        |                         | SAMPLED MEDIA |      |          |      |       | RECEIVING LABORATORY<br>REMARKS/OTHER INFORMATION<br>(condition of samples upon receipt,<br>other sample numbers, etc.) |
|---|--------------------|--------|--------|--------|-------------------------|---------------|------|----------|------|-------|---|
|   | CUBITAINER         | 8002   | 1-L    | BOTTLE | VOA SET<br>(2 VIALS EA) | water         | soil | sediment | dust | other |   |
|   |                    | BOTTLE | BOTTLE |        |                         |               |      |          |      |       |   |
| 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                                    | ROX                | 4      | 2      |        | 6                       | X             |      |          |      |       | ms/mso  |
| -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<br><br>_____ PIECE(S) CONSISTING OF _____ BOX(ES)<br><u>10</u> ICE CHEST(S); OTHER _____ | MODE OF SHIPMENT<br><br>_____ COMMERCIAL CARRIER _____<br>_____ COURIER _____<br><input checked="" type="checkbox"/> SAMPLER CONVEYED _____ (SHIPPING DOCUMENT NUMBER) |
|--|--|

| PERSONNEL CUSTODY RECORD   |                         |                     |  |
|--|-------------------------|---------------------|--|
| RELINQUISHED BY (SAMPLER)<br><u>Kevin Larson</u>                             | DATE<br><u>12-15-15</u> | TIME<br><u>1353</u> | RECEIVED BY<br><u>Nicholas Ray</u>   |
| <input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED |                         |                     | <input type="checkbox"/> SEALED <input checked="" type="checkbox"/> UNSEALED |
| REASON FOR CHANGE OF CUSTODY   |                         |                     |  |
| RELINQUISHED BY  | DATE                    | TIME                | RECEIVED BY  |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                         |                     | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |
| REASON FOR CHANGE OF CUSTODY   |                         |                     |  |
| RELINQUISHED BY  | DATE                    | TIME                | RECEIVED BY  |
| <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |                         |                     | <input type="checkbox"/> SEALED <input type="checkbox"/> UNSEALED            |
| REASON FOR CHANGE OF CUSTODY   |                         |                     |  |

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.

Project Manager: Kevin Larson

Org: SUPR/ERNB

Phone: 913-551-7808

Project ID: KL07HY

Project Desc: Citizens Gas &amp; Electric Co. sampling

Location: Council Bluffs

State: Iowa

Program: Superfund

Site Name: CITIZENS GAS & ELECTRIC CO - SITE  
EVALUATION/DISPOSITIONSite 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.Units: Specific units in which results are  
reported.

\_\_\_ = Field Sample

FB = Field Blank

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 &amp; 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   |

ASR Number: 7007

## Sample Information Summary

01/25/2016

Project ID: KL07HY

Project Desc: Citizens Gas &amp; Electric Co. sampling

| 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 &amp; 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   |

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| Analysis | Comments About Results For This Analysis |
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## 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

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| Analysis | Comments About Results For This Analysis |
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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-__ |

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| Analysis | Comments About Results For This Analysis |
|----------|--|
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|          |       |       |       |       |       |       |       |
|----------|-------|-------|-------|-------|-------|-------|-------|
| 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-Nitroaniline, 3-Nitroaniline, 4-Nitroaniline, 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

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**Analysis      Comments About Results For This Analysis**


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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

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**Analysis**      **Comments About Results For This Analysis**

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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

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**Analysis**      **Comments About Results For This Analysis**

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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 it 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.

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Analysis      Comments About Results For This Analysis

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## 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

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|          |  |
|----------|--|
| Analysis | Comments About Results For This Analysis |
|----------|--|

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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-Chloroaniline, 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:

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Analysis      Comments About Results For This Analysis

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## 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  $\pm 20\%$  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  $\pm 20\%$  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

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**Analysis**      **Comments About Results For This Analysis**

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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.

ASR Number: 7007  
Project ID: KL07HY

RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

01/25/2016

| 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  |

ASR Number: 7007  
Project ID: KL07HY

RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

01/25/2016

| 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  |

ASR Number: 7007  
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RLAB Approved Sample Analysis Results  
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| 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 |

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| 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  |

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| 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  |

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| 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 |

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RLAB Approved Sample Analysis Results  
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| 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  |

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| 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   |

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| 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 |

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| 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  |

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| 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   |

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| 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  |

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| 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  |

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| 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 |

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| 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  |

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| 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  |

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| 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   |

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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 U  | 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  |

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| 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 |

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| 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  |

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Project Desc: Citizens Gas & Electric Co. sampling

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| 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  |

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RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

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| 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 |

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RLAB Approved Sample Analysis Results  
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| 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  |

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| 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  |

ASR Number: 7007  
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RLAB Approved Sample Analysis Results  
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| 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 |

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| 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  |

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| 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  |

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| 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 |

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| 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  |

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| 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  |

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| 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 |

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| 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   |

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| 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    |

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| 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 |

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| 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   |

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| 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   |

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| 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  |

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| 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  |

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RLAB Approved Sample Analysis Results  
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| 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  |

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RLAB Approved Sample Analysis Results  
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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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 |

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RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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   |

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| 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  |

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| 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  |

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| 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  |

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| 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 |

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| 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  |

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| 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  |

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| 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  |

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| 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 |

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| 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  |

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| 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  |

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| 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  |

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| 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 |

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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  |

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| 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 |

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| 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  |

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| 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  |

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| 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  |

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| 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   |

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| 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  |

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| 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  |

ASR Number: 7007  
Project ID: KL07HY

RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

01/25/2016

| 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  |

ASR Number: 7007  
Project ID: KL07HY

RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

01/25/2016

| 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 |

ASR Number: 7007  
Project ID: KL07HY

RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

01/25/2016

| 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  |

ASR Number: 7007  
Project ID: KL07HY

RLAB Approved Sample Analysis Results  
Project Desc: Citizens Gas & Electric Co. sampling

01/25/2016

| 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.

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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.

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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: \_\_\_\_\_