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**2006 ANNUAL**  
**PROGRESS MONITORING REPORT**  
**PHASE I – OPERABLE UNIT 2**

**FORMER SINCLAIR REFINERY SITE**  
**WELLSVILLE, NEW YORK**

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## **1.0 OVERVIEW**

### **1.1 Site Description and Project Overview**

This document provides a remediation progress update for the Operable Unit 2 (OU2) portion of the Former Sinclair Refinery (Site) located in the Town and Village of Wellsville, Allegany County, New York (please see Figure 1). This report covers the time period from January 1 to December 31, 2006. An electronic copy of this report is included as Appendix A.

The OU2 site consists of the approximately 90 acre former refinery area and is currently occupied by a number of commercial/manufacturing businesses and the State University of New York (SUNY Alfred) at Wellsville campus. SUNY Alfred operates a vocational–technical school at the Site consisting of various vocational programs. Most of the former refinery structures were removed before 1964; however some buildings from the original refinery operations are still present. Most of these buildings have been renovated and are now in use supporting current occupants. Some of the original buildings are vacant.

The Remedial Investigation/Feasibility Study (RI/FS) and Remedial Design Investigation (RDI) efforts at OU2 were conducted between 1985 and 1994. The United States Environmental Protection Agency (USEPA) issued the OU2 Record of Decision (ROD) on September 30, 1991 and Unilateral Administrative Order (UAO) on September 8, 1992. The ROD and UAO specified cleanup levels for groundwater and surface water for the OU2 area of the Site. The shallow water bearing zone at the Site is designated by New York State as a class GA aquifer, and the Genesee River adjacent to the Site is designated a Class A surface water. These classifications characterize the water bearing zone and river as potential sources of potable water. Chemical-specific applicable or relevant and appropriate requirements (ARARs) for groundwater and surface water at the Site were defined as federal maximum contaminant levels (MCLs) and state ambient water quality standards (AWQSs).

The OU2 remedial actions have consisted of the following:

- Remediation of surface soils completed in 1993;
- Remediation of the Northern Oil Water Separator completed in 1993;
- Demolition of the Powerhouse completed in 1993; and
- Implementation of a phased approach to groundwater remediation.

The phased groundwater remediation approach was approved in 1994. Phase I remediation of groundwater involved the construction, operation, and monitoring of a groundwater extraction and water treatment system, and three air sparging/soil vapor extraction (AS/SVE) systems. Operation of these remedial systems was initiated in 1995 and enhanced with an expanded AS/SVE system in December 1997. Phase I groundwater remediation is complete as

documented in *Phase I Completion Report, Former Sinclair Refinery Site (OU2) Wellsville, New York*, August, 2001. The Phase I AS/SVE systems were deactivated in July 2003 following USEPA approval of the Phase II Remedial Design Investigation Work Plan. The Phase I groundwater extraction and water treatment system is scheduled to continue operations until Phase II is implemented. Design activities for Phase II are currently being finalized. Phase II is anticipated to include a downgradient hydrogeologic barrier and an engineered wetland treatment system.

## **1.2 Report Organization**

This report documents the Phase I progress monitoring completed from January 1 through December 31, 2006. The remainder of the report is organized as follows:

- Section 2 describes the groundwater extraction and treatment operations;
- Section 3 presents the groundwater chemical monitoring results;
- Section 4 provides the groundwater physical and geochemical monitoring results; and
- Section 5 outlines the Genesee River monitoring activities.

## **2.0 GROUNDWATER EXTRACTION AND TREATMENT SYSTEM**

### **2.1 Treatment System Overview**

#### *System Components*

The groundwater treatment system and building were constructed in 2004 following a fire in the previous water treatment building at the same location. The groundwater treatment system consists of the following components: i) a MSD-4-500 Multistage Diffuser (Air Stripper) manufactured by Carbtrol Corporation; ii) an equalization tank and pump to transfer water from the air stripper to the metals treatment unit; iii) a two stage reaction, flocculation and clarification metals treatment unit rehabilitated from the previous system; iv) two, 200-pound Hayward sand filters; v) two Carbtrol 1400-pound granular activated carbon (GAC) units; vi) an Iron Removal Filter manufactured by Carbtrol Corporation; and vii) a four cubic foot plate and frame filter press manufactured by Hoffland Environmental Inc. The sand filters and GAC units were added to the system in 2005. The sand filters were installed on January 28, 2005 and the GAC units were put online on July 1, 2005.

#### *Process Overview*

Groundwater is pumped from Northern Area recovery wells RW-1, RW-2 and RW-3 to the air stripper, which removes Volatile Organic Compounds (VOCs). Process water is pumped from the air stripper to the metals treatment unit. Prior to the metals treatment unit, hydrogen peroxide

(35%) is injected inline to oxidize the ferrous (dissolved) iron to ferric state. A pH controller adds caustic soda (50%) to reactor Chamber 1 to raise the pH from approximately 6.5 to a range of 7.5 to 8.5. The water is continually mixed and an anionic polymer (Drewfloc 2278) is added to promote flocculation of solids. The floc and process water flows over a weir and into the solids settling chamber. The process water rises through the inclined plate settling racks and over an effluent weir to two sand filters. The settled solids accumulate in the inverted pyramid shaped bottom section of the clarifier. The solids are periodically pumped to a holding tank and then filter pressed prior to disposal at an approved off-site landfill. From the metals treatment unit, process water flows to an equalization tank before being pumped through the two sand filters. The sand filters are plumbed in parallel and are equipped with a programmable automatic backwash valve. The sand filters remove suspended solids from the process water prior to the GAC units. The GACs each hold approximately 1400 pounds of carbon and are piped in series. Process water is polished by the GACs and pumped to the Iron filter. The Iron filter acts as an equalization tank and a final suspended solids filter. From the Iron filter, treated water gravity drains to the Genesee River. A process flow diagram is provided as Figure 2.

#### *2006 System Operations*

During 2006, the treatment system operated 97% of the time. A total of approximately 5,111,100 gallons of water were treated. Approximately six cubic yards of sludge was produced from the metals treatment unit and properly disposed off-site. Additionally, five 55-gallon drums of used absorbents (river booms) were properly disposed off-site. Both the boxes and drums were disposed as non-hazardous waste at an approved off-site facility. A 2006 waste disposal summary is provided as Table 1.

Compliance sampling and chemical analysis of influent (sample port SP-114), effluent (SP-219) and between the GACs (SP-217) was completed on a monthly basis. The monthly effluent analytical results are below discharge limits. Monthly compliance analytical results are presented in Table 2. Data validation was completed on laboratory analytical results. Monthly compliance data validation reports are included as Appendix B.

### **3.0 GROUNDWATER CHEMICAL MONITORING RESULTS**

Interim groundwater monitoring (until Phase II is implemented) requirements were proposed in a letter from Atlantic Richfield Company to USEPA entitled: *Proposed Revisions to Interim OU2 Groundwater Monitoring Plan, Former Sinclair Refinery, Wellsville, NY*, dated April 29, 2003. This plan was approved by USEPA in correspondence dated May 28, 2003. The interim plan requires 13 wells along the downgradient side of the Site be sampled annually during the second quarter of the year.

### 3.1 Sampling and Analysis

The 2006 annual OU2 groundwater sampling event was completed between June 13 and 21, 2006. Sampling activities were performed by On-Site Technical Services and laboratory analysis was conducted by Accutest Laboratories, Dayton, New Jersey. Required analyses are listed by area below.

| Well                 | Required Analysis    |
|----------------------|----------------------|
| <b>Northern Area</b> |                      |
| MW-10                | BTEX, CVOC, SVOC, Ar |
| MW-11                | BTEX, Ar             |
| MW-69A               | BTEX, CVOC, Ar       |
| MW-78                | BTEX, Ar             |
| <b>MW-70 Area</b>    |                      |
| MW-70                | BTEX, SVOC, Ar       |
| OW-1                 | BTEX, SVOC, Ar       |
| OW-3                 | BTEX, SVOC, Ar       |
| <b>Central Area</b>  |                      |
| MW-9                 | BTEX, Ar             |
| MW-71                | BTEX, Ar             |
| OW-4                 | BTEX, Ar             |
| <b>Southern Area</b> |                      |
| MW-7                 | BTEX, Ar             |
| MW-55                | BTEX, Ar             |
| MW-96                | BTEX, Ar             |

**Notes:**

BTEX – Benzene, Toluene, Ethylbenzene, Total Xylene (SW846, 8260B)

CVOC – cis-1,2-Dichloroethene, Vinyl chloride (SW846, 8260B)

SVOC – 2-Aminophenol, Aniline, Azobenzene, Azoxybenzene, Nitrobenzene, Nitrosobenzene (SW846, 8270C)

Ar – Arsenic (EPA 200.7 (ICP), SW846 6010B (ICP))

Sampling was completed following low-flow sampling techniques using a combination of non-dedicated bladder and grundfus pumps. The pump and Teflon<sup>®</sup> coated tubing were decontaminated between each well following a three step washing procedure: (i) phosphate-free detergent (Liqui-nox) and tap water wash; (ii) tap water rinse; followed by (iii) distilled water rinse. Equipment rinsate blanks were collected from each pump and tubing each day used. Due to a shipping error, samples from wells MW-7, MW-11, MW-71, MW-78 and MW-91 sent on June 14, 2006 were not received by the laboratory until June 19, 2006 at 19.8°C. Since these samples were received above temperature requirements, samples were recollected from these wells on June 20 and 21, 2006 and sent to the laboratory. Well locations with analytical results are shown in Figure 3. Results are discussed in the following sections.

### **3.2 Dissolved BTEX Concentrations**

Groundwater BTEX compounds (benzene, toluene, ethylbenzene and total xylene) were analyzed in the 13 wells sampled in accordance with the current sampling plan. Groundwater BTEX concentrations at the June 2006 sampling locations are generally in the range observed over the past six years. For discussion purposes the site has been divided into 4 areas, Northern Area, MW-70 Area, Central Area, and Southern Area.

In the Northern Area, which is represented by wells MW-10, MW-11, MW-69A and MW-78, benzene was the only BTEX parameter exceeding water quality standards, having exceeded both MCLs and AWQSs at monitoring well MW-69A and AWQS at monitoring well MW-78. Since the Northern Area has ongoing groundwater extraction and treatment, BTEX groundwater concentrations over time have been tracked as presented in Figure 4. Since 1999, BTEX groundwater concentrations in the Northern Area are significantly lower than historic concentrations.

Three MW-70 Area wells, MW-70, OW-01 and OW-03, exhibited benzene MCL and AWQS exceedances. Additionally, MW-70 and OW-3 exceeded toluene, ethyl benzene and xylenes AWQSs.

The Central Area includes wells MW-09, MW-71 and OW-04. With the exception of benzene detected at MW-09, BTEX compounds were not observed in these wells during 2006.

The Southern Area is represented by monitoring wells MW-07, MW-55 and MW-96. MW-55 groundwater concentrations exceeded the benzene AWQS and MCL, as well as AWQSs for toluene, ethyl benzene and xylenes. Additionally, benzene exceeded AWQS at MW-07 and MW-96.

A tabular listing of the June 2006 BTEX results is presented in Table 3.



### **3.3 Chlorinated VOC Concentrations**

Historically, MW-10 and MW-69A in the Northern Area have shown detections of Chlorinated Volatile Organic Compounds (CVOCs). June 2006 samples were tested for cis-1,2-dichloroethene (cDCE) and vinyl chloride as required by the current monitoring plan. The June 2006 concentrations are consistent with historic results. In 2006, MW-69A exceeded the AWQS and MCL for vinyl chloride. The June 2006 CVOc groundwater concentrations are presented in Table 4.

### **3.4 SVOC Concentrations**

Previous groundwater monitoring results have shown an area of elevated nitrobenzene and aniline concentrations in the MW-70 Area and at MW-10 (south end of Northern Area). SVOCs were not detected at MW-10 in the June 2006 sampling event. With the exception of aniline and nitrobenzene, SVOCs were not detected at MW-70, OW-1 and OW-3 during June 2006. Both aniline and nitrobenzene exceeded AWQSs at MW-70 and OW-3. The levels observed are consistent with historical data from these wells. June 2006 SVOC groundwater concentrations are presented in Table 5.

### **3.5 Arsenic Concentrations**

Analysis was performed for total arsenic at the 13 monitoring wells sampled in June 2006. Total arsenic was detected in samples from 12 of the 13 monitoring wells. Arsenic was not detected at MW-71. The arsenic MCL is 0.010 mg/L and the AWQS is 0.025 mg/L. In June 2006, total arsenic concentrations exceeded both MCL and AWQS at MW-10, MW-11, MW-55, MW-69A, MW-70, MW-78, MW-96, OW-1 and OW-4. Additionally, the arsenic MCL was exceeded at MW-7, MW-9 and OW-3. June 2006 groundwater arsenic results are consistent with previous monitoring results and are presented in Table 6.

### **3.6 Data Quality Assessment**

Sampling procedures followed low-flow sampling techniques. Sampling pumps and tubing were cleaned between wells as indicated in section 3.1 above. Three original equipment rinsate blank samples (EB1-0606, EB2-0606 and EB3-0606) were collected by pumping distilled water through the pumps and tubing into laboratory provided sample bottles. Equipment blank EB1-0606 was collected on June 13, 2006 from the bladder pump and tubing used to collect samples from MW-9, MW-55 and MW-69A. EB2-0606 was collected from pump and tubing on June 21, 2006 associated with wells MW-7, MW-10, MW-71, MW-96 and OW-4. Equipment blank EB3-0606 was collected on June 15, 2006 from the grundfus pump and tubing used to collect samples from OW-1, MW-70 and OW-3. Equipment rinsate blanks results are non-detect and are presented in Table 7.

A field duplicate sample was collected from OW-03 on June 15, 2006. The samples were analyzed for BTEX, SVOCs and arsenic. Analytical results compare favorably between the samples. A field duplicate sample comparison is shown in Table 8.

Samples were shipped to the laboratory via Federal Express priority overnight delivery service. Most samples were received intact and in good condition by the laboratory within one to two days after sampling, except for the following samples. Monitoring well samples from MW-96, MW-7, MW-71, MW-10 and OW-4 were shipped on June 15, 2006, but not received by the lab until June 19, 2006 at a temperature of 19.8°C. These wells were resampled and shipped on June 21, 2006. Three QC trip blank samples were included in the sample coolers and analyzed for VOCs, showing non-detectable results.

Data validation was performed by the project data validator following USEPA Region II SOPs for organic and inorganic data review. Following data validation, which included some qualifier adjustments and some low level detections to be changed to non-detect, the analytical results are considered 100% complete, usable and valid. The annual groundwater data validation report is attached as Appendix B.

#### **4.0 GROUNDWATER PHYSICAL AND GEOCHEMICAL RESULTS**

##### **4.1 Groundwater Elevations**

Groundwater levels were measured on June 13, 2006 at each of the 13 wells scheduled for sampling (Table 9). Water levels were measured using a GeoTech ORS Interface Probe™ (Oil/Water Interface Probe). Light non-aqueous phase liquid (LNAPL) was detected at trace levels at MW-07 and OW-3. Oil absorbent socks were installed in MW-07 and OW-03 as a precautionary measure prior to sampling. The socks were removed from the wells immediately prior to purging and sampling each well. Groundwater elevations were calculated by subtracting the depth to water measurements from the survey elevation of the top of well casings (measuring point elevation). These groundwater elevation data, along with previous elevations were plotted verses time. The plots are presented as Figures 5 to 8 for the Northern Area, MW-70 Area, Central Area and Southern Area.

##### **4.2 LNAPL Thickness Measurements and Removal**

As a proactive measure, LNAPL removal was conducted at six wells (MW-7, OW-3, OW-8, MW-75, MW-85 and MW-86) during 2006. These six wells are the only wells where LNAPL is routinely measured at an apparent thickness more than 0.01 ft. Measurements are first conducted to determine the thickness, if any, of LNAPL in the wells. Any LNAPL present is removed by installing absorbent socks in the wells whenever an apparent LNAPL thickness greater than 0.01 ft was measured. During 2006, approximately 1.4 ounces (oz) of LNAPL was

removed from MW-7; approximately 3.8 oz from OW-3; approximately 30.2 oz from OW-8; approximately 8.5 oz from MW-75; approximately 4.7 oz from MW-85; and approximately 21.7 oz from MW-86. Table 10 provides details on LNAPL measurements and removal.

#### **4.3 Groundwater Geochemical Parameters**

Groundwater geochemical parameter monitoring was performed in the field during the June 2006 sampling event. A properly calibrated YSI® 556 MPS with a flow through cell was utilized to measure pH, conductivity, dissolved oxygen (DO), temperature and oxidation-reduction potential (ORP). Turbidity was measured from grab samples using a properly calibrated Hach® 2100P turbidity meter. Results of the June 2006 geochemical monitoring are generally consistent with historic results. DO levels continue to be low and ORP readings indicate reducing conditions at the wells. The June 2006 geochemical field parameters are listed in Table 11.

#### **5.0 GENESEE RIVER MONITORING**

River seep monitoring and boom management continues to be conducted in accordance with previously submitted plans.

River bank seeps have not been observed since June 2001. However, sub-aqueous seep activities continue during periods of low river water levels and warm temperatures. In 2006, absorbent booms and sweeps were installed on July 17, 2006 (immediately following the first observation of sub-aqueous seep activity) and removed for the winter on November 2, 2006. Boom replacement was conducted periodically throughout the year due to washout or visual appearance. Boom replacement occurred on July 31, 2006, October 3, 2006, and October 20, 2006. In the event of a boom washout, tethers attaching the booms to the river bank prevent loss during high river levels.

Table 1

**2006 Off-Site Disposal Summary  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York**

| <b>Drum / Box No.</b> | <b>Contents</b> | <b>Type</b>   | <b>Profile No.</b> | <b>Disposal Date</b> | <b>Manifest No.</b> | <b>Disposal Facility</b>    |
|-----------------------|-----------------|---------------|--------------------|----------------------|---------------------|-----------------------------|
| D-123                 | River Booms     | Non-Hazardous | CS4644             | 3/28/2006            | WMNH003740          | CWM Chemical Services, Inc. |
| D-124                 | River Booms     | Non-Hazardous | CS4644             | 3/28/2006            | WMNH003740          | CWM Chemical Services, Inc. |
| B-6                   | Filter Cake     | Non-Hazardous | VB5107             | 3/28/2006            | WMNH003740          | CWM Chemical Services, Inc. |
| B-7                   | Filter Cake     | Non-Hazardous | VB5107             | 3/28/2006            | WMNH003740          | CWM Chemical Services, Inc. |
| B-8                   | Filter Cake     | Non-Hazardous | VB5107             | 3/28/2006            | WMNH003740          | CWM Chemical Services, Inc. |
| B-9                   | Filter Cake     | Non-Hazardous | VB5107             | 3/28/2006            | WMNH003740          | CWM Chemical Services, Inc. |
| B-10                  | Filter Cake     | Non-Hazardous | VB5107             | 9/18/2006            | WMNH005516          | CWM Chemical Services, Inc. |
| B-11                  | Filter Cake     | Non-Hazardous | VB5107             | 9/18/2006            | WMNH005516          | CWM Chemical Services, Inc. |
| D-125                 | River Booms     | Non-Hazardous | CS4644             | 9/18/2006            | WMNH005516          | CWM Chemical Services, Inc. |
| D-126                 | River Booms     | Non-Hazardous | CS4644             | 9/18/2006            | WMNH005516          | CWM Chemical Services, Inc. |
| D-127                 | River Booms     | Non-Hazardous | CS4644             | 9/18/2006            | WMNH005516          | CWM Chemical Services, Inc. |

**Notes:**

- 1) D - 55 Gallon Drum
- 2) B - 1 Cubic Yard Box

Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
 (mg/L except where noted)

| Parameter                 | 1/4/2006  |             |           | 2/2/2006    |           |          | 3/6/2006    |          |       | Discharge Limits |
|---------------------------|-----------|-------------|-----------|-------------|-----------|----------|-------------|----------|-------|------------------|
|                           | Influent  | Between GAC | Effluent  | Between GAC | Effluent  | Influent | Between GAC | Effluent |       |                  |
| Aluminum                  | 0.1 U     | NA          | 0.1 U     | NA          | 0.1 U     | 0.108    | NA          | 0.1 U    |       |                  |
| Aluminum, dissolved       | 0.1 U     | NA          | 0.1 U     | NA          | 0.1 U     | 0.1 U    | NA          | 0.1 U    | 0.1   |                  |
| Arsenic                   | 0.101     | NA          | 0.005 U   | NA          | 0.008 U   | 0.114    | NA          | 0.008 U  | 0.15  |                  |
| Chromium                  | 0.01 U    | NA          | 0.01 U    | NA          | 0.01 U    | 0.01 U   | NA          | 0.01 U   | 0.5   |                  |
| Copper                    | 0.025 U   | NA          | 0.025 U   | NA          | 0.025 U   | 0.025 U  | NA          | 0.025 U  | 0.5   |                  |
| Iron                      | 46.4      | NA          | 0.148     | NA          | 0.123     | 50.8     | NA          | 0.182    | 4     |                  |
| Lead                      | 0.0039    | NA          | 0.003 U   | NA          | 0.003 U   | 0.003 U  | NA          | 0.003 U  | 0.004 |                  |
| Nickel                    | 0.0652    | NA          | 0.04 U    | NA          | 0.04 U    | 0.04 U   | NA          | 0.04 U   |       |                  |
| Zinc                      | 0.0285    | NA          | 0.02 U    | NA          | 0.02 U    | 0.02 U   | NA          | 0.02 U   | 0.052 |                  |
| 1,1,1-Trichloroethane     | 0.0058    | 0.00046 J   | 0.001 U   | 0.001 U     | 0.001 U   | 0.0097   | 0.001 U     | 0.001 U  |       |                  |
| 1,1,2,2-Tetrachloroethane | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| 1,1,2-Trichloroethane     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| 1,1-Dichloroethane        | 0.0293    | 0.0036      | 0.0012    | 0.0011      | 0.0012    | 0.0276   | 0.0013      | 0.001 U  | 0.03  |                  |
| 1,1-Dichloroethene        | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| 1,2-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| 1,2-Dichloroethane        | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| 1,2-Dichloropropane       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| 1,3-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| 1,4-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Benzene                   | 0.0995    | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.104    | 0.001 U     | 0.001 U  | 0.01  |                  |
| Bromodichloromethane      | 0.001 U   | 0.00039 J   | 0.001 U   | 0.00021 J   | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Bromoform                 | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Bromomethane              | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Carbon tetrachloride      | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Chlorobenzene             | 0.00057 J | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Chloroethane              | 0.0014    | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.0012   | 0.001 U     | 0.001 U  |       |                  |
| Chloroform                | 0.001 U   | 0.0013      | 0.00048 J | 0.00079 J   | 0.00059 J | 0.001 U  | 0.00064 J   | 0.001 U  |       |                  |
| Chloromethane             | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| cis-1,2-Dichloroethene    | 0.107     | 0.0074      | 0.00036 J | 0.0015      | 0.00059 J | 0.101    | 0.00079 J   | 0.001 U  | 0.03  |                  |
| cis-1,3-Dichloropropene   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Dibromochloromethane      | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  |       |                  |
| Dichlorodifluoromethane   | 0.002 U   | 0.002 U     | 0.002 U   | 0.002 U     | 0.002 U   | 0.002 U  | 0.002 U     | 0.002 U  |       |                  |

Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
(mg/L except where noted)

| Parameter                            | 1/4/2006 |             |          | 2/2/2006    |          | 3/6/2006 |             |          | Discharge Limits |
|--------------------------------------|----------|-------------|----------|-------------|----------|----------|-------------|----------|------------------|
|                                      | Influent | Between GAC | Effluent | Between GAC | Effluent | Influent | Between GAC | Effluent |                  |
| Dichloromethane (Methylene chloride) | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  |                  |
| Ethyl benzene                        | 0.0067   | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.0098   | 0.001 U     | 0.001 U  | 0.01             |
| Tetrachloroethene                    | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  |                  |
| Toluene                              | 0.0066   | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.0087   | 0.001 U     | 0.001 U  | 0.01             |
| trans-1,2-Dichloroethene             | 0.0012   | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.0013   | 0.001 U     | 0.001 U  |                  |
| trans-1,3-Dichloropropene            | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  |                  |
| Trichloroethene                      | 0.0012   | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.0027   | 0.001 U     | 0.001 U  |                  |
| Trichlorofluoromethane               | 0.002 U  | 0.002 U     | 0.002 U  | 0.002 U     | 0.002 U  | 0.002 U  | 0.002 U     | 0.002 U  |                  |
| Vinyl chloride                       | 0.0898   | 0.0017 J    | 0.001 J  | 0.00061 J   | 0.0011 J | 0.108    | 0.00086 J   | 0.002 U  | 0.05             |
| Xylenes (total)                      | 0.0078   | 0.001 U     | 0.001 U  | 0.001 U     | 0.001 U  | 0.0115   | 0.001 U     | 0.001 U  | 0.01             |
| Cyanide                              |          |             | 0 R      |             | 0.01 U   |          |             | 0.01 U   |                  |
| Oil & Grease                         |          |             | 5.1 U    |             | 5.1 U    |          |             | 5.1 UJ   | 15               |
| pH                                   | 6.6      |             | 7.35     |             | 7.33     | 6.61     |             | 7.83     | 6.5 - 8.5        |

Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
 (mg/L except where noted)

| Parameter                 | 4/6/2006  |             |          | 5/2/2006  |             |           | 6/1/2006  |             |           | Discharge Limits |
|---------------------------|-----------|-------------|----------|-----------|-------------|-----------|-----------|-------------|-----------|------------------|
|                           | Influent  | Between GAC | Effluent | Influent  | Between GAC | Effluent  | Influent  | Between GAC | Effluent  |                  |
| Aluminum                  | 0.1 U     | NA          | 0.1 U    | 0.1 U     | NA          | 0.1 U     | 0.1 U     | NA          | 0.1 U     |                  |
| Aluminum, dissolved       | 0.1 U     | NA          | 0.1 U    | 0.1 U     | NA          | 0.1 U     | 0.1 U     | NA          | 0.1 U     | 0.1              |
| Arsenic                   | 0.0966    | NA          | 0.008 U  | 0.0968    | NA          | 0.008 U   | 0.0902    | NA          | 0.008 U   | 0.15             |
| Chromium                  | 0.01 U    | NA          | 0.01 U   | 0.01 U    | NA          | 0.01 U    | 0.01 U    | NA          | 0.01 U    | 0.5              |
| Copper                    | 0.025 U   | NA          | 0.025 U  | 0.025 U   | NA          | 0.025 U   | 0.025 U   | NA          | 0.025 U   | 0.5              |
| Iron                      | 45.8      | NA          | 0.15     | 46.8      | NA          | 0.1 U     | 43.4      | NA          | 0.1 U     | 4                |
| Lead                      | 0.003 U   | NA          | 0.003 U  | 0.003 U   | NA          | 0.003 U   | 0.003     | NA          | 0.003 U   | 0.004            |
| Nickel                    | 0.04 U    | NA          | 0.04 U   | 0.04 U    | NA          | 0.04 U    | 0.04 U    | NA          | 0.04 U    |                  |
| Zinc                      | 0.02 U    | NA          | 0.02 U   | 0.02 U    | NA          | 0.02 U    | 0.02 U    | NA          | 0.02 U    | 0.052            |
| 1,1,1-Trichloroethane     | 0.0076    | 0.00061 J   | 0.001 U  | 0.0078    | 0.001 U     | 0.001 U   | 0.0083    | 0.0013      | 0.00037 J | 0.01             |
| 1,1,2,2-Tetrachloroethane | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,1,2-Trichloroethane     | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,1-Dichloroethane        | 0.0213    | 0.0032      | 0.001 U  | 0.0211    | 0.0013      | 0.001 U   | 0.0167    | 0.0042      | 0.0019    | 0.03             |
| 1,1-Dichloroethene        | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,2-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,2-Dichloroethane        | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,2-Dichloropropane       | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,3-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,4-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Benzene                   | 0.0875    | 0.001 U     | 0.001 U  | 0.102     | 0.001 U     | 0.001 U   | 0.0825    | 0.00021 J   | 0.001 U   | 0.01             |
| Bromodichloromethane      | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.0003 J    | 0.001 U   |                  |
| Bromoform                 | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Bromomethane              | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Carbon tetrachloride      | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Chlorobenzene             | 0.00056 J | 0.001 U     | 0.001 U  | 0.00064 J | 0.001 U     | 0.001 U   | 0.00056 J | 0.001 U     | 0.001 U   |                  |
| Chloroethane              | 0.0013    | 0.001 UJ    | 0.001 UJ | 0.00083 J | 0.001 U     | 0.001 U   | 0.00066 J | 0.001 U     | 0.001 U   |                  |
| Chloroform                | 0.001 U   | 0.0012      | 0.001 U  | 0.001 U   | 0.00086 J   | 0.00021 J | 0.001 U   | 0.0013      | 0.00076 J |                  |
| Chloromethane             | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| cis-1,2-Dichloroethene    | 0.061     | 0.0029      | 0.001 U  | 0.0769    | 0.0016      | 0.001 U   | 0.0553    | 0.005       | 0.001 U   | 0.03             |
| cis-1,3-Dichloropropene   | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Dibromochloromethane      | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Dichlorodifluoromethane   | 0.002 U   | 0.002 U     | 0.002 U  | 0.002 U   | 0.002 U     | 0.002 U   | 0.002 U   | 0.002 U     | 0.002 U   |                  |

Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
 (mg/L except where noted)

| Parameter                            | 4/6/2006  |             |          | 5/2/2006  |             |          | 6/1/2006 |             |          | Discharge Limits |
|--------------------------------------|-----------|-------------|----------|-----------|-------------|----------|----------|-------------|----------|------------------|
|                                      | Influent  | Between GAC | Effluent | Influent  | Between GAC | Effluent | Influent | Between GAC | Effluent |                  |
| Dichloromethane (Methylene chloride) | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  |                  |
| Ethyl benzene                        | 0.0085    | 0.001 U     | 0.001 U  | 0.0101    | 0.001 U     | 0.001 U  | 0.0075   | 0.001 U     | 0.001 U  | 0.01             |
| Tetrachloroethene                    | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  |                  |
| Toluene                              | 0.0076    | 0.001 U     | 0.001 U  | 0.009     | 0.001 U     | 0.001 U  | 0.0079   | 0.001 U     | 0.001 U  | 0.01             |
| trans-1,2-Dichloroethene             | 0.00093 J | 0.001 U     | 0.001 U  | 0.0013    | 0.001 U     | 0.001 U  | 0.001    | 0.001 U     | 0.001 U  |                  |
| trans-1,3-Dichloropropene            | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  |                  |
| Trichloroethene                      | 0.00046 J | 0.001 U     | 0.001 U  | 0.00049 J | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  |                  |
| Trichlorofluoromethane               | 0.002 U   | 0.002 U     | 0.002 U  | 0.002 U   | 0.002 U     | 0.002 U  | 0.002 U  | 0.002 U     | 0.002 U  |                  |
| Vinyl chloride                       | 0.073     | 0.00081 J   | 0.002 U  | 0.0712    | 0.002 U     | 0.002 U  | 0.0857   | 0.0015 J    | 0.0005 J | 0.05             |
| Xylenes (total)                      | 0.009     | 0.001 U     | 0.001 U  | 0.0119    | 0.001 U     | 0.001 U  | 0.012    | 0.001 U     | 0.001 U  | 0.01             |
| Cyanide                              |           |             | 0.01 U   |           |             | 0.01 U   |          |             | 0.01 U   |                  |
| Oil & Grease                         |           |             | 5.1 U    |           |             | 5 U      |          |             | 5.2 U    | 15               |
| pH                                   | 6.73      |             | 7.27     | 6.62      |             | 7.3      | 6.64     |             | 7.22     | 6.5 - 8.5        |



Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
 (mg/L except where noted)

| Parameter                 | 7/6/2006  |             |           | 8/3/2006 |             |          | 9/6/2006  |             |          | Discharge Limits |
|---------------------------|-----------|-------------|-----------|----------|-------------|----------|-----------|-------------|----------|------------------|
|                           | Influent  | Between GAC | Effluent  | Influent | Between GAC | Effluent | Influent  | Between GAC | Effluent |                  |
| Aluminum                  | 0.1 U     | NA          | 0.1 U     | 0.1 U    | NA          | 0.1 U    | 0.1 U     | NA          | 0.1 U    |                  |
| Aluminum, dissolved       | 0.1 U     | NA          | 0.1 U     | 0.1 U    | NA          | 0.1 U    | 0.1 U     | NA          | 0.1 U    | 0.1              |
| Arsenic                   | 0.0984    | NA          | 0.008 U   | 0.102    | NA          | 0.008 U  | 0.117     | NA          | 0.008 U  | 0.15             |
| Chromium                  | 0.01 U    | NA          | 0.01 U    | 0.01 U   | NA          | 0.01 U   | 0.01 U    | NA          | 0.01 U   | 0.5              |
| Copper                    | 0.025 U   | NA          | 0.025 U   | 0.025 U  | NA          | 0.025 U  | 0.025 U   | NA          | 0.025 U  | 0.5              |
| Iron                      | 44.9      | NA          | 0.186     | 44.9     | NA          | 0.1 U    | 48.4      | NA          | 0.143    | 4                |
| Lead                      | 0.003 U   | NA          | 0.003 U   | 0.003 U  | NA          | 0.003 U  | 0.003 U   | NA          | 0.003 U  | 0.004            |
| Nickel                    | 0.04 U    | NA          | 0.04 U    | 0.04 U   | NA          | 0.04 U   | 0.04 U    | NA          | 0.04 U   |                  |
| Zinc                      | 0.02 U    | NA          | 0.02 U    | 0.02 U   | NA          | 0.02 U   | 0.02 U    | NA          | 0.02 U   | 0.052            |
| 1,1,1-Trichloroethane     | 0.0074    | 0.00081 J   | 0.00057 J | 0.0077   | 0.001 U     | 0.001 U  | 0.0048    | 0.001 U     | 0.001 U  | 0.01             |
| 1,1,2,2-Tetrachloroethane | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| 1,1,2-Trichloroethane     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| 1,1-Dichloroethane        | 0.017     | 0.0036      | 0.0026    | 0.0185   | 0.001 U     | 0.001 U  | 0.0145    | 0.0022      | 0.001 U  | 0.03             |
| 1,1-Dichloroethene        | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| 1,2-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| 1,2-Dichloroethane        | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| 1,2-Dichloropropane       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| 1,3-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| 1,4-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Benzene                   | 0.091     | 0.0005 J    | 0.00029 J | 0.0882   | 0.001 U     | 0.001 U  | 0.077     | 0.001 U     | 0.001 U  | 0.01             |
| Bromodichloromethane      | 0.001 U   | 0.0004 J    | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.00047 J   | 0.001 U  |                  |
| Bromoform                 | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Bromomethane              | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Carbon tetrachloride      | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Chlorobenzene             | 0.00065 J | 0.001 U     | 0.001 U   | 0.0008 J | 0.001 U     | 0.001 U  | 0.00072 J | 0.001 U     | 0.001 U  |                  |
| Chloroethane              | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Chloroform                | 0.001 U   | 0.0023      | 0.0018    | 0.001 U  | 0.00071 J   | 0.001 U  | 0.001 U   | 0.0021      | 0.001 U  |                  |
| Chloromethane             | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| cis-1,2-Dichloroethene    | 0.0349    | 0.001       | 0.00083 J | 0.0392   | 0.001 U     | 0.001 U  | 0.0109    | 0.0018      | 0.001 U  | 0.03             |
| cis-1,3-Dichloropropene   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Dibromochloromethane      | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Dichlorodifluoromethane   | 0.002 U   | 0.002 U     | 0.002 U   | 0.002 U  | 0.002 U     | 0.002 U  | 0.002 U   | 0.002 U     | 0.002 U  |                  |

Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
 (mg/L except where noted)

| Parameter                            | 7/6/2006  |             |          | 8/3/2006 |             |          | 9/6/2006  |             |          | Discharge Limits |
|--------------------------------------|-----------|-------------|----------|----------|-------------|----------|-----------|-------------|----------|------------------|
|                                      | Influent  | Between GAC | Effluent | Influent | Between GAC | Effluent | Influent  | Between GAC | Effluent |                  |
| Dichloromethane (Methylene chloride) | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  | 0.0027    | 0.001 U     | 0.001 U  |                  |
| Ethyl benzene                        | 0.0068    | 0.001 U     | 0.001 U  | 0.0062   | 0.001 U     | 0.001 U  | 0.0043    | 0.001 U     | 0.001 U  | 0.01             |
| Tetrachloroethene                    | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U  | 0.0043      | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Toluene                              | 0.0076    | 0.001 U     | 0.001 U  | 0.0084   | 0.001 U     | 0.001 U  | 0.0058    | 0.001 U     | 0.001 U  | 0.01             |
| trans-1,2-Dichloroethene             | 0.00072 J | 0.001 U     | 0.001 U  | 0.0014   | 0.001 U     | 0.001 U  | 0.00058 J | 0.001 U     | 0.001 U  |                  |
| trans-1,3-Dichloropropene            | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U  | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Trichloroethene                      | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U  | 0.0015      | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U  |                  |
| Trichlorofluoromethane               | 0.002 U   | 0.002 U     | 0.002 U  | 0.002 U  | 0.002 U     | 0.002 U  | 0.002 U   | 0.002 U     | 0.002 U  |                  |
| Vinyl chloride                       | 0.0964    | 0.0012 J    | 0.0007 J | 0.0958   | 0.002 U     | 0.002 U  | 0.0553    | 0.002 U     | 0.002 U  | 0.05             |
| Xylenes (total)                      | 0.0107    | 0.001 U     | 0.001 U  | 0.0135   | 0.001 U     | 0.001 U  | 0.0091    | 0.001 U     | 0.001 U  | 0.01             |
| Cyanide                              |           |             | 0.01 U   |          |             | 0.01 U   |           |             | 0.01 U   |                  |
| Oil & Grease                         |           |             | 5.1 U    |          |             | 5.1 U    |           |             | 5 U      | 15               |
| pH                                   | 6.72      |             | 7.48     | 6.75     |             | 7.57     | 6.7       |             | 7.47     | 6.5 - 8.5        |

Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
 (mg/L except where noted)

| Parameter                 | 10/5/2006 |             |           | 11/1/2006 |             |           | 12/6/2006 |             |           | Discharge Limits |
|---------------------------|-----------|-------------|-----------|-----------|-------------|-----------|-----------|-------------|-----------|------------------|
|                           | Influent  | Between GAC | Effluent  | Influent  | Between GAC | Effluent  | Influent  | Between GAC | Effluent  |                  |
| Aluminum                  | 0.2 U     | NA          | 0.2 U     | 0.1 U     | NA          | 0.1 U     | 0.1 U     | NA          | 0.1 U     |                  |
| Aluminum, dissolved       | 0.2 U     | NA          | 0.2 U     | 0.1 U     | NA          | 0.1 U     | 0.1 U     | NA          | 0.1 U     | 0.1              |
| Arsenic                   | 0.124     | NA          | 0.008 U   | 0.119     | NA          | 0.008 U   | 0.0442    | NA          | 0.008 U   | 0.15             |
| Chromium                  | 0.01 U    | NA          | 0.01 U    | 0.01 U    | NA          | 0.01 U    | 0.01 U    | NA          | 0.01 U    | 0.5              |
| Copper                    | 0.025 U   | NA          | 0.025 U   | 0.025 U   | NA          | 0.025 U   | 0.025 U   | NA          | 0.025 U   | 0.5              |
| Iron                      | 46        | NA          | 0.1 U     | 48.4      | NA          | 0.1 U     | 34.7      | NA          | 0.1 U     | 4                |
| Lead                      | 0.0039    | NA          | 0.003 U   | 0.003 U   | NA          | 0.003 U   | 0.003 U   | NA          | 0.003 U   | 0.004            |
| Nickel                    | 0.04 U    | NA          | 0.04 U    | 0.04 U    | NA          | 0.04 U    | 0.04 U    | NA          | 0.04 U    |                  |
| Zinc                      | 0.02 U    | NA          | 0.02 U    | 0.02 U    | NA          | 0.02 U    | 0.02 U    | NA          | 0.02 U    | 0.052            |
| 1,1,1-Trichloroethane     | 0.0073    | 0.00064 J   | 0.001 U   | 0.0029    | 0.00027 J   | 0.00025 J | 0.005     | 0.00031 J   | 0.00035 J | 0.01             |
| 1,1,2,2-Tetrachloroethane | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,1,2-Trichloroethane     | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,1-Dichloroethane        | 0.0206    | 0.0038      | 0.0013    | 0.0191    | 0.0025      | 0.0029    | 0.0237    | 0.0029      | 0.0035    | 0.03             |
| 1,1-Dichloroethene        | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,2-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,2-Dichloroethane        | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,2-Dichloropropane       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,3-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| 1,4-Dichlorobenzene       | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Benzene                   | 0.0933    | 0.001 U     | 0.001 U   | 0.0762    | 0.001 U     | 0.001 U   | 0.0758    | 0.001 U     | 0.001 U   | 0.01             |
| Bromodichloromethane      | 0.001 U   | 0.00049 J   | 0.001 U   | 0.001 U   | 0.00093 J   | 0.001 U   | 0.001 U   | 0.00038 J   | 0.00022 J |                  |
| Bromoform                 | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Bromomethane              | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Carbon tetrachloride      | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Chlorobenzene             | 0.00068 J | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.00059 J | 0.001 U     | 0.001 U   |                  |
| Chloroethane              | 0.00094 J | 0.001 U     | 0.001 U   | 0.00055 J | 0.001 U     | 0.001 U   | 0.0017    | 0.001 U     | 0.001 U   |                  |
| Chloroform                | 0.001 U   | 0.0015      | 0.00067 J | 0.001 U   | 0.0039      | 0.0011    | 0.001 U   | 0.0013      | 0.0013    |                  |
| Chloromethane             | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| cis-1,2-Dichloroethene    | 0.029     | 0.0018      | 0.001 U   | 0.0045    | 0.0012      | 0.001 U   | 0.021     | 0.0013      | 0.001 U   | 0.03             |
| cis-1,3-Dichloropropene   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Dibromochloromethane      | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Dichlorodifluoromethane   | 0.002 U   | 0.002 U     | 0.002 U   | 0.002 U   | 0.002 U     | 0.002 U   | 0.002 U   | 0.002 U     | 0.002 U   |                  |

Table 2

**2006 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results**  
**Former Sinclair Refinery Site (OU2)**  
**Wellsville, New York**  
 (mg/L except where noted)

| Parameter                            | 10/5/2006 |             |          | 11/1/2006 |             |           | 12/6/2006 |             |           | Discharge Limits |
|--------------------------------------|-----------|-------------|----------|-----------|-------------|-----------|-----------|-------------|-----------|------------------|
|                                      | Influent  | Between GAC | Effluent | Influent  | Between GAC | Effluent  | Influent  | Between GAC | Effluent  |                  |
| Dichloromethane (Methylene chloride) | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Ethyl benzene                        | 0.0045    | 0.001 U     | 0.001 U  | 0.0031    | 0.001 U     | 0.001 U   | 0.0049    | 0.001 U     | 0.001 U   | 0.01             |
| Tetrachloroethene                    | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Toluene                              | 0.0081    | 0.001 U     | 0.001 U  | 0.0045    | 0.001 U     | 0.001 U   | 0.0062    | 0.001 U     | 0.001 U   | 0.01             |
| trans-1,2-Dichloroethene             | 0.0011    | 0.001 U     | 0.001 U  | 0.0061 J  | 0.001 U     | 0.001 U   | 0.00094 J | 0.001 U     | 0.001 U   |                  |
| trans-1,3-Dichloropropene            | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Trichloroethene                      | 0.001 U   | 0.001 U     | 0.001 U  | 0.001 U   | 0.001 U     | 0.001 U   | 0.001 U   | 0.001 U     | 0.001 U   |                  |
| Trichlorofluoromethane               | 0.002 U   | 0.002 U     | 0.002 U  | 0.002 U   | 0.002 U     | 0.002 U   | 0.002 U   | 0.002 U     | 0.002 U   |                  |
| Vinyl chloride                       | 0.0932    | 0.0013 J    | 0.002 U  | 0.0335    | 0.002 U     | 0.00056 J | 0.0855    | 0.002 U     | 0.00079 J | 0.05             |
| Xylenes (total)                      | 0.0096    | 0.001 U     | 0.001 U  | 0.0058    | 0.001 U     | 0.001 U   | 0.0067    | 0.001 U     | 0.001 U   | 0.01             |
| Cyanide                              |           |             | 0.01 U   |           |             | 0.01 U    |           |             | 0 R       |                  |
| Oil & Grease                         |           |             | 5.1 U    |           |             | 5 U       |           |             | 5.1 U     | 15               |
| pH                                   | 6.74      |             | 7.49     | 6.73      |             | 7.47      | 6.76      |             | 7.5       | 6.5 - 8.5        |

**Notes:**

- 1) Influent - Combines groundwater pumped from recovery wells RW-1, RW-2 and RW-3 (sample port SP-114)
- 2) Effluent - Treated water prior to discharge (sample port SP-219)
- 3) Between GAC - Between the primary and secondary granular activated carbon units (sample port SP-217)
- 4) Discharge limits are allowable daily maximum
- 5) Results in **BOLD** exceed discharge limits
- 6) NA - Not analyzed
- 7) J - Estimated Value
- 8) R - Data validation rejected result
- 9) U - Parameter not detected above the detection limit

Table 3

**2006 Groundwater BTEX Concentrations  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York  
(mg/L)**

| Location             | Benzene   | Ethyl benzene | Toluene   | Xylenes (total)    | Total BTEX |
|----------------------|-----------|---------------|-----------|--------------------|------------|
| MCL <sup>1</sup>     | 0.005     | 1             | 0.7       | 10                 | NA         |
| AWQS <sup>2</sup>    | 0.001     | 0.005         | 0.005     | 0.005 <sup>3</sup> | NA         |
| <b>Northern Area</b> |           |               |           |                    |            |
| MW-10                | 0.00062 J | 0.001 U       | 0.001 U   | 0.001 U            | 0.00062    |
| MW-11                | 0.001 U   | 0.001 U       | 0.001 U   | 0.001 U            | 0          |
| MW-69A               | 0.0005 J  | 0.00054 J     | 0.0004 J  | 0.001 U            | 0.05784    |
| MW-78                | 0.004     | 0.001 U       | 0.001 U   | 0.001 U            | 0.004      |
| <b>MW-70 Area</b>    |           |               |           |                    |            |
| MW-70                | 0.018     | 0.018         | 0.0405    | 0.0776             | 0.1475     |
| OW-01                | 0.00048 J | 0.00048 J     | 0.0027    | 0.0016             | 0.04418    |
| OW-03                | 0.0083    | 0.0083        | 0.022     | 0.0524             | 0.0906     |
| <b>Central Area</b>  |           |               |           |                    |            |
| MW-09                | 0.00058 J | 0.001 U       | 0.001 U   | 0.001 U            | 0.00058    |
| MW-71                | 0.001 U   | 0.001 U       | 0.001 U   | 0.001 U            | 0          |
| OW-04                | 0.001 U   | 0.001 U       | 0.001 U   | 0.001 U            | 0          |
| <b>Southern Area</b> |           |               |           |                    |            |
| MW-07                | 0.0033    | 0.00034 J     | 0.0023    | 0.0034             | 0.00934    |
| MW-55                | 0.0491    | 0.0491        | 0.0117    | 0.0482             | 0.1374     |
| MW-96                | 0.0016    | 0.001 U       | 0.00031 J | 0.001 U            | 0.00191    |

## Notes:

- 1) Groundwater sampling conducted between June 13 and 21, 2006.
- 2) EPA 8260 Analysis with Benzene, Toluene, Ethylbenzene and Xylenes (total) reported.
- 3) <sup>1</sup> - Maximum Contaminate Level, National Primary Drinking Water Regulations (40 CFR 141.11-141.16)
- 4) <sup>2</sup> - New York State Ambient Water Quality Standards, Class GA Groundwater (NYCRR 700-706, TOG 1.1.1)
- 5) <sup>3</sup> - New York State Xylene AWQS is for each isomer, results are for Total Xylene
- 6) NA - Not Applicable
- 7) ND - Not Detected
- 8) U - Analyte not detected at detection limit shown
- 9) J - Concentration value is approximate

**Yellow shaded values exceed New York State Ambient Water Quality Standards (AWQS), Class GA Groundwater (NYCRR 700-706, TOGs 1.1.1)**

**Table 4**

**2006 Groundwater Chlorinated VOC Concentrations  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York  
(mg/L)**

| Location             | cis-1,2-Dichloroethene | Vinyl chloride |
|----------------------|------------------------|----------------|
| MCL <sup>1</sup>     | 0.07                   | 0.002          |
| AWQS <sup>2</sup>    | 0.005                  | 0.002          |
| <b>Northern Area</b> |                        |                |
| MW-10                | 0.001 U                | 0.001 U        |
| MW-69A               | 0.0037                 | 0.0037         |

Notes:

- 1) Groundwater sampling conducted between June 13 and 21, 2006.
- 2) EPA 8260 Analysis with cis-1,2-Dichloroethene and Vinyl chloride reported.
- 3) <sup>1</sup> - Maximum Contaminate Level, National Primary Drinking Water Regulations (40 CFR 141.11-141.16)
- 4) <sup>2</sup> - New York State Ambient Water Quality Standards, Class GA Groundwater (NYCRR 700-706, TOG 1.1.1)
- 5) U - Analyte not detected at detection limit shown

Green shaded values exceed Maximum Contaminant Levels (MCL), National Primary Drinking Water Regulations (40 CFR 141.11-141.16) and New York AWQS.

Table 5

**2006 Groundwater Semi-Volatile Organic Compound Concentrations  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York  
(mg/L)**

| Location             | 2-Aminophenol | Aniline   | Azobenzene | Azoxybenzene | Nitrobenzene | Nitrosobenzene  |
|----------------------|---------------|-----------|------------|--------------|--------------|-----------------|
| MCL <sup>1</sup>     | NA            | NA        | NA         | NA           | NA           |                 |
| AWQS <sup>2</sup>    | 0.001         | 0.005     | 0.005      | NA           | 0.0004       |                 |
| <b>Northern Area</b> |               |           |            |              |              |                 |
| MW-10                | 0.021 U       | 0.0021 UJ | 0.0052 U   | 0.0052 U     | 0.0021 U     | ND <sup>3</sup> |
| <b>MW-70 Area</b>    |               |           |            |              |              |                 |
| MW-70                | 0.02 U        | 7.69      | 0.005 U    | 0.005 U      | 3.13         | ND <sup>3</sup> |
| OW-01                | 0.02 U        | 0.002 U   | 0.005 U    | 0.005 U      | 0.002 U      | ND <sup>3</sup> |
| OW-03                | 0.02 U        | 4.2       | 0.005 U    | 0.005 U      | 12.3         | ND <sup>3</sup> |

## Notes:

- 1) Groundwater sampling conducted between June 13 and 21, 2006.
- 2) EPA 8270 Analysis with 2-Aminophenol, Aniline, Azobenzene, Azoxybenzene and
- 3) <sup>1</sup> - Maximum Contaminate Level,
- 4) <sup>2</sup> - New York State Ambient Water
- 5) <sup>3</sup> - Nitrosobenzene not detected as part of volatile library search
- 6) U - Analyte not detected at detection limit shown
- 7) NA - Not Applicable

**Shaded values exceed New York State Ambient Water Quality Standards (AWQS), Class GA Groundwater (NYCRR 700-706, TOGs 1.1.1)**

**Table 6**

**2006 Groundwater Arsenic Concentrations  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York  
(mg/L)**

| Location | Arsenic |
|----------|---------|
|----------|---------|

|                   |       |
|-------------------|-------|
| MCL <sup>1</sup>  | 0.010 |
| AWQS <sup>2</sup> | 0.025 |

**Northern Area**

|        |        |
|--------|--------|
| MW-10  | 0.0210 |
| MW-11  | 0.0277 |
| MW-69A | 0.0082 |
| MW-78  | 0.026  |

**MW-70 Area**

|       |        |
|-------|--------|
| MW-70 | 0.0228 |
| OW-01 | 0.0096 |
| OW-03 | 0.022  |

**Central Area**

|       |         |
|-------|---------|
| MW-71 | 0.008 U |
| MW-09 | 0.011   |
| OW-04 | 0.0267  |

**Southern Area**

|       |        |
|-------|--------|
| MW-07 | 0.0168 |
| MW-55 | 0.0016 |
| MW-96 | 0.0362 |

**Notes:**

- 1) Groundwater sampling conducted between June 13 and 21, 2006.
- 2) EPA 6010 Analysis with Total Arsenic reported.
- 3) <sup>1</sup> - Maximum Contaminate Level, National Primary Drinking Water Regulations (40 CFR 141.11-141.16)
- 4) Arsenic MCL lowered from 0.05 mg/L to 0.01 mg/L.
- 5) <sup>2</sup> - New York State Ambient Water Quality Standards, Class GA Groundwater (NYCRR 700-706, TOG 1.1.1)
- 6) U - Analyte not detected at detection limit shown

**Yellow shaded values exceed Maximum Contaminant Levels (MCL), National Primary Drinking Water Regulations (40 CFR 141.11-141.16)**

**Green shaded values exceed MCL and New York State Ambient Water Quality Standards (AWQS), Class GA Groundwater (NYCRR 700-706, TOG 1.1.1)**



**Table 7**

**2006 Groundwater Sampling Equipment Rinsate Blank Concentrations  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York  
(mg/L)**

| <b>Parameter</b>       | <b>EB1-0606<br/>6/13/2006</b> | <b>EB2-0606<br/>6/21/2006</b> | <b>EB3-0606<br/>6/15/2006</b> |
|------------------------|-------------------------------|-------------------------------|-------------------------------|
| Benzene                | 0.001 U                       | 0.001 U                       | 0.001 U                       |
| cis-1,2-Dichloroethene | 0.001 U                       | 0.001 U                       | NA                            |
| Ethyl benzene          | 0.001 U                       | 0.001 U                       | 0.001 U                       |
| Toluene                | 0.001 U                       | 0.001 U                       | 0.001 U                       |
| Vinyl chloride         | 0.001 U                       | 0.001 U                       | NA                            |
| Xylenes (total)        | 0.001 U                       | 0.001 U                       | 0.001 U                       |
| 2-Aminophenol          | NA                            | 0.02 U                        | 0.02 U                        |
| Aniline                | NA                            | 0.002 UJ                      | 0.002 U                       |
| Azobenzene             | NA                            | 0.005 U                       | 0.005 U                       |
| Azoxybenzene           | NA                            | 0.005 U                       | 0.005 U                       |
| Nitrobenzene           | NA                            | 0.002 U                       | 0.002 U                       |
| Arsenic                | 0.008 U                       | 0.008 U                       | 0.008 U                       |

**Notes:**

- 1) EB1-0606 collected by pumping laboratory grade water through bladder pump and tubing; associated with samples collected from MW-9, MW-55 and MW-69A.
- 2) EB2-0606 collected by pumping distilled water through bladder pump and tubing; associated with samples collected from MW-96, MW-7, MW-71, MW-10 and OW-4
- 3) EB3-0606 collected by pumping distilled water through the grundfus pump and tubing; associated with samples collected from MW70, OW-1 and OW-3.
- 4) U - Analyte not detected at detection limit shown.
- 5) J - Concentration value is approximate.
- 6) NA - Not analyzed.

**Table 8**

**2006 Groundwater Field Duplicate Sample Comparison  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York  
(mg/L)**

| <b>Parameter</b> | <b>OW3-0606</b> | <b>DUP1-0606</b> |
|------------------|-----------------|------------------|
|------------------|-----------------|------------------|

**Volatile Organic Compounds**

|                 |        |        |
|-----------------|--------|--------|
| Benzene         | 0.0079 | 0.0078 |
| Ethyl benzene   | 0.0083 | 0.0085 |
| Toluene         | 0.022  | 0.0217 |
| Xylenes (total) | 0.0524 | 0.0529 |

**Semi-Volatile Organic Compounds**

|               |         |         |
|---------------|---------|---------|
| 2-Aminophenol | 0.02 U  | 0.02 U  |
| Aniline       | 4.2     | 4.85    |
| Azobenzene    | 0.005 U | 0.005 U |
| Azoxybenzene  | 0.005 U | 0.005 U |
| Nitrobenzene  | 12.3    | 15.2    |

**Metals**

|         |       |        |
|---------|-------|--------|
| Arsenic | 0.022 | 0.0218 |
|---------|-------|--------|

**Notes:**

- 1) U - Analyte not detected at detection limit shown
- 2) J - Concentration value is approximate

**Table 9**

**2006 Groundwater Elevations  
Former Sinclair Refinery Site (OU2)  
Wellsville, New York**

| <b>WELL</b> | <b>Depth to<br/>Water (ft)</b> | <b>Depth to<br/>LNAPL<br/>(ft)</b> | <b>Well Measuring<br/>Point Elevation (ft<br/>amsl<sup>1</sup>)</b> | <b>Water Table<br/>Elevation (ft<br/>amsl<sup>1</sup>)</b> | <b>Comment</b>        |
|-------------|--------------------------------|------------------------------------|---|--|-----------------------|
| MW-07       | 12.42                          | 12.41                              | 1488.00   | 1475.58  | Installed 1 18" sock  |
| MW-09       | 12.79                          |                                    | 1486.88   | 1474.09  | Trace of Iron         |
| MW-10       | 15.04                          |                                    | 1482.67   | 1467.63  |                       |
| MW-11       | 13.95                          |                                    | 1482.08   | 1468.13  | Trace of Iron         |
| MW-55       | 10.21                          |                                    | 1490.13   | 1479.92  |                       |
| MW-69A      | 15.31                          |                                    | 1482.60   | 1467.29  |                       |
| MW-70       | 13.75                          |                                    | 1481.55   | 1467.80  | Trace of Iron         |
| MW-71       | 14.04                          |                                    | 1485.15   | 1471.11  |                       |
| MW-78       | 15.60                          |                                    | 1482.19   | 1466.59  |                       |
| MW-96       | 12.64                          |                                    | 1487.36   | 1474.72  |                       |
| OW-01       | 16.98                          |                                    | 1481.30   | 1464.32  |                       |
| OW-03       | 15.17                          | 15.16                              | 1483.03   | 1467.86  | Installed 2 18" socks |
| OW-04       | 13.68                          |                                    | 1485.33   | 1471.65  |                       |

**Notes:**

- 1) ND - LNAPL not detected with interface probe
- 2) Water levels measured June 13, 2006 prior to commencing well purging and sampling activities
- 3) 1 - feet above mean sea level (NGVD 29, U.S. Survey Feet)

Table 10

**2006 LNAPL Measurements and Removal  
Former Sinclair Refinery Site (OU-2)  
Wellsville, New York**

| Date                                  | Depth to LNAPL (ft) | Depth to Water (ft) | Apparent LNAPL Thickness (ft) | Comment  | Sock LNAPL Saturation (in) | Approximate LNAPL Removed (oz) |
|---------------------------------------|---------------------|---------------------|-------------------------------|--|----------------------------|--------------------------------|
| <b>MW-7</b>                           |                     |                     |                               |  |                            |                                |
| 6/20/2006                             | 12.54               | 12.55               | 0.01                          | Removed 1 18" sock and installed 1 18" sock                              | 1.5"                       | 1.4                            |
| <b>OW-3</b>                           |                     |                     |                               |  |                            |                                |
| 6/15/2006                             | NM                  | NM                  | NM                            | Removed 2 18" socks and installed 2 18" socks                            | 2"                         | 3.8                            |
| <b>OW-8</b>                           |                     |                     |                               |  |                            |                                |
| 2/2/2006                              | 7.42                | 7.69                | 0.27                          | Removed 4 18" socks and installed 4 18" socks                            | 8"                         | 30.2                           |
| 2/16/2006                             | NM                  | 8.07                | NM                            | Removed 4 18" socks (staining visible on sock but no evidence of LNAPL.) | 0"                         | 0.0                            |
| <b>MW-75</b>                          |                     |                     |                               |  |                            |                                |
| 11/1/2006                             | 6.94                | 6.96                | 0.02                          | Installed 1 18" sock   |                            |                                |
| 11/21/2006                            | 7.28                | 7.29                | 0.01                          | Removed 1 18" sock   | 9"                         | 8.5                            |
| <b>MW-85</b>                          |                     |                     |                               |  |                            |                                |
| 2/2/2006                              | 2.91                | NM                  | NM                            | Installed 1 18" sock   |                            |                                |
| 2/2/2006                              | 1.85                | 1.86                | 0.01                          | Removed 1 18" sock   | 5"                         | 4.7                            |
| 11/1/2006                             | 1.9                 | 1.95                | 0.05                          | Installed 1 18" sock   |                            |                                |
| 11/21/2006                            | NM                  | 2.02                | NM                            | Removed 1 18" sock (little to no trace of LNAPL)                         | 0"                         | 0.0                            |
| <b>MW-86</b>                          |                     |                     |                               |  |                            |                                |
| 2/2/2006                              | NM                  | 6.64                | NM                            | Removed 1 18" sock (no product tone)                                     | 5"                         | 4.7                            |
| 11/1/2006                             | 5.9                 | 6.54                | 0.64                          | Installed 1 18" sock   |                            |                                |
| 11/21/2006                            | 6.62                | 6.64                | 0.02                          | Removed 1 18" sock   | 18"                        | 17                             |
| <b>2006 Total LNAPL Removed (oz):</b> |                     |                     |                               |  |                            | <b>70.4</b>                    |

**Notes:**

The approximate quantities of LNAPL removed are based on the length of sock saturation and the manufacturers information indicates that 18" sock absorbs 17oz of NAPL.

Example: Four fully saturated 18" socks (4x17oz = 68oz NAPL)

NM -- Not measured

Table 11

**2006 Groundwater Geochemical Parameters  
Former Sinclair Refinery Site (OU-2)  
Wellsville, New York**

| Well   | Date      | Parameter |                                 |                 |           |                     |
|--------|-----------|-----------|---------------------------------|-----------------|-----------|---------------------|
|        |           | pH (SU)   | Conductivity<br>(micro siemens) | Turbidity (NTU) | DO (mg/L) | Temperature<br>(°C) |
| MW-7   | 6/20/2006 | 6.36      | 459                             | 3.07            | 1.01      | 16.44               |
| MW-9   | 6/13/2006 | 6.1       | 1611                            | 31.1            | 1.49      | 15.09               |
| MW-10  | 6/21/2006 | 6.19      | 840                             | 3.32            | 0.75      | 14.5                |
| MW-11  | 6/14/2006 | 6.3       | 292                             | 0.36            | 0.41      | 10.56               |
| MW-55  | 6/13/2006 | 6.76      | 391                             | 6.81            | 0.51      | 24.98               |
| MW-69A | 6/13/2006 | 6.27      | 742                             | 1.97            | 0.28      | 21.75               |
| MW-70  | 6/15/2006 | 6.52      | 1071                            | 3.12            | 0.55      | 14.11               |
| MW-71  | 6/21/2006 | 6.03      | 897                             | 1.81            | 0.61      | 11.82               |
| MW-78  | 6/14/2006 | 6.24      | 537                             | 0.52            | 0.22      | 13.19               |
| MW-96  | 6/20/2006 | 5.81      | 534                             | 1.00            | 0.58      | 14.29               |
| OW-1   | 6/15/2006 | 6.89      | 850                             | 1.23            | 0.24      | 18.35               |
| OW-3   | 6/15/2006 | 6.48      | 1007                            | 3.32            | 1.08      | 14.25               |
| OW-4   | 6/21/2006 | 6.08      | 946                             | 6.57            | 1.75      | 16.49               |
|        |           |           |                                 |                 |           | -20.2               |

## Notes:

- 1) pH, Conductivity, DO, Temperature and ORP measured with properly calibrated YSI 556 MPS water quality meter
- 2) Turbidity measured with properly calibrated Hach 2100P turbidity meter

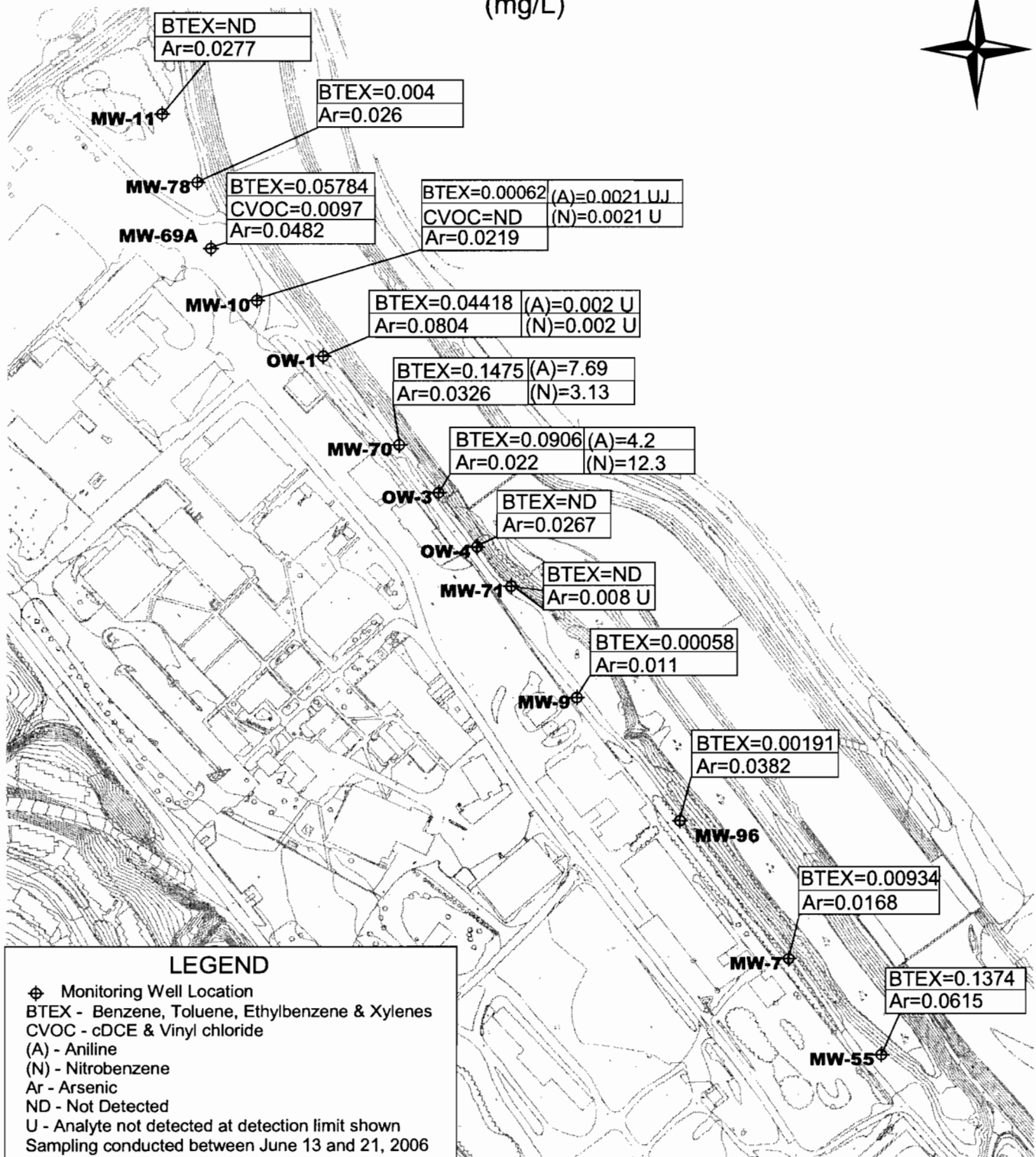
This is a detailed topographic map of Wells, Vermont. The map features the Genesee River flowing through the center, with two specific areas labeled 'OU1' and 'OU2' along its banks. To the north of the river is the town of Wells, with various buildings and infrastructure. Key landmarks include Island Park, Sacred Heart Cemetery, and the Washington School. The map also shows Weidrick Road and a Gas Well. Contour lines indicate elevation, with peaks like Rauber Hill and Weidrick Hill. A north arrow and a scale bar are present in the upper right corner.

|              |                  |
|--------------|------------------|
| FIGURE NO.   | 1                |
| PROJECT      | WELLSVILLE OU2   |
| DOCUMENT NO. | 2006 OU2 REPORT  |
| FILE NO.     | FIG1-SITELOC.MXD |

[illegible]

**Note: System designed to operate at 10 to 15 gpm**

# 2006 GROUNDWATER ANALYTICAL RESULTS (mg/L)



150 0 150 300 Feet

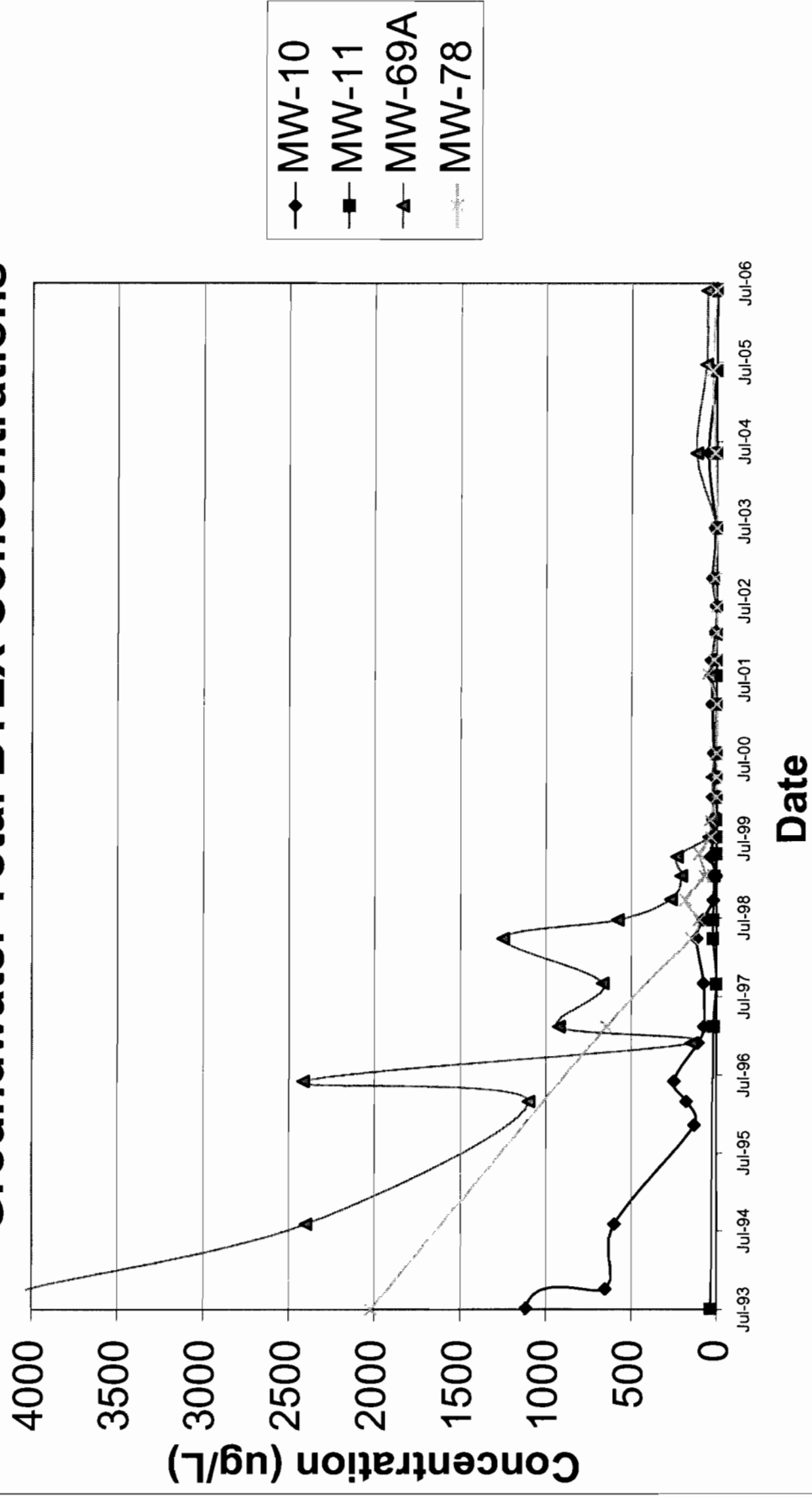


**ON-SITE TECHNICAL SERVICES, INC.**  
72 Railroad Avenue Wellsville, NY 14895

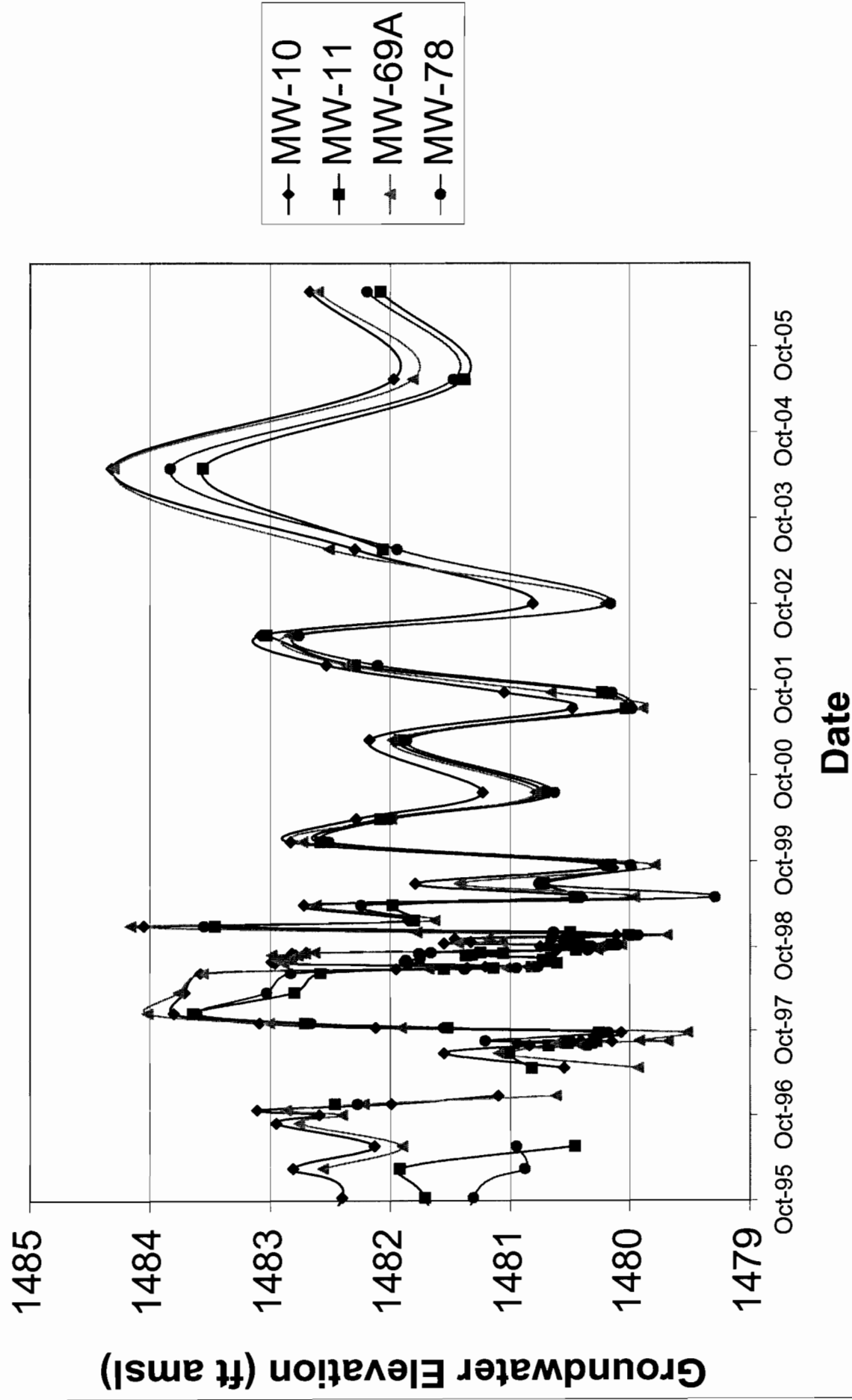
|            |                        |
|------------|------------------------|
| FIGURE NO. | 3                      |
| PROJECT    | Wellsville OU2         |
| DOCUMENT   | 2006 OU2 Annual Report |
| FILE NO.   | FIG3.APR               |



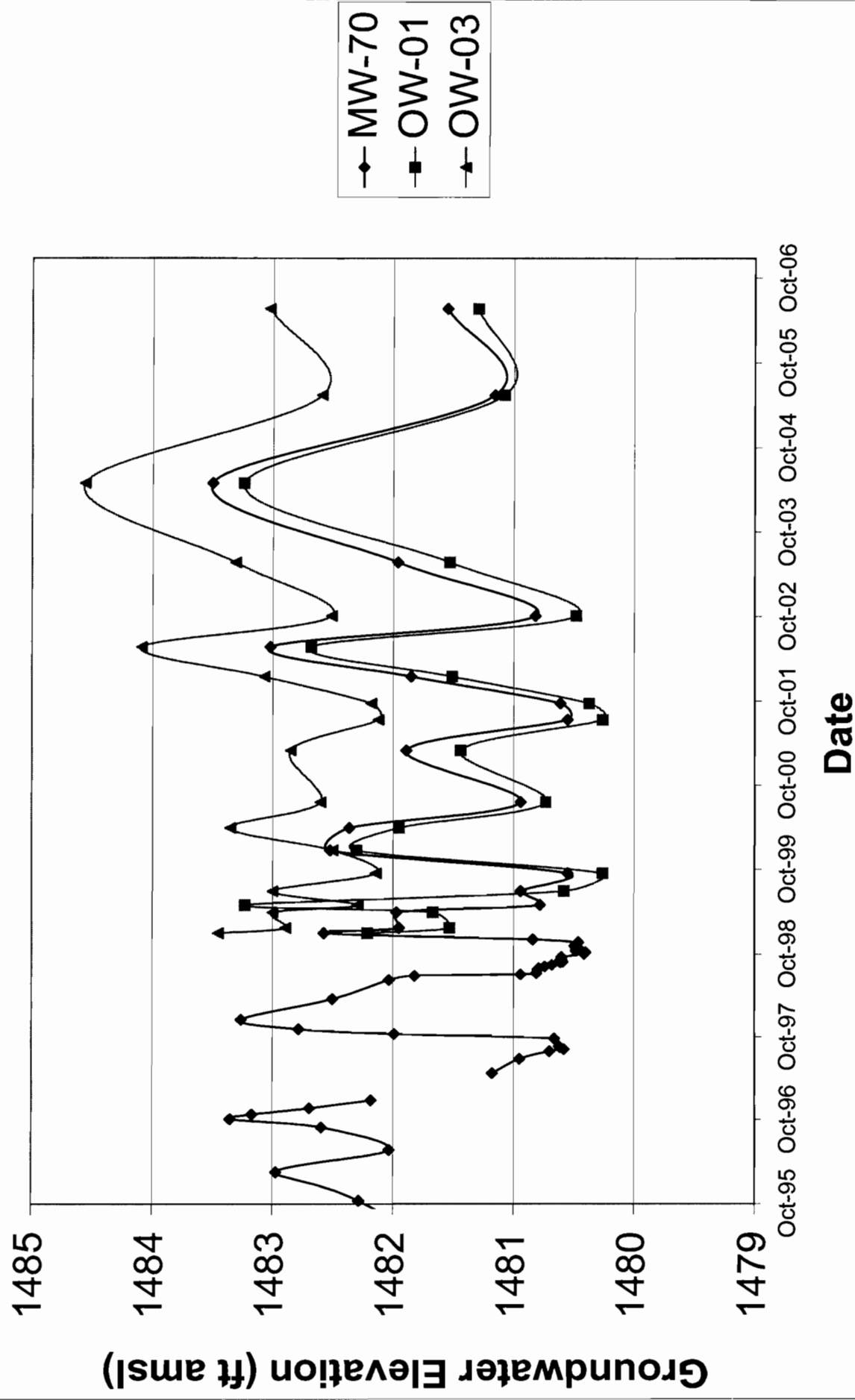
**Figure 4**  
**Northern Area**  
**Groundwater Total BTEX Concentrations**



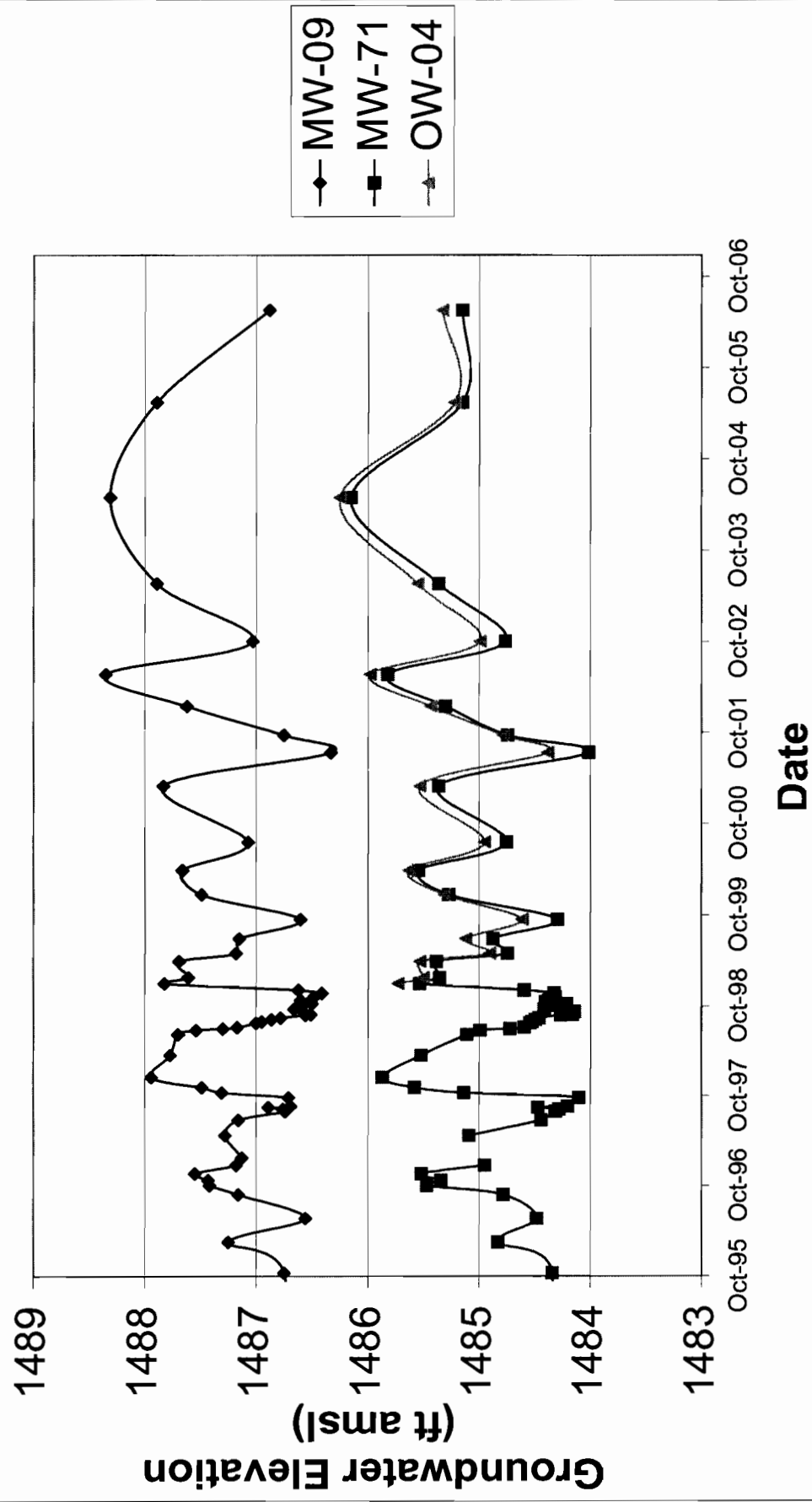
**Figure 5**  
**Northern Area Groundwater Elevations**



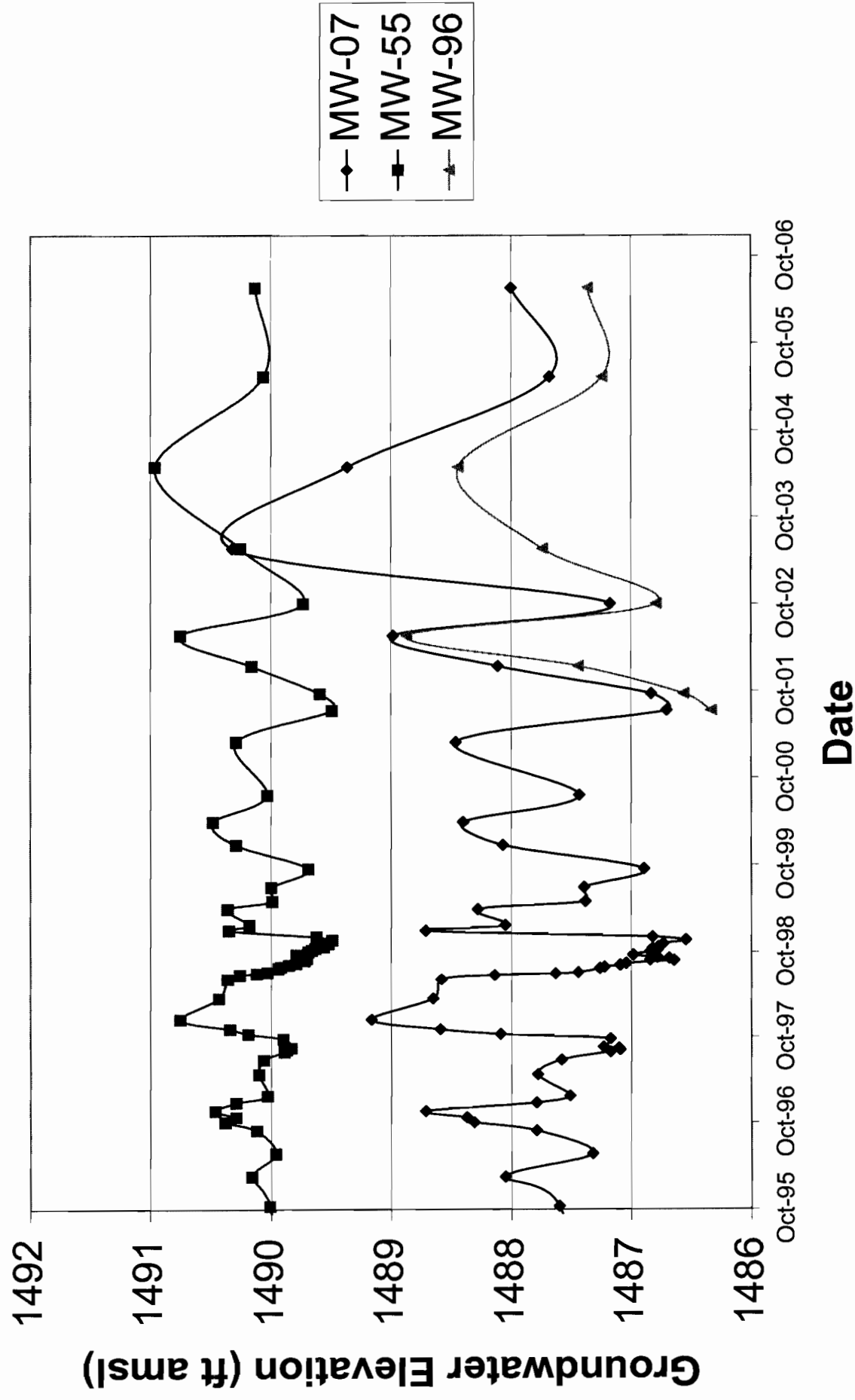
**Figure 6**  
**MW-70 Area Groundwater Elevations**



**Figure 7**  
**Central Area Groundwater Elevations**



**Figure 8**  
**Southern Area Groundwater Elevations**



# **DATA USABILITY SUMMARY REPORT FOR JANUARY 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on January 4, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on January 5, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J19642) was received by On-Site within 20 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in laboratory data resulting from data validation. Therefore, the nondetected cyanide result

for sample SP219-0106 was considered unusable and qualified "R" in the "Valid Code" column as a result from data validation.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS recoveries and LCS recoveries.

All MS recoveries were compliant and within QC acceptance ranges with the exception of the extremely low recovery for cyanide (25.2%R; QC limit 75-125%R). As a result, the nondetected cyanide result for sample SP219-0106 was considered unusable and qualified "R".

All LCS recoveries were compliant and within QC acceptance ranges with the exception of the high recovery for cyanide (111.6%R; QC limit 90-110%R). Since cyanide was not detected, validation qualification of the samples was not required.

Therefore, the inorganic data and the oil and grease data presented by Accutest were 95.2% complete with all data considered usable and valid.



| Analyte                   | CAS#       | Method    | Lab Sample ID | Validation Date | Date Sampled | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|-----------------|--------------|--------|----------|--------|------|----|----------|--------------|------------|
| Lead, Total               | 7439-92-1  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 3.9    |      |    | 3 ug/l   |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 6.7    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 6.8    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.57   | J    |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 7.8    |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 107    |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 1.2    |      |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 99.5   |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 5.8    |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 1.4    |      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 89.8   |      |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0108     | 0.0    |      |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0108     | 29.3   |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 2 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-8    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0108     | 1.2    |      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0108     | 0.0    |      |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 1 ug/l   |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 46400  |      |    | 100 ug/l |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 65.2   |      |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 101    |      |    | 5 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 0.0    |      |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J19642-1      | 1-Feb-06        | 04-Jan-06    | SP114  | 0106     | 28.5   |      |    | 20 ug/l  |              |            |

| Analyte                   | casno      | Method  | Lab sample ID | Validation Date | Date Sampled | Sample | Location | Result Code | RL | Units  | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|-----------------|--------------|--------|----------|-------------|----|--------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 7.4         |    | 1 ug/l |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 1.3         |    | 1 ug/l |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0.46 J      |    | 1 ug/l |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 1.7 J       |    | 2 ug/l |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0.39 J      |    | 1 ug/l |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 3.6         |    | 1 ug/l |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 2 ug/l |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 2 ug/l |              |            |
| 1,2-Dichloropropane       | 78-57-5    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J19642-2      | 1-Feb-06        | 04-Jan-06    | SP217  | 0106     | 0 U         |    | 1 ug/l |              |            |

| Analyte                   | Casno      | Method    | LabSampleID | Validation Date | Date Sampled | Sample | Location | Result | Code | RL        | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|-------------|-----------------|--------------|--------|----------|--------|------|-----------|-------|--------------|------------|
| Lead, Total               | 7439-92-1  | EPA 200.7 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 3 ug/l    |       |              |            |
| pH                        |            | EPA 150.1 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 7.35   |      | su        |       |              |            |
| Oil And Grease            |            | EPA 1664A | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 5.1 mg/l  |       |              |            |
| Cyanide                   | 57-12-5    | EPA 335.3 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 0.01 mg/l |       |              | R          |
| Ethylbenzene              | 100-41-4   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0.36 J |      | 1 ug/l    |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 824   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0.48 J |      | 1 ug/l    |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 1 J    |      | 2 ug/l    |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 1.2    |      | 1 ug/l    |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 2 ug/l    |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 2 ug/l    |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 1 ug/l    |       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 100 ug/l  |       |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 148    |      | 100 ug/l  |       |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 40 ug/l   |       |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 5 ug/l    |       |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 10 ug/l   |       |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J19642-3    | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0 U    |      | 25 ug/l   |       |              |            |

| Analyte     | casno     | Method    | Labsampid | Validation Date | Date Sampled | Sample | Location | Result Code | RL | Units | Valid Result | Valid Code |
|-------------|-----------|-----------|-----------|-----------------|--------------|--------|----------|-------------|----|-------|--------------|------------|
| Zinc, Total | 7440-66-6 | EPA 200.7 | J19642-3  | 1-Feb-06        | 04-Jan-06    | SP219  | 0106     | 0:U         | 20 | ug/l  |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Validation Data | Date Sampled | Sample | Location   | Result | Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|-----------------|--------------|--------|------------|--------|------|----------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 2 ug/l   |       |              |            |
| 1,2-Dichloropropene       | 78-87-5    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J19642-4      | 1-Feb-06        | 04-Jan-06    | UNK    | TRIP BLANK | 0:U    | 0:U  | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J19642-1F     | 1-Feb-06        | 04-Jan-06    | SP114  | 0106       | 0:U    | 0:U  | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J19642-3F     | 1-Feb-06        | 04-Jan-06    | SP219  | 0106       | 0:U    | 0:U  | 100 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR FEBRUARY 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on February 2, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on February 3, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J21855) was received by On-Site within 20 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in laboratory data resulting from data validation. However, the laboratory data did not

require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.



| Analysite                 | casno      | Method    | Lab Sampled | Date Sampled | Validation Date | Sample | ID   | Result | Code | RL        | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|-------------|--------------|-----------------|--------|------|--------|------|-----------|-------|--------------|------------|
| Lead, Total               | 7439-92-1  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 3 ug/l    |       |              |            |
| Cyanide                   | 57-12-5    | EPA 335.3 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 0.01 mg/l |       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 100 ug/l  |       |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 123    | 123  | 100 ug/l  |       |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 40 ug/l   |       |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 8 ug/l    |       |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 10 ug/l   |       |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 25 ug/l   |       |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 20 ug/l   |       |              |            |
| Oil And Grease            |            | EPA 1664A | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 5.1 mg/l  |       |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.59   | 0.59 | 1 ug/l    |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.59   | 0.59 | 1 ug/l    |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 1.1    | 1.1  | 2 ug/l    |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 1.2    | 1.2  | 1 ug/l    |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 2 ug/l    |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 2 ug/l    |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J21855-3    | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0.0    | 0.0  | 1 ug/l    |       |              |            |



| Analyte                   | CAS#       | Method  | Lab Sampled | Date Sampled | Validation Date | Sample | ID         | Result Code | RL | Units  | Valid Result | Valid Code |
|---------------------------|------------|---------|-------------|--------------|-----------------|--------|------------|-------------|----|--------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 2 ug/l |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 2 ug/l |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 2 ug/l |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J21855-4    | 02-Feb-06    | 03-Apr-06       | UNK    | TRIP BLANK | 0 U         |    | 1 ug/l |              |            |

| Analyte                   | casno      | Method    | Subsampled | Date Sampled | Validation Date | Sample | ID   | Result Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|------------|--------------|-----------------|--------|------|-------------|----------|-------|--------------|------------|
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J21855-1F  | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J21855-3F  | 02-Feb-06    | 03-Apr-06       | SP219  | 0206 | 0 U         | 100 ug/l |       |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 3 ug/l   |       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 100 ug/l |       |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 46400       | 100 ug/l |       |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 40 ug/l  |       |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 98.4        | 8 ug/l   |       |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 10 ug/l  |       |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 25 ug/l  |       |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 20 ug/l  |       |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 8.6         | 2 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-5 | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 6.8         | 2 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 6.5         | 2 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 78.8        | 2 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 1.5 J       | 2 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 103         | 2 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 5.4         | 2 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 1.6 J       | 2 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 78.1        | 4 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 31          | 2 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 4 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 4 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0.85 J      | 2 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J21855-1   | 02-Feb-06    | 03-Apr-06       | SP114  | 0206 | 0 U         | 2 ug/l   |       |              |            |

| Analyte                   | CAS#       | Method  | Subsampled | Date Sampled | Validation Date | Sample | ID   | Result | Code | RL     | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|------------|--------------|-----------------|--------|------|--------|------|--------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| cis-1,3-Dichloropropene   | 10661-01-5 | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| trans-1,3-Dichloropropene | 10661-02-6 | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 1.5    |      | 1 ug/l |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.79 J |      | 1 ug/l |       |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.61 J |      | 2 ug/l |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.21 J |      | 1 ug/l |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 1.1    |      | 1 ug/l |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 2 ug/l |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 2 ug/l |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J21855-2   | 02-Feb-06    | 03-Apr-06       | SP217  | 0206 | 0.0    | U    | 1 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR MARCH 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on March 6, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on March 7, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J24238) was received by On-Site within 18 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in laboratory data resulting from data validation. Therefore, the nondetected oil and grease

result for sample SP219-0306 was considered estimated and qualified "UJ" in the "Valid Code" column as a result from data validation.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS recoveries.

All MS recoveries were compliant and within QC acceptance ranges with the exception of the low recovery for oil and grease (70.4%R; QC limit 79-114%R). As a result, the nondetected oil and grease result for sample SP219-0306 was considered estimated, possibly biased low, and qualified "UJ".

Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | CASNO      | Method    | Subsample | Date Sampled | Validation Date | Sample | ID   | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|-----------|--------------|-----------------|--------|------|--------|------|----|----------|--------------|------------|
| pH                        |            | EPA 150.1 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 6.61   |      |    | su       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 108    |      |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 50800  |      |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 114    |      |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 20 ug/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 9.8    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 8.7    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 11.5   |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 101    |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 1.3    |      |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 58-23-5    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 104    |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 9.7    |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 1.2    |      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 108    |      |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 27.6   |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 2 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 2.7    |      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J24238-1  | 06-Mar-06    | 04-Apr-06       | SP114  | 0306 | 0 U    |      |    | 1 ug/l   |              |            |

| Analyte                   | Casno      | Method  | Lab Sample | Date Sampled | Validation Date | Sample | ID   | Result | Code | RL | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|------------|--------------|-----------------|--------|------|--------|------|----|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.79   | J    | 1  | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.64   | J    | 1  | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Chloroethane              | 74-87-3    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Vinyl chloride            | 75-00-3    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Methylene chloride        | 75-01-4    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.86   | J    | 2  | ug/l  |              |            |
| Bromoform                 | 75-09-2    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Bromodichloromethane      | 75-25-2    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-27-4    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-34-3    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 1.3    |      | 1  | ug/l  |              |            |
| Trichlorofluoromethane    | 75-35-4    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-69-4    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 2  | ug/l  |              |            |
| 1,2-Dichloropropane       | 75-71-8    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 2  | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 78-87-5    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| Trichloroethene           | 79-00-5    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-01-6    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J24238-2   | 06-Mar-06    | 04-Apr-06       | SP217  | 0306 | 0.0    | U    | 1  | ug/l  |              |            |



| Analyte                   | casno      | Method    | Labcampid | Date Sampled | Validation Date | Sample | ID   | Result | Code | RL   | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|-----------|--------------|-----------------|--------|------|--------|------|------|-------|--------------|------------|
| Cyanide                   | 57-12-5    | EPA 335.3 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 0.01 | mg/l  |              |            |
| pH                        |            | EPA 150.1 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 7.83   |      |      | su    |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 100  | ug/l  |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 182    |      | 100  | ug/l  |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 3    | ug/l  |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 40   | ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 8    | ug/l  |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 10   | ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 25   | ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 20   | ug/l  |              |            |
| Oil And Grease            |            | EPA 1664A | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 5.1  | mg/l  |              | UJ         |
| Ethylbenzene              | 100-41-4   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 158-59-2   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 2    | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 2    | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 2    | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J24238-3  | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    | 1    | ug/l  |              |            |

| Analyte             | Casno   | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | ID   | Result | Code | RL | Units  | Valid Result | Valid Code |
|---------------------|---------|---------|---------------|--------------|-----------------|--------|------|--------|------|----|--------|--------------|------------|
| 1,2-Dichlorobenzene | 95-50-1 | EPA 624 | J24238-3      | 06-Mar-06    | 04-Apr-06       | SP219  | 0306 | 0      | U    |    | 1 ug/l |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | ID         | Result Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|------------|-------------|----------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J24238-4      | 06-Mar-06    | 04-Apr-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J24238-1F     | 06-Mar-06    | 04-Apr-06       | SP114  | 0306       | 0 U         | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J24238-3F     | 06-Mar-06    | 04-Apr-06       | SP219  | 0306       | 0 U         | 100 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR APRIL 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on April 6, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on April 7, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J27120) was received by On-Site within 21 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in laboratory data resulting from data validation. Therefore, the nondetected chloroethane

results for samples SP217-0406, SP219-0406, and TRIP BLANK were considered estimated and qualified "UJ" in the "Valid Code" column as a result from data validation.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of continuing calibrations. All continuing calibration compounds were compliant with maximum percent differences (%Ds) of  $\pm 25\%$  and minimum relative response factors (RRFs) of 0.05 with the exception of chloroethane (-33.4%D, -26.4%D) in the continuing calibrations associated with samples SP217-0406, SP219-0406, and TRIP BLANK. Therefore, the nondetected chloroethane results for these samples were considered estimated and qualified "UJ".

Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination

- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | casno      | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid | Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|----|----------|-------|--------|------------|
| pH                        |            | EPA 150.1 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 6.73   |      |    | su       |       |        |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 100 ug/l |       |        |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 45800  |      |    | 100 ug/l |       |        |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 3 ug/l   |       |        |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 40 ug/l  |       |        |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 96.6   |      |    | 8 ug/l   |       |        |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 10 ug/l  |       |        |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 25 ug/l  |       |        |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 20 ug/l  |       |        |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 8.5    |      |    | 1 ug/l   |       |        |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Dichloropropene           | 10061-02-6 | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Toluene                   | 108-88-3   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 7.6    |      |    | 1 ug/l   |       |        |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0.56 J |      |    | 1 ug/l   |       |        |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Tetrachloroethane         | 127-18-4   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 9      |      |    | 1 ug/l   |       |        |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 61     |      |    | 1 ug/l   |       |        |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0.93 J |      |    | 1 ug/l   |       |        |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Chloroform                | 67-66-3    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Benzene                   | 71-43-2    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 87.5   |      |    | 1 ug/l   |       |        |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 7.6    |      |    | 1 ug/l   |       |        |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Chloromethane             | 74-87-3    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 1.3    |      |    | 1 ug/l   |       |        |            |
| Chloroethane              | 75-00-3    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 73     |      |    | 2 ug/l   |       |        |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Bromoform                 | 75-25-2    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 21.3   |      |    | 1 ug/l   |       |        |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 2 ug/l   |       |        |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 2 ug/l   |       |        |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0.46 J |      |    | 1 ug/l   |       |        |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J27120-1      | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 1 ug/l   |       |        |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J27120-1F     | 06-Apr-06    | 23-May-06       | SP114  | 0406     | 0 U    |      |    | 100 ug/l |       |        |            |

| Analyte                   | Casno      | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RT     | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|--------------|-----------------|--------|----------|--------|------|--------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-6 | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Dichloropropene           | 10061-02-6 | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 2.9    | 0 U  | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 1.2    | 0 U  | 1 ug/l |       |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-8    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0.61 J | 0 U  | 1 ug/l |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0.81 J | 0 U  | 2 ug/l |       |              | UJ         |
| Vinyl chloride            | 75-01-4    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 3.2    | 0 U  | 1 ug/l |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 2 ug/l |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 2 ug/l |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| Trichloroethene           | 79-01-8    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J27120-2      | 06-Apr-06    | 23-May-06       | SP217  | 0406     | 0 U    | 0 U  | 1 ug/l |       |              |            |



| Analyte                   | Casno      | Method    | Lab Sampled | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|-------------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| pH                        |            | EPA 160.1 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 7.27   |      |    | su       |              |            |
| Cyanide                   | 57-12-5    | EPA 335.3 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 0 mg/l   |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 160    |      |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-68-6  | EPA 200.7 | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 20 ug/l  |              |            |
| Oil And Grease            |            | EPA 1684A | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 5.1 mg/l |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Dichloropropene           | 10061-02-6 | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              | UJ         |
| Methylene chloride        | 75-09-2    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 2 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 2 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 2 ug/l   |              |            |
| 1,1,2-Dichloropropane     | 78-87-5    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J27120-3    | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0.0    | U    |    | 1 ug/l   |              |            |

| Analyte             | Casac     | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result Code | RL  | Units | Valid Result | Valid Code |
|---------------------|-----------|-----------|---------------|--------------|-----------------|--------|----------|-------------|-----|-------|--------------|------------|
| Aluminum, Dissolved | 7429-90-5 | EPA 200.7 | J27120-3F     | 06-Apr-06    | 23-May-06       | SP219  | 0406     | 0:U         | 100 | ug/l  |              |            |

| Analyte                   | casno      | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | Location   | Result Code | RL     | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|--------------|-----------------|--------|------------|-------------|--------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Dichloropropene           | 10061-02-6 | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Toluene                   | 108-48-3   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Chloroform                | 67-68-3    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Trichlorofluoromethane    | 75-35-4    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Dichlorodifluoromethane   | 75-69-4    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l |       |              |            |
| 1,2-Dichloropropane       | 75-71-8    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l |       |              |            |
| 1,1,2-Trichloroethane     | 78-87-5    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| Trichloroethene           | 79-00-5    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-01-6    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J27120-4      | 06-Apr-06    | 23-May-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR MAY 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on May 3, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on May 4, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J29436) was received by On-Site within 19 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the "Valid Result" and "Valid Code" columns representing changes in laboratory data resulting from data validation. However, the laboratory data did not require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions

- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of LCS recoveries. All LCS recoveries were compliant and within QC acceptance limits with the exception of the high LCS recovery for cyanide (112.2%R; QC limit 90-110%R). Since cyanide was not detected in the project sample SP219-0506, validation qualification was not warranted.

Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|-------------|----|----------|--------------|------------|
| pH                        |            | EPA 150.1 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 6.62        |    | su       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 100 ug/l |              |            |
| Iron, Total               | 7439-99-8  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 46800       |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 96.8        |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 20 ug/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 10.1        |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 9           |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0.64 J      |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 11.9        |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 76.9        |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 1.3         |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 102         |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 7.8         |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0.83 J      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 71.2        |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 21.1        |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-8    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0.49 J      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J29436-1      | 02-May-06    | 24-May-06       | SP114  | 0506     | 0:U         |    | 1 ug/l   |              |            |

| Analyte                   | CAS#       | Method  | Subsampled | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|------------|--------------|-----------------|--------|----------|--------|------|----|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 1.6    |      | 1  | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.86   | J    | 1  | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 2  | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 1.3    |      | 1  | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 2  | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 2  | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J29436-2   | 02-May-06    | 24-May-06       | SP217  | 0506     | 0.0    | U    | 1  | ug/l  |              |            |



| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL   | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|------|-------|--------------|------------|
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 8    | ug/l  |              |            |
| pH                        |            | EPA 150.1 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 7.3    |      |      | su    |              |            |
| Cyanide                   | 57-12-5    | EPA 335.3 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 0.01 | mg/l  |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 100  | ug/l  |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 100  | ug/l  |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 3    | ug/l  |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 40   | ug/l  |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 10   | ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 25   | ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 20   | ug/l  |              |            |
| Oil And Grease            |            | EPA 1664A | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 5    | mg/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0.21   | J    | 1    | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-8    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 2    | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 2    | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 2    | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J29436-3      | 02-May-06    | 24-May-06       | SP219  | 0506     | 0      | U    | 1    | ug/l  |              |            |

| Analyte             | casno   | Method  | Labstampid | Date Sampled | Validation Date | Sample | Location | Result Code | RL | Units | Valid Result | Valid Code |
|---------------------|---------|---------|------------|--------------|-----------------|--------|----------|-------------|----|-------|--------------|------------|
| 1,2-Dichlorobenzene | 95-50-1 | EPA 624 | J29436-3   | 02-May-06    | 24-May-06       | SP219  | 0506     | 0:U         | 1  | ug/l  |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location   | Result Code | RL  | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|------------|-------------|-----|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 2   | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 2   | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 2   | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J29436-4      | 02-May-06    | 24-May-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J29436-1F     | 02-May-06    | 24-May-06       | SP114  | 0506       | 0 U         | 100 | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J29436-3F     | 02-May-06    | 24-May-06       | SP219  | 0506       | 0 U         | 100 | ug/l  |              |            |

# **DATA USABILITY SUMMARY REPORT FOR MAY 2006 WASTE SAMPLING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Two waste samples were collected from the Former Sinclair Refinery Site in Wellsville, New York on May 15, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on May 16, 2006. These samples were analyzed by Accutest for percent solids using the USEPA method 160.3. One waste sample was analyzed by Accutest for toxicity characteristic leaching procedure (TCLP) volatile organic compounds (VOCs) using the USEPA SW-846 method 8260B; the total metals arsenic and iron using the USEPA SW-826 method 6010B; TCLP arsenic using the USEPA SW-846 method 6010B; and corrosivity, reactivity, and ignitability using the USEPA SW-846 methods specified in Chapter 7. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The waste samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J30626) was received by On-Site within 18 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, internal standard responses, laboratory control sample (LCS) recoveries, laboratory method blank and TCLP extraction blank contamination, instrument calibrations and verifications, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in

laboratory data resulting from data validation. However, the laboratory data did not require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **TCLP VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the TCLP volatile method 8260B analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and TCLP extraction blank contamination
- Internal standard responses
- Quantitation limits
- Sample result identifications
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the TCLP volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **TOTAL METAL AND TCLP METAL ANALYSIS**

The following items were reviewed for compliancy in the metals method 6010B analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank and TCLP extraction blank contamination
- ICP serial dilutions
- Quantitation limits

- Sample result identifications
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the metals data presented by Accutest were 100% complete with all data considered usable and valid.

## **CORROSIVITY, IGNITABILITY, AND REACTIVITY ANALYSIS**

The following items were reviewed for compliancy in the waste characteristic analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Laboratory method blank contamination
- Quantitation limits
- Sample result identifications
- Data Completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the waste characteristic data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte              | Casno     | Method      | Labsampid | Date Sampled | Validation Date | Sample   | Location | Result | Code | DL    | Units  | Valid Result | Valid Code |
|----------------------|-----------|-------------|-----------|--------------|-----------------|----------|----------|--------|------|-------|--------|--------------|------------|
| Iron, Total          | 7439-89-6 | SW846 6010B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 490000 |      | 120   | mg/kg  |              |            |
| Arsenic, Total       | 7440-38-2 | SW846 6010B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 990    |      | 25    | mg/kg  |              |            |
| Solids, Percent      |           | EPA 160.3 M | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 80.9   |      |       | %      |              |            |
| (Flashpoint)         |           | SW846 CHAP7 | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U>   |      |       | Deg. F |              |            |
| Sulfide Reactivity   |           | SW846 CHAP7 | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 60    | mg/kg  |              |            |
| 1,4-Dichlorobenzene  | 106-46-7  | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| 1,2-Dichloroethane   | 107-06-2  | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| Chlorobenzene        | 108-90-7  | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| Tetrachloroethene    | 127-18-4  | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| Carbon tetrachloride | 56-23-5   | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| Chloroform           | 67-66-3   | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| Benzene              | 71-43-2   | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| Vinyl chloride       | 75-01-4   | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.025 | mg/l   |              |            |
| 1,1-Dichloroethene   | 75-35-4   | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| 2-Butanone (mek)     | 78-93-3   | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.05  | mg/l   |              |            |
| Trichloroethene      | 79-01-6   | SW846 8260B | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.005 | mg/l   |              |            |
| Cyanide Reactivity   |           | SW846 CHAP7 | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 6.2   | mg/kg  |              |            |
| Corrosivity as pH    |           | SW846 CHAP7 | J30626-1  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      |       |        |              |            |
| Solids, Percent      |           | EPA 160.3 M | J30626-2  | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      |       | %      |              |            |
| Arsenic, Total       | 7440-38-2 | SW846 6010B | J30626-1A | 15-May-06    | 03-Jul-06       | FPSLUDGE | 0506     | 0 U    |      | 0.5   | mg/l   |              |            |

# **DATA USABILITY SUMMARY REPORT FOR JUNE 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on June 1, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on June 2, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 3.4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J32037) was received by On-Site within 21 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in



laboratory data resulting from data validation. However, the laboratory data did not require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS recoveries. It was noted that the spiked recoveries for the compounds cis-1,2-dichloroethene (139%R; QC limit 69-133%R) and vinyl chloride (162%R; QC limit 56-159%R) exceeded QC acceptance limits during the spiked analysis of sample SP114-0606. However, validation qualification of the unspiked sample SP114-0606 was not required due to large concentrations of these compounds in the unspiked sample and the absence of the analysis of a MSD.

Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample

- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | CasNo      | Method    | Lab Sampled | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|-------------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| pH                        |            | EPA 150.1 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 6.64   |      |    | su       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     |        | 0 U  |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-8  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 43400  |      |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 3      |      |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 90.2   |      |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 20 ug/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 7.5    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 7.9    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0.56 J |      |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 12     |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 55.3   |      |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 1      |      |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 82.5   |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 8.3    |      |    | 1 ug/l   |              |            |
| Chloromethane             | 75-00-3    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0.66 J |      |    | 1 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 85.7   |      |    | 2 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 16.7   |      |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J32037-1    | 01-Jun-06    | 03-Jul-06       | SP114  | 0606     | 0 U    |      |    | 1 ug/l   |              |            |

| Analyte                   | Casno      | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code   | RL     | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|--------------|-----------------|--------|----------|--------|--------|--------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 5      | 5      | 1 ug/l |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 1.3    | 1.3    | 1 ug/l |       |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0.21 J | 0.21 J | 1 ug/l |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 1.3    | 1.3    | 1 ug/l |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 1.5 J  | 1.5 J  | 2 ug/l |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0.3 J  | 0.3 J  | 1 ug/l |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 4.2    | 4.2    | 1 ug/l |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 2 ug/l |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 2 ug/l |       |              |            |
| 1,2-Dichloropropene       | 78-87-5    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J32037-2      | 01-Jun-06    | 03-Jul-06       | SP217  | 0606     | 0 U    | 0 U    | 1 ug/l |       |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL   | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|------|-------|--------------|------------|
| pH                        |            | EPA 150.1 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 7.22   |      |      | su    |              |            |
| Cyanide                   | 57-12-5    | EPA 335.3 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 0.01 | mg/l  |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 100  | ug/l  |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 100  | ug/l  |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 3    | ug/l  |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 40   | ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 8    | ug/l  |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 10   | ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 25   | ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 20   | ug/l  |              |            |
| Oil And Grease            |            | EPA 1664A | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 5.2  | mg/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Chloroform                | 67-68-3    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.76   | J    | 1    | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.37   | J    | 1    | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.5    | J    | 2    | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 1.9    |      | 1    | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 2    | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 2    | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J32037-3      | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0.0    | U    | 1    | ug/l  |              |            |

| Analyte             | casno   | Method  | Labsampid | Date Sampled | Validation Date | Sample | Location | Result | Code | PL | Units  | Valid Result | Valid Code |
|---------------------|---------|---------|-----------|--------------|-----------------|--------|----------|--------|------|----|--------|--------------|------------|
| 1,2-Dichlorobenzene | 95-50-1 | EPA 624 | J32037-3  | 01-Jun-06    | 03-Jul-06       | SP219  | 0606     | 0      | U    |    | 1 ug/l |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location   | Result | Code | RL  | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|------------|--------|------|-----|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 2   | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 2   | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 2   | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 96-50-1    | EPA 624   | J32037-4      | 01-Jun-06    | 03-Jul-06       | UNK    | TRIP BLANK | 0      | U    | 1   | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J32037-1F     | 01-Jun-06    | 03-Jul-06       | SP114  | 0606       | 0      | U    | 100 | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J32037-3F     | 01-Jun-06    | 03-Jul-06       | SP219  | 0606       | 0      | U    | 100 | ug/l  |              |            |

# **DATA USABILITY SUMMARY REPORT FOR INTERIM GROUNDWATER MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Fourteen groundwater samples, three field QC equipment blanks, and three field QC trip blanks were collected from the Former Sinclair Refinery Site in Wellsville, New York on June 13, 2006 through June 21, 2006. These samples were received by Accutest Laboratories (Accutest) within one to two days of collection on June 15, 2006, June 17, 2006, and June 22, 2006. These samples were analyzed by Accutest for the volatile organic compounds (VOCs) benzene, toluene, ethylbenzene, and total xylenes (BTEX), cis-1,2-dichloroethene, and vinyl chloride using the USEPA SW-846 8260B analytical method; nitroaromatic compounds using the USEPA SW-846 8270C analytical method; and arsenic using the USEPA SW-846 6010B analytical method. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 3-5°C. All samples were received intact and in good condition at Accutest.

The analytical data packages generated by Accutest (Accutest Job #s J33288, J33534, and J33914) were received by On-Site within 20-23 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip and equipment blank contamination, instrument calibrations, internal standard responses, laboratory duplicate precision, field duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached tables with the “Valid Result” and “Valid Code” columns representing changes in



laboratory data resulting from data validation. Therefore, the nondetected aniline results for samples MW10-0606 and EB2-0606 were considered estimated and qualified "UJ" in the "Valid Code" column as a result from data validation.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 8260B analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and equipment / trip blank contamination
- Internal standard responses
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **SEMIVOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the semivolatile method 8270C analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and equipment blank contamination
- Internal standard responses
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of continuing calibrations.

All continuing calibration compounds were compliant with minimum relative response factors (RRFs) of 0.05 and percent differences (%Ds) within  $\pm 25\%$  with the exception of aniline (31.6%D) in the continuing calibration associated with samples MW10-0606 and EB2-0606. Therefore, the aniline results for these samples which were nondetects, were considered estimated and qualified "UJ".

As a result, the nitroaromatic data presented by Accutest were 100% complete with all data considered usable and valid.

## **METALS ANALYSIS**

The following items were reviewed for compliancy in the arsenic method 6010B analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank and equipment blank contamination
- ICP serial dilutions
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the arsenic data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                | Casno     | Method      | Labsampid | Date Sampled | Validation Date | Sample | Location   | Result | Code   | RL     | Units | Valid Result | Valid Code |
|------------------------|-----------|-------------|-----------|--------------|-----------------|--------|------------|--------|--------|--------|-------|--------------|------------|
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33288-1  | 13-Jun-06    | 15-Aug-06       | MW9    | 0606       | 11     | 0 U    | 8 ug/l |       |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33288-1  | 13-Jun-06    | 15-Aug-06       | MW9    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33288-1  | 13-Jun-06    | 15-Aug-06       | MW9    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33288-1  | 13-Jun-06    | 15-Aug-06       | MW9    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33288-1  | 13-Jun-06    | 15-Aug-06       | MW9    | 0606       | 0.58 J | 0.58 J | 1 ug/l |       |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33288-2  | 13-Jun-06    | 15-Aug-06       | MW55   | 0606       | 61.5   | 61.5   | 8 ug/l |       |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33288-2  | 13-Jun-06    | 15-Aug-06       | MW55   | 0606       | 49.1   | 49.1   | 1 ug/l |       |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33288-2  | 13-Jun-06    | 15-Aug-06       | MW55   | 0606       | 11.7   | 11.7   | 1 ug/l |       |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33288-2  | 13-Jun-06    | 15-Aug-06       | MW55   | 0606       | 48.2   | 48.2   | 1 ug/l |       |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33288-2  | 13-Jun-06    | 15-Aug-06       | MW55   | 0606       | 28.4   | 28.4   | 1 ug/l |       |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33288-3  | 13-Jun-06    | 15-Aug-06       | MW69A  | 0606       | 48.2   | 48.2   | 8 ug/l |       |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33288-3  | 13-Jun-06    | 15-Aug-06       | MW69A  | 0606       | 0.54 J | 0.54 J | 1 ug/l |       |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33288-3  | 13-Jun-06    | 15-Aug-06       | MW69A  | 0606       | 0.4 J  | 0.4 J  | 1 ug/l |       |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33288-3  | 13-Jun-06    | 15-Aug-06       | MW69A  | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene | 156-59-2  | SW846 8260B | J33288-3  | 13-Jun-06    | 15-Aug-06       | MW69A  | 0606       | 3.7    | 3.7    | 1 ug/l |       |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33288-3  | 13-Jun-06    | 15-Aug-06       | MW69A  | 0606       | 56.9   | 56.9   | 1 ug/l |       |              |            |
| Vinyl chloride         | 75-01-4   | SW846 8260B | J33288-3  | 13-Jun-06    | 15-Aug-06       | MW69A  | 0606       | 9.7    | 9.7    | 1 ug/l |       |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33288-4  | 13-Jun-06    | 15-Aug-06       | EB1    | 0606       | 0 U    | 0 U    | 8 ug/l |       |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33288-4  | 13-Jun-06    | 15-Aug-06       | EB1    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33288-4  | 13-Jun-06    | 15-Aug-06       | EB1    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33288-4  | 13-Jun-06    | 15-Aug-06       | EB1    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene | 156-59-2  | SW846 8260B | J33288-4  | 13-Jun-06    | 15-Aug-06       | EB1    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33288-4  | 13-Jun-06    | 15-Aug-06       | EB1    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Vinyl chloride         | 75-01-4   | SW846 8260B | J33288-4  | 13-Jun-06    | 15-Aug-06       | EB1    | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33288-5  | 14-Jun-06    | 15-Aug-06       | MW11   | 0606       | 27.7   | 27.7   | 8 ug/l |       |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33288-5  | 14-Jun-06    | 15-Aug-06       | MW11   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33288-5  | 14-Jun-06    | 15-Aug-06       | MW11   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33288-5  | 14-Jun-06    | 15-Aug-06       | MW11   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33288-5  | 14-Jun-06    | 15-Aug-06       | MW11   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33288-6  | 14-Jun-06    | 15-Aug-06       | MW11   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33288-6  | 14-Jun-06    | 15-Aug-06       | MW78   | 0606       | 26     | 26     | 8 ug/l |       |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33288-6  | 14-Jun-06    | 15-Aug-06       | MW78   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33288-6  | 14-Jun-06    | 15-Aug-06       | MW78   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33288-6  | 14-Jun-06    | 15-Aug-06       | MW78   | 0606       | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33288-7  | 14-Jun-06    | 15-Aug-06       | MW78   | 0606       | 4      | 4      | 1 ug/l |       |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33288-7  | 14-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33288-7  | 14-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33288-7  | 14-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    | 0 U    | 1 ug/l |       |              |            |

| Analyte        | casno     | Method      | LabSampled | Date Sampled | Validation Date | Sample | Location | Result | Code | RL       | Units | Valid Result | Valid Code |
|----------------|-----------|-------------|------------|--------------|-----------------|--------|----------|--------|------|----------|-------|--------------|------------|
| 2-Aminophenol  | 95-55-6   | SW846 8270C | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 0      | U    | 20 ug/l  |       |              |            |
| Ethylbenzene   | 100-41-4  | SW846 8260B | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 8.3    |      | 1 ug/l   |       |              |            |
| Toluene        | 108-88-3  | SW846 8260B | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 22     |      | 1 ug/l   |       |              |            |
| Xylene (total) | 1330-20-7 | SW846 8260B | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 52.4   |      | 1 ug/l   |       |              |            |
| Benzene        | 71-43-2   | SW846 8260B | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 7.9    |      | 1 ug/l   |       |              |            |
| Arsenic, Total | 7440-38-2 | SW846 6010B | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 80.4   |      | 8 ug/l   |       |              |            |
| Azobenzene     | 103-33-3  | SW846 8270C | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| Azoxybenzene   | 495-48-7  | SW846 8270C | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| Aniline        | 62-53-3   | SW846 8270C | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 0      | U    | 2 ug/l   |       |              |            |
| 2-Aminophenol  | 95-55-6   | SW846 8270C | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 0      | U    | 20 ug/l  |       |              |            |
| Nitrobenzene   | 98-95-3   | SW846 8270C | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 0      | U    | 2 ug/l   |       |              |            |
| Ethylbenzene   | 100-41-4  | SW846 8260B | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 0.48   | J    | 1 ug/l   |       |              |            |
| Toluene        | 108-88-3  | SW846 8260B | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 2.7    |      | 1 ug/l   |       |              |            |
| Xylene (total) | 1330-20-7 | SW846 8260B | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 1.6    |      | 1 ug/l   |       |              |            |
| Benzene        | 71-43-2   | SW846 8260B | J33534-1   | 15-Jun-06    | 15-Aug-06       | OW1    | 0606     | 39.4   |      | 1 ug/l   |       |              |            |
| Aniline        | 62-53-3   | SW846 8270C | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 7690   |      | 200 ug/l |       |              |            |
| Nitrobenzene   | 98-95-3   | SW846 8270C | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 3130   |      | 200 ug/l |       |              |            |
| Arsenic, Total | 7440-38-2 | SW846 6010B | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 32.6   |      | 8 ug/l   |       |              |            |
| Azobenzene     | 103-33-3  | SW846 8270C | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| Azoxybenzene   | 495-48-7  | SW846 8270C | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| 2-Aminophenol  | 95-55-6   | SW846 8270C | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 0      | U    | 20 ug/l  |       |              |            |
| Ethylbenzene   | 100-41-4  | SW846 8260B | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 18     |      | 1 ug/l   |       |              |            |
| Toluene        | 108-88-3  | SW846 8260B | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 40.5   |      | 1 ug/l   |       |              |            |
| Xylene (total) | 1330-20-7 | SW846 8260B | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 77.6   |      | 1 ug/l   |       |              |            |
| Benzene        | 71-43-2   | SW846 8260B | J33534-2   | 15-Jun-06    | 15-Aug-06       | MW70   | 0606     | 11.4   |      | 1 ug/l   |       |              |            |
| Aniline        | 62-53-3   | SW846 8270C | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 4200   |      | 400 ug/l |       |              |            |
| Nitrobenzene   | 98-95-3   | SW846 8270C | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 12300  |      | 400 ug/l |       |              |            |
| Arsenic, Total | 7440-38-2 | SW846 6010B | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 22     |      | 8 ug/l   |       |              |            |
| Azobenzene     | 103-33-3  | SW846 8270C | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| Azoxybenzene   | 495-48-7  | SW846 8270C | J33534-3   | 15-Jun-06    | 15-Aug-06       | OW3    | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| Aniline        | 62-53-3   | SW846 8270C | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 4850   |      | 800 ug/l |       |              |            |
| Nitrobenzene   | 98-95-3   | SW846 8270C | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 15200  |      | 800 ug/l |       |              |            |
| Arsenic, Total | 7440-38-2 | SW846 6010B | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 21.8   |      | 8 ug/l   |       |              |            |
| Azobenzene     | 103-33-3  | SW846 8270C | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| Azoxybenzene   | 495-48-7  | SW846 8270C | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| 2-Aminophenol  | 95-55-6   | SW846 8270C | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 0      | U    | 5 ug/l   |       |              |            |
| Ethylbenzene   | 100-41-4  | SW846 8270C | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 0      | U    | 20 ug/l  |       |              |            |
| Toluene        | 108-88-3  | SW846 8260B | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 8.5    |      | 1 ug/l   |       |              |            |
| Xylene (total) | 1330-20-7 | SW846 8260B | J33534-4   | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606     | 21.7   |      | 1 ug/l   |       |              |            |
|                |           |             |            |              |                 |        | 0606     | 52.9   |      | 1 ug/l   |       |              |            |

| Analyte        | casno     | Method      | Lab sample ID | Date Sampled | Validation Date | Sample | Location   | Result | Code | RL | Units   | Valid Result | Valid Code |
|----------------|-----------|-------------|---------------|--------------|-----------------|--------|------------|--------|------|----|---------|--------------|------------|
| Benzene        | 71-43-2   | SW846 8260B | J33534-4      | 15-Jun-06    | 15-Aug-06       | DUP1   | 0606       | 7.8    |      |    | 1 ug/l  |              |            |
| Azobenzene     | 103-33-3  | SW846 8270C | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 5 ug/l  |              |            |
| Azoxybenzene   | 495-48-7  | SW846 8270C | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 5 ug/l  |              |            |
| Aniline        | 62-53-3   | SW846 8270C | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 2 ug/l  |              |            |
| 2-Aminophenol  | 95-55-6   | SW846 8270C | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 20 ug/l |              |            |
| Nitrobenzene   | 98-95-3   | SW846 8270C | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 2 ug/l  |              |            |
| Arsenic, Total | 7440-38-2 | SW846 6010B | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 8 ug/l  |              |            |
| Ethylbenzene   | 100-41-4  | SW846 8260B | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Toluene        | 108-88-3  | SW846 8260B | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Xylene (total) | 1330-20-7 | SW846 8260B | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Benzene        | 71-43-2   | SW846 8260B | J33534-5      | 15-Jun-06    | 15-Aug-06       | EB3    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Ethylbenzene   | 100-41-4  | SW846 8260B | J33534-6      | 15-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |
| Toluene        | 108-88-3  | SW846 8260B | J33534-6      | 15-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |
| Xylene (total) | 1330-20-7 | SW846 8260B | J33534-6      | 15-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |
| Benzene        | 71-43-2   | SW846 8260B | J33534-6      | 15-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |

| Analyte                | Casno     | Method      | Labampid | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|------------------------|-----------|-------------|----------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33914-1 | 20-Jun-06    | 15-Aug-06       | MW96   | 0606     | 38.2   |      |    | 8 ug/l   |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33914-1 | 20-Jun-06    | 15-Aug-06       | MW96   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33914-1 | 20-Jun-06    | 15-Aug-06       | MW96   | 0606     | 0.31 J |      |    | 1 ug/l   |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33914-1 | 20-Jun-06    | 15-Aug-06       | MW96   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33914-1 | 20-Jun-06    | 15-Aug-06       | MW96   | 0606     | 1.6    |      |    | 1 ug/l   |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33914-2 | 20-Jun-06    | 15-Aug-06       | MW7    | 0606     | 16.8   |      |    | 8 ug/l   |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33914-2 | 20-Jun-06    | 15-Aug-06       | MW7    | 0606     | 0.34 J |      |    | 1 ug/l   |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33914-2 | 20-Jun-06    | 15-Aug-06       | MW7    | 0606     | 2.3    |      |    | 1 ug/l   |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33914-2 | 20-Jun-06    | 15-Aug-06       | MW7    | 0606     | 3.4    |      |    | 1 ug/l   |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33914-2 | 20-Jun-06    | 15-Aug-06       | MW7    | 0606     | 3.3    |      |    | 1 ug/l   |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33914-3 | 21-Jun-06    | 15-Aug-06       | MW71   | 0606     | 0 U    |      |    | 8 ug/l   |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33914-3 | 21-Jun-06    | 15-Aug-06       | MW71   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33914-3 | 21-Jun-06    | 15-Aug-06       | MW71   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33914-3 | 21-Jun-06    | 15-Aug-06       | MW71   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33914-3 | 21-Jun-06    | 15-Aug-06       | MW71   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Azobenzene             | 103-33-3  | SW846 8270C | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 5.2 ug/l |              |            |
| Azoxybenzene           | 495-48-7  | SW846 8270C | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 5.2 ug/l |              |            |
| 2-Aminophenol          | 95-55-6   | SW846 8270C | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 21 ug/l  |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 21.9   |      |    | 8 ug/l   |              |            |
| Aniline                | 62-53-3   | SW846 8270C | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 2.1 ug/l |              | UJ         |
| Nitrobenzene           | 98-95-3   | SW846 8270C | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 2.1 ug/l |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene | 156-59-2  | SW846 8260B | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0.62 J |      |    | 1 ug/l   |              |            |
| Vinyl chloride         | 75-01-4   | SW846 8260B | J33914-4 | 21-Jun-06    | 15-Aug-06       | MW10   | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33914-5 | 21-Jun-06    | 15-Aug-06       | OW4    | 0606     | 26.7   |      |    | 8 ug/l   |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33914-5 | 21-Jun-06    | 15-Aug-06       | OW4    | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33914-5 | 21-Jun-06    | 15-Aug-06       | OW4    | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33914-5 | 21-Jun-06    | 15-Aug-06       | OW4    | 0606     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33914-5 | 21-Jun-06    | 15-Aug-06       | OW4    | 0606     | 0 U    |      |    | 1 ug/l   |              |            |

| Analyte                | Casno     | Method      | Labsampid | Date Sampled | Validation Date | Sample | Location   | Result | Code | RL | Units   | Valid Result | Valid Code |
|------------------------|-----------|-------------|-----------|--------------|-----------------|--------|------------|--------|------|----|---------|--------------|------------|
| Azobenzene             | 103-33-3  | SW846 8270C | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 5 ug/l  |              |            |
| Azoxylbenzene          | 495-48-7  | SW846 8270C | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 5 ug/l  |              |            |
| 2-Aminophenol          | 95-55-6   | SW846 8270C | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 20 ug/l |              |            |
| Arsenic, Total         | 7440-38-2 | SW846 6010B | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 8 ug/l  |              |            |
| Aniline                | 62-53-3   | SW846 8270C | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 2 ug/l  |              | UJ         |
| Nitrobenzene           | 98-95-3   | SW846 8270C | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 2 ug/l  |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| cis-1,2-Dichloroethene | 156-59-2  | SW846 8260B | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Vinyl chloride         | 75-01-4   | SW846 8260B | J33914-6  | 21-Jun-06    | 15-Aug-06       | EB2    | 0606       | 0 U    |      |    | 1 ug/l  |              |            |
| Ethylbenzene           | 100-41-4  | SW846 8260B | J33914-7  | 21-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |
| Toluene                | 108-88-3  | SW846 8260B | J33914-7  | 21-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |
| Xylene (total)         | 1330-20-7 | SW846 8260B | J33914-7  | 21-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |
| Benzene                | 71-43-2   | SW846 8260B | J33914-7  | 21-Jun-06    | 15-Aug-06       | UNK    | TRIP BLANK | 0 U    |      |    | 1 ug/l  |              |            |

# **DATA USABILITY SUMMARY REPORT FOR JULY 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on July 6, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on July 7, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 5.2°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J34993) was received by On-Site within 20 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, internal standard responses, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in



laboratory data resulting from data validation. Therefore, the nondetected dichlorodifluoromethane, vinyl chloride, and bromomethane results were considered estimated and qualified "UJ" in the "Valid Code" column for the sample TRIP BLANK as a result of data validation.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of continuing calibrations. It was noted that all continuing calibration compounds were compliant with relative response factors greater than 0.05 and percent differences (%Ds) within  $\pm 25\%$  with the exception of dichlorodifluoromethane (-29.2%D), vinyl chloride (-27.4%D), and bromomethane (-28.9%D) in the continuing calibration associated with sample TRIP BLANK. Therefore, the nondetected results for these compounds for this sample were considered estimated and qualified "UJ".

Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision

- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| pH                        |            | EPA 150.1 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 6.72   |      |    | su       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 44900  |      |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 98.4   |      |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 20 ug/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 6.8    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 7.6    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0.65 J |      |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 10.7   |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 34.9   |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0.72 J |      |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroform                | 67-68-3    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 91     |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 7.4    |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 96.4   |      |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 17     |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 2 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J34993-1      | 06-Jul-06    | 28-Jul-06       | SP114  | 0706     | 0 U    |      |    | 1 ug/l   |              |            |

| Analyte                   | casno      | Method  | Labsampid | Date Sampled | Validation Date | Sample | Location | Result | Code   | RL | Units  | Valid Result | Valid Code |
|---------------------------|------------|---------|-----------|--------------|-----------------|--------|----------|--------|--------|----|--------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 1      | 1      |    | 1 ug/l |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chloroform                | 67-68-3    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 23     | 23     |    | 1 ug/l |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0.5 J  | 0.5 J  |    | 1 ug/l |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0.81 J | 0.81 J |    | 1 ug/l |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 1.2 J  | 1.2 J  |    | 2 ug/l |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0.4 J  | 0.4 J  |    | 1 ug/l |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 3.6    | 3.6    |    | 1 ug/l |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 2 ug/l |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 2 ug/l |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J34993-2  | 06-Jul-06    | 28-Jul-06       | SP217  | 0706     | 0 U    | 0 U    |    | 1 ug/l |              |            |

| Analyte                   | Casno      | Method    | Labampid | Date Sampled | Validation Date | Sample | Location | Result Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|----------|--------------|-----------------|--------|----------|-------------|----------|-------|--------------|------------|
| pH                        |            | EPA 150.1 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 7.48        |          | su    |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 100 ug/l |       |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 186         | 100 ug/l |       |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 3 ug/l   |       |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 40 ug/l  |       |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 8 ug/l   |       |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 10 ug/l  |       |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 25 ug/l  |       |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 20 ug/l  |       |              |            |
| Oil And Grease            |            | EPA 1664A | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 5.1 mg/l |       |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0.83 J      | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 1.8         | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0.29 J      | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0.57 J      | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0.7 J       | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 2.6         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 2 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J34993-3 | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 1 ug/l   |       |              |            |

| Analyte | Casno   | Method     | Labsampid | Date Sampled | Validation Date | Sample | Location | Result Code | RL   | Units | Valid Result | Valid Code |
|---------|---------|------------|-----------|--------------|-----------------|--------|----------|-------------|------|-------|--------------|------------|
| Cyanide | 57-12-5 | 335.3/LACH | J34993-3  | 06-Jul-06    | 28-Jul-06       | SP219  | 0706     | 0 U         | 0.01 | mg/l  |              |            |

| Analyte                   | casno      | Method    | Lab/sampleid | Date Sampled | Validation Date | Sample | Location   | Result Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|--------------|--------------|-----------------|--------|------------|-------------|----------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-08-2   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              | UJ         |
| Methyl bromide            | 74-83-9    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              | UJ         |
| Methylene chloride        | 75-09-2    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              | UJ         |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J34993-4     | 06-Jul-06    | 28-Jul-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J34993-1F    | 06-Jul-06    | 28-Jul-06       | SP114  | TRIP BLANK | 0 U         | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J34993-3F    | 06-Jul-06    | 28-Jul-06       | SP219  | 0706       | 0 U         | 100 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR AUGUST 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on August 3, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on August 4, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 5.4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J37582) was received by On-Site within 21 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, internal standard responses, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in



laboratory data resulting from data validation. However, the laboratory data did not require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | Cas#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| pH                        |            | EPA 150.1 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 6.75   |      |    | su       |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 6.2    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 8.4    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0.8 J  |      |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 13.5   |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 39.2   |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 1.4    |      |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 88.2   |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 7.7    |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 95.8   |      |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 18.5   |      |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 1 ug/l   |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 44900  |      |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 102    |      |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J37582-1      | 03-Aug-06    | 08-Sep-06       | SP114  | 0806     | 0 U    |      |    | 20 ug/l  |              |            |

| Analyte                   | casno      | Method  | Subsampled | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|------------|--------------|-----------------|--------|----------|--------|------|----|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 4.3    | 0 U  | 1  | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0.71 J | 0 U  | 1  | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 2  | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 2  | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 2  | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 1.5    | 0 U  | 1  | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J37582-2   | 03-Aug-06    | 08-Sep-06       | SP117  | 0806     | 0 U    | 0 U  | 1  | ug/l  |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|----------|-------|--------------|------------|
| pH                        |            | EPA 150.1 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 7.57   |      |          | su    |              |            |
| Oil And Grease            |            | EPA 1664A | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 5.1 mg/l |       |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 2 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 2 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 1 ug/l   |       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 100 ug/l |       |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 100 ug/l |       |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 3 ug/l   |       |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 40 ug/l  |       |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 8 ug/l   |       |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 10 ug/l  |       |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 25 ug/l  |       |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0:U    |      | 20 ug/l  |       |              |            |

| Analyte | casno   | Method     | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result Code | RL   | Units | Valid Result | Valid Code |
|---------|---------|------------|---------------|--------------|-----------------|--------|----------|-------------|------|-------|--------------|------------|
| Cyanide | 57-12-5 | 335.3/LACH | J37582-3      | 03-Aug-06    | 08-Sep-06       | SP119  | 0806     | 0 U         | 0.01 | mg/l  |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location   | Result Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|------------|-------------|----------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 2 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J37582-4      | 03-Aug-06    | 08-Sep-06       | UNK    | TRIP BLANK | 0 U         | 1 ug/l   |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J37582-1F     | 03-Aug-06    | 08-Sep-06       | SP114  | 0806       | 0 U         | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J37582-3F     | 03-Aug-06    | 08-Sep-06       | SP119  | 0806       | 0 U         | 100 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR SEPTEMBER 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on September 6, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on September 7, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 5.8°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J40276) was received by On-Site within 21 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, internal standard responses, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in

laboratory data resulting from data validation. However, the laboratory data did not require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.



| Analysis                  | Casno      | Method    | Labsampleid | Date Sampled | Validation Date | Sample | Location | Result | Code | RL  | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|-------------|--------------|-----------------|--------|----------|--------|------|-----|-------|--------------|------------|
| Iron, Total               | 7439-99-6  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 48400  |      | 100 | ug/l  |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 3   | ug/l  |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 40  | ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 117    |      | 8   | ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 25  | ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 20  | ug/l  |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 100 | ug/l  |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 10  | ug/l  |              |            |
| pH                        | EPA 150.1  |           | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 6.7    |      | su  |       |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 4.3    |      | 1   | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 5.8    |      | 1   | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0.72 J |      | 1   | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 9.1    |      | 1   | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 10.9   |      | 1   | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0.58 J |      | 1   | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 77     |      | 1   | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 4.8    |      | 1   | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 55.3   |      | 2   | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 2.7    |      | 1   | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 14.5   |      | 1   | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 2   | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 2   | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Trichloroethene           | 79-01-8    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J40276-1    | 06-Sep-06    | 28-Nov-06       | SP114  | 0906     | 0 U    | 0 U  | 1   | ug/l  |              |            |

| Analyte                   | Casno      | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units  | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|--------------|-----------------|--------|----------|--------|------|----|--------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 1.8    |      |    | 1 ug/l |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Carbon tetrachloride      | 58-23-5    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Chloroform                | 67-68-3    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 2.1    |      |    | 1 ug/l |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 2 ug/l |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.47   | J    |    | 1 ug/l |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 2.2    |      |    | 1 ug/l |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 2 ug/l |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 2 ug/l |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J40276-2      | 06-Sep-06    | 28-Nov-06       | SP217  | 0906     | 0.0    | U    |    | 1 ug/l |              |            |

| Analyte                   | Casno      | Method    | Lab Sampled | Date Sampled | Validation Date | Sample | Location | Result | Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|-------------|--------------|-----------------|--------|----------|--------|------|----------|-------|--------------|------------|
| Iron, Total               | 7439-89-6  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 143    |      | 100 ug/l |       |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 3 ug/l   |       |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 40 ug/l  |       |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 8 ug/l   |       |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 10 ug/l  |       |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 25 ug/l  |       |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 20 ug/l  |       |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 100 ug/l |       |              |            |
| pH                        | EPA 150.1  |           | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 7.47   |      | su       |       |              |            |
| Oil And Grease            | EPA 1664A  |           | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 5 mg/l   |       |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 158-59-2   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 158-60-5   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 2 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U    |      | 1 ug/l   |       |              |            |

| Analyte | Casno   | Method     | Labsampleid | Date Sampled | Validation Date | Sample | Location | Result Code | RL   | Units | Valid Result | Valid Code |
|---------|---------|------------|-------------|--------------|-----------------|--------|----------|-------------|------|-------|--------------|------------|
| Cyanide | 57-12-5 | 335.3/LACH | J40276-3    | 06-Sep-06    | 28-Nov-06       | SP219  | 0906     | 0 U         | 0.01 | mg/l  |              |            |

| Analyte                   | Casno      | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location   | Result | Code | RL  | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|------------|--------|------|-----|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-48-7   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Chloroform                | 67-68-3    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 2   | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 2   | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J40276-4      | 06-Sep-06    | 28-Nov-06       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1   | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J40276-1F     | 06-Sep-06    | 28-Nov-06       | SP114  | 0906       | 0 U    | 0 U  | 100 | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J40276-3F     | 06-Sep-06    | 28-Nov-06       | SP219  | 0906       | 0 U    | 0 U  | 100 | ug/l  |              |            |

# **DATA USABILITY SUMMARY REPORT FOR OCTOBER 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on October 5, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on October 6, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J43078) was received by On-Site within 27 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, internal standard responses, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in

laboratory data resulting from data validation. However, the laboratory data did not require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | Casno      | Method     | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL   | Units | Valid Result | Valid Code |
|---------------------------|------------|------------|---------------|--------------|-----------------|--------|----------|--------|------|------|-------|--------------|------------|
| Oil And Grease            |            | EPA 1664A  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 5.1  | mg/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.67   | J    | 1    | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 2    | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 1.3    |      | 1    | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 2    | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 2    | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624    | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 1    | ug/l  |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 200  | ug/l  |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 100  | ug/l  |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 3    | ug/l  |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 40   | ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 8    | ug/l  |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 10   | ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 25   | ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7  | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 20   | ug/l  |              |            |
| Cyanide                   | 57-12-5    | 335.3/LACH | J43078-3      | 05-Oct-06    | 29-Nov-06       | SP219  | 1006     | 0.0    | 0.0  | 0.01 | mg/l  |              |            |



| Analyte                   | Casno      | Method    | Labsampid | Date Sampled | Validation Date | Sample | Location   | Result Code | RL  | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|-----------|--------------|-----------------|--------|------------|-------------|-----|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-8    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 2   | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 2   | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 2   | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J43078-4  | 05-Oct-06    | 29-Nov-06       | UNK    | TRIP BLANK | 0 U         | 1   | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J43078-1F | 05-Oct-06    | 29-Nov-06       | SP114  | 1006       | 0 U         | 200 | ug/l  |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J43078-3F | 05-Oct-06    | 29-Nov-06       | SP219  | 1006       | 0 U         | 200 | ug/l  |              |            |

| Analyte                   | Casno      | Method    | Labsampid | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|-----------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 4.5    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 8.1    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0.88 J |      |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 9.6    |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 29     |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 1.1    |      |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 93.3   |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 7.3    |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0.94 J |      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 93.2   |      |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 20.6   |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 2 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 1 ug/l   |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 200 ug/l |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 46000  |      |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 3.9    |      |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 124    |      |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J43078-1  | 05-Oct-06    | 29-Nov-06       | SP114  | 1006     | 0 U    |      |    | 20 ug/l  |              |            |

| Analyte                   | Casno      | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code   | RL     | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|--------------|-----------------|--------|----------|--------|--------|--------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 1.8    | 1.8    | 1 ug/l |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 1.5    | 1.5    | 1 ug/l |       |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0.64 J | 0.64 J | 1 ug/l |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 1.3 J  | 1.3 J  | 2 ug/l |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0.49 J | 0.49 J | 1 ug/l |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 3.8    | 3.8    | 1 ug/l |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 2 ug/l |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 2 ug/l |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 2 ug/l |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J43078-2      | 05-Oct-06    | 29-Nov-06       | SP217  | 1006     | 0 U    | 0 U    | 1 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR NOVEMBER 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on November 1, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on November 2, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 3.2°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J45287) was received by On-Site within 23 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, internal standard responses, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

- “U” – not detected at the value given,
- “UJ” – estimated and not detected at the value given,
- “J” – estimated at the value given, and
- “R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in

laboratory data resulting from data validation. However, the laboratory data did not require qualification resulting from data validation for these samples. Therefore, there were no changes to the laboratory data presented in the attached table.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the inorganic data and the oil and grease data presented by Accutest were 100% complete with all data considered usable and valid.

| Analyte                   | Casno     | Method    | Labsampld | Date Sampled | Validation Date | Sample | Location | Result | Code | PL | Units    | Valid Result | Valid Code |
|---------------------------|-----------|-----------|-----------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| Ethylbenzene              | 100-41-4  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 3.1    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 1061-01-5 | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 1061-02-6 | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 4.5    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7 | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 5.8    |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 4.5    |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.61   | J    |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1  | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Chloroform                | 67-66-3   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 76.2   |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 2.9    |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.55   | J    |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 33.5   |      |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 19.1   |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethene        | 75-35-4   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 2 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1   | EPA 624   | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 1 ug/l   |              |            |
| Lead, Total               | 7439-92-1 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 3 ug/l   |              |            |
| Aluminum, Total           | 7429-90-5 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-6 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 48400  |      |    | 100 ug/l |              |            |
| Nickel, Total             | 7440-02-0 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 119    |      |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6 | EPA 200.7 | J45287-1  | 01-Nov-06    | 30-Nov-06       | SP114  | 1106     | 0.0    | U    |    | 20 ug/l  |              |            |

| Analyte                   | CAS#       | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL     | Units | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|--------------|-----------------|--------|----------|--------|------|--------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 1.2    |      | 1 ug/l |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 3.9    |      | 1 ug/l |       |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.27   | J    | 1 ug/l |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 2 ug/l |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.93   | J    | 1 ug/l |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 2.5    |      | 1 ug/l |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 2 ug/l |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 2 ug/l |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J45287-2      | 01-Nov-06    | 30-Nov-06       | SP217  | 1106     | 0.0    | U    | 1 ug/l |       |              |            |

| Analyte                   | CAS#       | Method     | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code   | RL   | Units | Valid Result | Valid Code |
|---------------------------|------------|------------|---------------|--------------|-----------------|--------|----------|--------|--------|------|-------|--------------|------------|
| Lead, Total               | 7439-92-1  | EPA 200.7  | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 3    | ug/l  |              |            |
| Oil And Grease            |            | EPA 166.4A | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 5    | mg/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 1.1    | 1.1    | 1    | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0.25 J | 0.25 J | 1    | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0.56 J | 0.56 J | 2    | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 2.9    | 2.9    | 1    | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 2    | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 2    | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624    | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 1    | ug/l  |              |            |
| Cyanide                   | 57-12-5    | 335.3/LACH | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 0.01 | mg/l  |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7  | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 100  | ug/l  |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7  | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 100  | ug/l  |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7  | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 40   | ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7  | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 8    | ug/l  |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7  | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 10   | ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7  | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0 U    | 0 U    | 25   | ug/l  |              |            |



| Analyte     | Casno     | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units | Valid Result | Valid Code |
|-------------|-----------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|----|-------|--------------|------------|
| Zinc, Total | 7440-86-6 | EPA 200.7 | J45287-3      | 01-Nov-06    | 30-Nov-06       | SP219  | 1106     | 0      | U    | 20 | ug/l  |              |            |

| Analyte                   | Casno      | Method    | LabSampleID | Date Sampled | Validation Date | Sample | Location   | Result | Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|-------------|--------------|-----------------|--------|------------|--------|------|----------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Chloroform                | 67-66-3    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 2 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J45287-4    | 01-Nov-06    | 30-Nov-06       | UNK    | TRIP BLANK | 0.0    | 0.0  | 1 ug/l   |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J45287-1F   | 01-Nov-06    | 30-Nov-06       | SP114  | 1106       | 0.0    | 0.0  | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J45287-3F   | 01-Nov-06    | 30-Nov-06       | SP219  | 1106       | 0.0    | 0.0  | 100 ug/l |       |              |            |

# **DATA USABILITY SUMMARY REPORT FOR DECEMBER 2006 MONTHLY COMPLIANCE MONITORING**

## **ATLANTIC RICHFIELD COMPANY FORMER SINCLAIR REFINERY SITE (OU2) WELLSVILLE, NEW YORK**

Three groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on December 6, 2006. These samples were received by Accutest Laboratories (Accutest) within one day of collection on December 7, 2006. These samples were analyzed by Accutest for halogenated volatile organic compounds (VOCs) and the VOCs benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the USEPA method 624; total metals using the USEPA method 200.7; total cyanide using the USEPA method 335.3; and oil and grease using the USEPA SW-846 method 1664A. Analytical results from these project samples were validated and reviewed by On-Site Technical Services, Inc. (On-Site) for usability in accordance to the USEPA Region II SOPs for organic and inorganic data review.

### **SUMMARY**

The groundwater samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received by Accutest at 4°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J48524) was received by On-Site within 29 days of sample receipt at the laboratory, reviewed, and validated for custody documentation, holding times, surrogate recoveries, matrix spike/matrix spike duplicate (MS/MSD) recoveries, laboratory control sample (LCS) recoveries, laboratory method blank contamination, trip blank contamination, instrument calibrations, internal standard responses, laboratory duplicate precision, quantitation limits, and data completeness. The laboratory sample data were reviewed and may be qualified with the following validation flags:

“U” – not detected at the value given,  
“UJ” – estimated and not detected at the value given,  
“J” – estimated at the value given, and  
“R” – unusable value.

The validated laboratory data were tabulated and are presented in the attached table with the “Valid Result” and “Valid Code” columns representing changes in laboratory data resulting from data validation. Therefore, the nondetected cyanide result

for sample SP219-1206 was considered unusable and qualified "R" in the "Valid Code" column as a result from data validation.

## **VOLATILE ORGANIC ANALYSIS**

The following items were reviewed for compliancy in the volatile method 624 analyses:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- GC/MS instrument performance
- Initial and continuing calibrations
- Laboratory method blank and trip blank contamination
- Internal standard responses
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols. Therefore, the volatile data presented by Accutest were 100% complete with all data considered usable and valid.

## **INORGANIC AND OIL AND GREASE ANALYSIS**

The following items were reviewed for compliancy in the metals method 200.7, total cyanide method 335.3, and oil and grease method 1664A analyses:

- Custody documentation
- Holding times
- MS recoveries
- LCS recoveries
- Laboratory duplicate precision
- Instrument calibrations
- Interference check sample
- Laboratory method blank contamination
- ICP serial dilutions
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS recoveries.

All MS recoveries were compliant and within QC acceptance ranges with the exception of the extremely low recovery for cyanide (27.6%R; QC limit 75-125%R). As a result, the nondetected cyanide result for sample SP219-1206 was considered unusable and qualified "R".

Therefore, the inorganic data and the oil and grease data presented by Accutest were 95.2% complete (i.e., usable).

It was noted that during the review of the metals sample data, the laboratory inadvertently mislabeled the bottles prior to analysis for samples SP114-1206 and SP219-1206. As a result, total metals were not detected for sample SP114-1206 while sample SP219-1206 detected total arsenic and total iron at concentrations of 44.2 and 34,700 µg/L, respectively. These samples were reanalyzed with total arsenic and total iron confirmed present in sample SP114-1206 at concentrations of 113 and 48,300 µg/L, respectively, and total metals were confirmed absent in sample SP219-1206 which is consistent with historical data. Based upon historical data for these samples and the reanalysis of these samples confirming the presence of total arsenic and total iron for sample SP114-1206 and the absence of total metals for sample SP219-1206, the original sample results were reported in the validated data table with total arsenic and total iron reported for sample SP114-1206 at concentrations of 44.2 and 34,700 µg/L, respectively, and nondetected results reported for sample SP219-1206.

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units    | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|----------|--------|------|----|----------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 4.9    |      |    | 1 ug/l   |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 6.2    |      |    | 1 ug/l   |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0.59 J |      |    | 1 ug/l   |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 6.7    |      |    | 1 ug/l   |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 21     |      |    | 1 ug/l   |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0.94 J |      |    | 1 ug/l   |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroform                | 67-68-3    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Benzene                   | 71-43-2    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 75.8   |      |    | 1 ug/l   |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 5      |      |    | 1 ug/l   |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 1.7    |      |    | 1 ug/l   |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 85.5   |      |    | 2 ug/l   |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 23.7   |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 75-35-4    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 2 ug/l   |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 2 ug/l   |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 1 ug/l   |              |            |
| Aluminum, Total           | 7429-90-5  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 100 ug/l |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 34700  |      |    | 100 ug/l |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 3 ug/l   |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 40 ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 44.2   |      |    | 8 ug/l   |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 10 ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 25 ug/l  |              |            |
| Zinc, Total               | 7440-66-6  | EPA 200.7 | J48524-1      | 06-Dec-06    | 09-Jan-07       | SP114  | 1206     | 0 U    |      |    | 20 ug/l  |              |            |

| Analyte                   | CAS#       | Method  | Lab Sample ID | Date Sampled | Validation Date | Sample | Location | Result | Code   | RI | Units  | Valid Result | Valid Code |
|---------------------------|------------|---------|---------------|--------------|-----------------|--------|----------|--------|--------|----|--------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Toluene                   | 108-88-3   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 1.3    | 1.3    |    | 1 ug/l |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chloroform                | 67-66-3    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 1.3    | 1.3    |    | 1 ug/l |              |            |
| Benzene                   | 71-43-2    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0.31 J | 0.31 J |    | 1 ug/l |              |            |
| Methyl bromide            | 74-83-9    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chloromethane             | 74-87-3    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Chloroethane              | 75-00-3    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 2 ug/l |              |            |
| Methylene chloride        | 75-09-2    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Bromoform                 | 75-25-2    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0.38 J | 0.38 J |    | 1 ug/l |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 2.9    | 2.9    |    | 1 ug/l |              |            |
| Trichloroethene           | 75-35-4    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 2 ug/l |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 2 ug/l |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| Trichloroethene           | 79-01-6    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624 | J48524-2      | 06-Dec-06    | 09-Jan-07       | SP217  | 1206     | 0 U    | 0 U    |    | 1 ug/l |              |            |

| Analyte                   | Casno      | Method     | Lab sample ID | Date Sampled | Validation Data | Sample | Location | Result | Code | RL   | Units | Valid Result | Valid Code |
|---------------------------|------------|------------|---------------|--------------|-----------------|--------|----------|--------|------|------|-------|--------------|------------|
| Oil And Grease            |            | EPA 1664A  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 5.1  | mg/l  |              |            |
| Ethylbenzene              | 100-41-4   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Toluene                   | 108-88-3   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Chloroform                | 67-66-3    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 1.3    | 0 U  | 1    | ug/l  |              |            |
| Benzene                   | 71-43-2    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0.35 J | 0 U  | 1    | ug/l  |              |            |
| Methyl bromide            | 74-83-9    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Chloromethane             | 74-87-3    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Chloroethane              | 75-00-3    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0.79 J | 0 U  | 2    | ug/l  |              |            |
| Methylene chloride        | 75-09-2    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Bromoform                 | 75-25-2    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0.22 J | 0 U  | 1    | ug/l  |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 3.5    | 0 U  | 1    | ug/l  |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 2    | ug/l  |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 2    | ug/l  |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Trichloroethene           | 79-01-6    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624    | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 1    | ug/l  |              |            |
| Cyanide                   | 57-12-5    | 335.3/LACH | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 0.01 | mg/l  |              | R          |
| Aluminum, Total           | 7429-90-5  | EPA 200.7  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 100  | ug/l  |              |            |
| Iron, Total               | 7439-89-6  | EPA 200.7  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 100  | ug/l  |              |            |
| Lead, Total               | 7439-92-1  | EPA 200.7  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 3    | ug/l  |              |            |
| Nickel, Total             | 7440-02-0  | EPA 200.7  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 40   | ug/l  |              |            |
| Arsenic, Total            | 7440-38-2  | EPA 200.7  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 8    | ug/l  |              |            |
| Chromium, Total           | 7440-47-3  | EPA 200.7  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 10   | ug/l  |              |            |
| Copper, Total             | 7440-50-8  | EPA 200.7  | J48524-3      | 06-Dec-06    | 09-Jan-07       | SP219  | 1206     | 0 U    | 0 U  | 25   | ug/l  |              |            |



| Analyte     | Casno     | Method    | Labsampid | Date Sampled | Validation Date | Sample | Location | Result | Code | RL | Units | Valid Result | Valid Code |
|-------------|-----------|-----------|-----------|--------------|-----------------|--------|----------|--------|------|----|-------|--------------|------------|
| Zinc, Total | 7440-66-6 | EPA 200.7 | J48524-3  | 06-Dec-06    | 08-Jan-07       | SP219  | 1206     | 0.0    | 0.0  | 20 | ug/l  |              |            |

| Analyte                   | CAS#       | Method    | Lab Sample ID | Date Sampled | Validation Date | Sample | Location   | Result | Code | RL       | Units | Valid Result | Valid Code |
|---------------------------|------------|-----------|---------------|--------------|-----------------|--------|------------|--------|------|----------|-------|--------------|------------|
| Ethylbenzene              | 100-41-4   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| cis-1,3-Dichloropropene   | 10061-01-5 | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| trans-1,3-Dichloropropene | 10061-02-6 | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,4-Dichlorobenzene       | 106-46-7   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,2-Dichloroethane        | 107-06-2   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Toluene                   | 108-88-3   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Chlorobenzene             | 108-90-7   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Dibromochloromethane      | 124-48-1   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Tetrachloroethene         | 127-18-4   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Xylenes (total)           | 1330-20-7  | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| cis-1,2-Dichloroethene    | 156-59-2   | EPA 824   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| trans-1,2-Dichloroethene  | 156-60-5   | EPA 824   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,3-Dichlorobenzene       | 541-73-1   | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Carbon tetrachloride      | 56-23-5    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Chloroform                | 67-68-3    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Benzene                   | 71-43-2    | EPA 824   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,1,1-Trichloroethane     | 71-55-6    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Methyl bromide            | 74-83-9    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Chloromethane             | 74-87-3    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Chloroethane              | 75-00-3    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Vinyl chloride            | 75-01-4    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 2 ug/l   |       |              |            |
| Methylene chloride        | 75-09-2    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Bromoform                 | 75-25-2    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Bromodichloromethane      | 75-27-4    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,1-Dichloroethane        | 75-34-3    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,1-Dichloroethene        | 75-35-4    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Trichlorofluoromethane    | 75-69-4    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 2 ug/l   |       |              |            |
| Dichlorodifluoromethane   | 75-71-8    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 2 ug/l   |       |              |            |
| 1,2-Dichloropropane       | 78-87-5    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,1,2-Trichloroethane     | 79-00-5    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Trichloroethene           | 79-01-6    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,1,2,2-Tetrachloroethane | 79-34-5    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| 1,2-Dichlorobenzene       | 95-50-1    | EPA 624   | J48524-4      | 06-Dec-06    | 09-Jan-07       | UNK    | TRIP BLANK | 0 U    | 0 U  | 1 ug/l   |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J48524-1F     | 06-Dec-06    | 09-Jan-07       | SP114  | 1206       | 0 U    | 0 U  | 100 ug/l |       |              |            |
| Aluminum, Dissolved       | 7429-90-5  | EPA 200.7 | J48524-3F     | 06-Dec-06    | 09-Jan-07       | SP219  | 1206       | 0 U    | 0 U  | 100 ug/l |       |              |            |