

December 11, 2006

Mr. Michael J. Negrelli
Remedial Project Manager
U.S. Environmental Protection Agency
Region 2
290 Broadway Avenue
NYC SB2 – 20th Floor
New York, New York 10007-1866

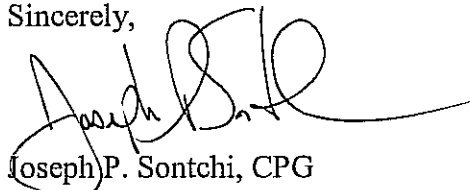
RE: 2005 Annual Progress Monitoring Report Phase 1
Operable Unit 2
Former Sinclair Refinery Site
Wellsville, New York

Dear Mr. Negrelli:

Attached herewith are two copies of the *2005 Annual Progress Monitoring Report Phase 1 – Operable Unit* at the Former Sinclair Refinery Site in Wellsville, New York. The report discusses the operation and maintenance activities for associated with the groundwater extraction and treatment system and presents groundwater monitoring data collected during 2005. For you use, an electronic version of the report has been provided on the CD included within the report.

If you have any questions regarding this submittal, please do not hesitate to contact me at (630) 836-6955.

Sincerely,



Joseph P. Sontchi, CPG
Environmental Business Manager
Atlantic Richfield Company, a BP affiliated company

cc: (w/ attachment)
M. Moore, NYSDEC
E. Belmore, NYSDEC
Ken Hannon, SECOR
J. Palmer, On-Site Technical Services
David A. Howe, Public Library, Wellsville, NY
File



A BP affiliated company

Prepared for:
Atlantic Richfield Company
A BP affiliated company
28100 Torch Parkway, MC 2S
Warrenville, IL 60555-3938

2005 ANNUAL
PROGRESS MONITORING REPORT
PHASE I – OPERABLE UNIT 2

FORMER SINCLAIR REFINERY SITE
WELLSVILLE, NEW YORK

Prepared by:
On-Site Technical Services, Inc.
72 Railroad Avenue
Wellsville, NY 14895

December 2006

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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, 2005. 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, 2005. 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.

2005 System Operations

During 2005, the treatment system operated 93% of the time. A total of approximately 4,904,625 gallons of water were treated. Approximately five cubic yards of sludge was produced from the metals treatment unit and properly disposed off-site. Additionally, eight 55-gallon drums of absorbents, used filter sand and used personnel protective equipment (PPE) were properly disposed off-site. Both the boxes and drums were disposed as Non-Hazardous Waste at an approved off-site facility. A 2005 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), once installed, was completed on a monthly basis. The monthly effluent analytical results are below discharge limits except in April 2005. The April 2005 effluent benzene concentration was detected at 14.5 mg/L, greater than the 10 mg/L discharge limit. The GAC units were installed as a corrective measure in response to this exceedance. Monthly compliance analytical results are presented in Table 2. Third part 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 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 2005 annual OU2 groundwater sampling event was completed between June 7 and 10, 2005. 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
Northern Area	
MW-10	BTEX, CVOC, SVOC, Ar
MW-11	BTEX, Ar
MW-69A	BTEX, CVOC, Ar
MW-78	BTEX, Ar
MW-70 Area	
MW-70	BTEX, SVOC, Ar
OW-1	BTEX, SVOC, Ar
OW-3	BTEX, SVOC, Ar
Central Area	
MW-9	BTEX, Ar
MW-71	BTEX, Ar
OW-4	BTEX, Ar

Well	Required Analysis
Southern Area	
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 submersible and peristaltic pumps. The pump and Teflon® 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. Well locations with analytical results are shown on 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 2005 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 in two of the four Northern Area wells sampled and AWQS in one well. 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. BTEX was not detected in these wells during 2005.

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.

A tabular listing of the June 2005 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 2005 samples were tested for cis-1,2-dichloroethene (cDCE) and vinyl chloride as required by the current monitoring plan. The June 2005 concentrations decreased slightly from the levels observed in 2004, although the results are generally in the range of historic results. In 2005, MW-69A exceeded the AWQS and MCL for vinyl chloride. The June 2005 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). In June 2005, the required SVOC samples were collected from MW-10, MW-70, OW-1 and OW-3 in accordance with the current monitoring plan. Due to a laboratory sample login error, nitrosobenzene was not in the

instrument calibration and therefore not reported. Historically, nitrosobenzene has only been detected in two of these four wells (MW-70 and OW-03) and it has not been detected since 2001. SVOCs were not detected at MW-10 in the June 2005 sampling event. With the exception of aniline and nitrobenzene, no SVOCs were detected at MW-70, OW-1 and OW-3 during June 2005. Both aniline and nitrobenzene exceeded AWQSs at all three locations. The levels observed are consistent with historical data from these wells. June 2005 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 2005. Total arsenic was detected in samples from 11 of the 13 monitoring wells. Arsenic was not detected at MW-09 or MW-71. The arsenic MCL is 0.010 mg/L and the AWQS is 0.025 mg/L. In June 2005, total arsenic concentrations exceeded both MCL and AWQS at MW-10, MW-11, MW-55, MW-69A, MW-70, MW-78, MW-96 and OW-1. Additionally, the arsenic MCL was exceeded at MW-7, OW-3 and OW-4. June 2005 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. Four equipment rinsate blank samples (EB1-605, EB2-605, EB3-605 and EB4-605) were collected by pumping distilled water through the pumps and tubing into laboratory provided sample bottles. Equipment blank EB1-605 was collected on June 8, 2005 from the peristaltic pump and tubing used on that day. Equipment blank samples EB2-605, EB3-605 and EB4-605 were collected from the submersible pump and tubing, one each day utilized. Analytical results for EB1-605 are non-detect. The other three equipment blank samples show low level BTEX compound detections. Additionally, EB3-605 and EB4-605 exhibited nitrobenzene detections. As part of the data validation process, groundwater analytical results associated with the submersible pump with detections less than

the validation action concentration (five times the value detected in the associated equipment blank) were considered non-detect and are flagged “U”. The corrective action for these equipment blank detections included discarding the tubing and disassembly and thorough cleaning of the stainless steel submersible pump. Equipment rinsate blanks results are presented in Table 7.

A field duplicate sample was collected from OW-01 on June 9, 2005. The samples were analyzed for BTEX, SVOCs and arsenic. Analytical results compare favorably between the samples, with the exception of Aniline. Due to this low precision, data validation resulted in aniline results flagged “J” (estimated) for these two samples. A field duplicate sample comparison is shown in Table 8.

Samples were shipped to the laboratory via Federal Express priority overnight delivery service. All samples were received intact and in good condition by the laboratory within one to two days after sampling. 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 7, 2005 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 not detected with the interface probe at the wells. However, a slight sheen was observed on the interface probe when removed from MW-07.

Oil absorbent socks were installed in MW-07 and OW-03 (OW-03 has historically contained LNAPL). The socks were installed 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 three wells (MW-75, MW-85 and MW-86) during 2005. These three wells are the only wells where LNAPL is routinely measured at an apparent thickness more than 0.01 ft thickness. 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 2005, approximately 3.8 ounces (oz) of LNAPL was removed from MW-75; approximately 1.4 oz from MW-85; and approximately 52.6 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 2005 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 2005 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 2005 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 2005, absorbent booms and sweeps were installed on May 10, 2005 and removed for the winter on November 4, 2005. Boom replacement was conducted periodically throughout the year due to washout or visual appearance. Boom replacement occurred on July 13, 2005, August 10, 2005, September 2, 2005 and October 18, 2005. In event of a boom washout, tethers attaching the booms to the river bank prevent loss during high river levels.

Table 1

**2005 Off-Site Disposal Summary
Former Sinclair Refinery Site (OU2)
Wellsville, New York**

Drum / Box No.	Contents	Type	Profile No.	Disposal Date	Manifest No.	Disposal Facility
D-114	River Booms	Non-Hazardous	CS4642	4/14/2005	WMNH003737	CWM Chemical Services, Inc.
D-115	PPE/LNAPL/Socks	Non-Hazardous	CS4644	10/7/2005	WMNH003738	CWM Chemical Services, Inc.
D-116	Sand	Non-Hazardous	CS4644	4/14/2005	WMNH003737	CWM Chemical Services, Inc.
D-117	Sand	Non-Hazardous	CS4644	4/14/2005	WMNH003737	CWM Chemical Services, Inc.
D-118	River Booms	Non-Hazardous	CS4642	10/7/2005	WMNH003738	CWM Chemical Services, Inc.
D-119	River Booms	Non-Hazardous	CS4642	10/7/2005	WMNH003738	CWM Chemical Services, Inc.
D-120	River Booms	Non-Hazardous	CS4642	10/7/2005	WMNH003738	CWM Chemical Services, Inc.
D-121	River Booms	Non-Hazardous	CS4642	10/7/2005	WMNH003738	CWM Chemical Services, Inc.
B-1	Filter Cake	Non-Hazardous	VB5107	4/14/2005	WMNH003737	CWM Chemical Services, Inc.
B-2	Filter Cake / Iron Filters	Non-Hazardous	VB5107	4/14/2005	WMNH003737	CWM Chemical Services, Inc.
B-3	Filter Cake	Non-Hazardous	VB5107	10/7/2005	WMNH003738	CWM Chemical Services, Inc.
B-4	Filter Cake / Iron Filters	Non-Hazardous	VB5107	10/7/2005	WMNH003738	CWM Chemical Services, Inc.
B-5	Filter Cake	Non-Hazardous	VB5107	10/7/2005	WMNH003738	CWM Chemical Services, Inc.

Notes:

- 1) D - 55 gallon drum
- 2) B - 1 cubic yard box

Table 2

2005 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L except where noted)

Parameter	1/18/2005		2/2/2005		3/2/2005		4/5/2005		4/28/2005		Discharge Limits
	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	
Aluminum	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	NA	NA	
Aluminum, dissolved	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	NA	NA	0.1
Arsenic	0.081	0.0066	0.0923	0.005 U	0.0867	0.005 U	0.0873	0.005 U	NA	NA	0.15
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	0.5
Copper	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	NA	NA	0.5
Iron	47.5	0.77	45.5	0.242	41.7	0.288	50.2	0.329	NA	NA	4
Lead	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.0035	0.003 U	0.003 U	NA	NA	0.004
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	0.052
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	0.001 U	
1,1,1-Trichloroethane	0.0032	0.001 U	0.0062	0.0005 J	0.003	0.001 U	0.0046	0.0012	0.008	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	0.001 U	
1,1,2-Trichloroethane	0.0006 J	0.001 U	0.001 U	0.001 U	0.00038 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethane	0.0207	0.0006 J	0.0304	0.0043	0.0144	0.001 U	0.0155	0.0058	0.0269	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	0.00055 J	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	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	0.001 UJ	
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	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	0.001 U	
Benzene	0.0778	0.0018	0.0868	0.0076	0.0614	0.00055 J	0.0691	0.0145	0.0898	0.00087 J	0.01
Bromodichloromethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 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	0.001 U	0.001 U	
Bromomethane (Methyl bromide)	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	0.001 UJ	
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	0.001 UJ	
Chlorobenzene	0.00068 J	0.001 U	0.001 U	0.001 U	0.00057 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloroethane	0.0013	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 UJ	
Chloroform	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	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	0.001 U	
cis-1,2-Dichloroethene	0.0627	0.0023	0.0627	0.0081	0.0616	0.0011	0.0327	0.0098	0.0922	0.0016	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	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	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	0.002 U	
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	0.001 U	
Ethyl benzene	0.0052	0.001 U	0.0112	0.00089 J	0.0053	0.001 U	0.0055	0.00081 J	0.0137	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	0.001 U	

Table 2

2005 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L except where noted)

Parameter	1/18/2005		2/2/2005		3/2/2005		4/5/2005		4/28/2005		Discharge Limits
	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	
Toluene	0.0044	0.00031 J	0.0065	0.00086 J	0.0042	0.001 U	0.0038	0.001	0.0069	0.001 U	0.01
trans-1,2-Dichloroethene	0.001	0.001 U	0.0012	0.001 U	0.00057 J	0.001 U	0.001 U	0.001 U	0.0013	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	0.001 U	
Trichloroethene	0.0021	0.001 U	0.001 U	0.001 U	0.0018	0.001 U	0.0018	0.00031 J	0.0021	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	0.002 U	
Vinyl chloride	0.0753	0.002 U	0.0724	0.0019 J	0.0271	0.002 U	0.0586	0.0064	0.0793	0.002 U	0.05
Xylenes (total)	0.0058	0.001 U	0.0077	0.00085 J	0.0058	0.001 U	0.0051	0.00081 J	0.0064	0.001 U	0.01
Cyanide	NA	R	NA	R	NA	0.01 U	NA	0.01 UJ	NA	NA	
Oil & Grease	NA	5.1 UJ	NA	5.1 U	NA	5.1 U	NA	5.1 U	NA	NA	15
Field pH (Std units)	6.45	7.67	NA	NA	6.47	7.59	6.58	7.42	NA	NA	6.5 - 8.5

Table 2

2005 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L except where noted)

Parameter	5/3/2005		6/2/2005		7/8/2005		8/4/2005		9/6/2005		Discharge Limits
	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	
Aluminum	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Aluminum, dissolved	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1
Arsenic	0.0828	0.005 U	0.0874	0.005 U	0.0828	0.005 U	0.0942	0.005 U	0.112	0.005 U	0.15
Chromium	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.5
Copper	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.5
Iron	44.6	0.275	44.4	0.269	41.7	0.1 U	41.5	0.1 U	45.8	0.203	4
Lead	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.0042	0.003 U	0.003 U	0.003 U	0.004
Nickel	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	
Zinc	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.052
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	0.001 U	
1,1,1-Trichloroethane	0.0079	0.00015 J	0.0118	0.001 U	0.0077	0.001 U	0.0093	0.001 U	0.0067	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	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	0.001 U	
1,1-Dichloroethane	0.0233	0.0013	0.0183	0.00037 J	0.0165	0.001 U	0.018	0.001 U	0.0112	0.001 U	0.03
1,1-Dichloroethene	0.00038 J	0.001 U	0.0012	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	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	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	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	0.001 U	
Benzene	0.0884	0.0025	0.0826	0.0008 J	0.0726	0.001 U	0.0806	0.001 U	0.066	0.001 U	0.01
Bromodichloromethane	0.001 U	0.001 U	0.001 U	0.00028 J	0.001 U	0.001 U	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	0.001 U	0.001 U	
Bromomethane (Methyl bromide)	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	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	0.001 U	
Chlorobenzene	0.001 U	0.001 U	0.00083 J	0.001 U	0.00083 J	0.001 U	0.001	0.001 U	0.00065 J	0.001 U	
Chloroethane	0.001	0.001 U	0.001 U	0.001 U	0.00092 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloroform	0.001 U	0.001 U	0.001 U	0.00067 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	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 UJ	0.001 UJ	
cis-1,2-Dichloroethene	0.0843	0.0041	0.103	0.0021	0.0642	0.001 U	0.0634	0.001 U	0.0252	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	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	0.001 U	
Dichlorodifluoromethane	0.002 U	0.002 U	0.002 UJ	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	
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	0.001 U	
Ethyl benzene	0.0129	0.00033 J	0.0084	0.001 U	0.0028	0.001 U	0.0034	0.001 U	0.0023	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	0.001 U	

Table 2

2005 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L except where noted)

Parameter	5/3/2005		6/2/2005		7/8/2005		8/4/2005		9/6/2005		Discharge Limits
	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	
Toluene	0.0073	0.0007 J	0.0066	0.00025 J	0.0035	0.001 U	0.0046	0.001 U	0.0043	0.001 U	0.01
trans-1,2-Dichloroethene	0.0012	0.001 U	0.0012	0.001 U	0.00091 J	0.001 U	0.0016	0.001 U	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	0.001 U	
Trichloroethene	0.0028	0.001 U	0.0074	0.001 U	0.0023	0.001 U	0.0011	0.001 U	0.001 U	0.001 U	
Trichlorofluoromethane	0.002 U	0.002 U	0.002 UJ	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	
Vinyl chloride	0.0996	0.00052 J	0.101	0.002 U	0.0635	0.002 U	0.102	0.002 U	0.0793	0.002 U	0.05
Xylenes (total)	0.0082	0.001 U	0.0106	0.001 U	0.0037	0.001 U	0.0045	0.001 U	0.0055	0.001 U	0.01
Cyanide	NA	0.01 U	NA	0.01 UJ	NA	0.01 U	NA	0.01 UJ	NA	0.01 U	
Oil & Grease	NA	5.1 U	NA	5.2 U	NA	5.1 U	NA	5.1 U	NA	5.1 U	15
Field pH (Std units)	6.65	8	6.64	7.96	6.5	8.01	NA	NA	6.52	7.49	6.5 - 8.5

Table 2

2005 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L except where noted)

Parameter	10/4/2005			11/3/2005			12/5/2005			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	0.116	NA	0.005 U	0.119	NA	0.005 U	0.108	NA	0.005 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	45.3	NA	0.1 U	50.6	NA	0.1 U	55.1	NA	0.135	4
Lead	0.003 U	NA	0.003	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	0.146	NA	0.02 U	0.052
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	
1,1,1-Trichloroethane	0.0084	0.001 U	0.001 U	0.0031	0.001 U	0.001 U	0.0033	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	0.014	0.00044 J	0.001 U	0.012	0.0006 J	0.00031 J	0.023	0.00092 J	0.00044 J	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	
1,4-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	0.0677	0.001 U	0.001 U	0.0685	0.001 U	0.001 U	0.0932	0.001 U	0.001 U	0.01
Bromodichloromethane	0.001 U	0.00021 J	0.001 U	0.001 U	0.00021 J	0.001 U	0.001 U	0.001 U	0.001 U	
Bromoform	0.001 UJ	0.001 UJ	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Bromomethane (Methyl bromide)	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	0.00074 J	0.001 U	0.001 U	0.00056 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloroethane	0.00066 J	0.001 U	0.001 U	0.00061 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloroform	0.001 U	0.00059 J	0.001 U	0.001 U	0.00073 J	0.00027 J	0.001 U	0.00095 J	0.0004 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	0.0371	0.00083 J	0.001 U	0.0152	0.00081 J	0.001 U	0.0452	0.0012	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	
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	0.0024	0.001 U	0.001 U	0.003	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	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	

Table 2

2005 Groundwater Treatment System Monthly Compliance Monitoring Analytical Results
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L except where noted)

Parameter	10/4/2005			11/3/2005			12/5/2005			Discharge Limits
	Influent	Between GAC	Effluent	Influent	Between GAC	Effluent	Influent	Between GAC	Effluent	
Toluene	0.0047	0.001 U	0.001 U	0.0041	0.001 U	0.001 U	0.0044	0.001 U	0.001 U	0.01
trans-1,2-Dichloroethene	0.00093 J	0.001 U	0.001 U	0.00083 J	0.001 U	0.001 U	0.0012	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	0.00064 J	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	0.0831	0.0007 J	0.00045 J	0.0544	0.00069 J	0.00071 J	0.08	0.002 U	0.002 U	0.05
Xylenes (total)	0.006	0.001 U	0.001 U	0.0049	0.001 U	0.001 U	0.0044	0.001 U	0.001 U	0.01
Cyanide	NA	NA	0.01 U	NA	NA	0.01 UJ	NA	NA	0.01 UJ	
Oil & Grease	NA	NA	5.1 U	NA	NA	5.2 U	NA	NA	5.1 U	15
Field pH (Std units)	6.58	NA	7.42	NA	NA	6.87	NA	NA	7.23	6.5 - 8.5

Notes:

- 1) Influent - Combined 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 listed detection limit

Table 3

**2005 Groundwater BTEX Concentrations
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L)**

Well	Benzene	Toluene	Ethyl benzene	Xylenes (total)	Total BTEX
MCL ¹	0.005	1	0.7	10	NA
AWQS ²	0.001	0.005	0.005	0.005 ³	NA
Northern Area					
MW-10	0.0011	0.001 U	0.001 U	0.001 U	0.0011
MW-11	0.00079 J	0.001 U	0.001 U	0.001 U	0.00079
MW-69A	0.0618	0.00045 J	0.00061 J	0.00031 J	0.06317
MW-78	0.0259	0.0001 U	0.001 U	0.00031 J	0.02621
MW-70 Area					
MW-70	0.0163	0.0394	0.0158	0.0749	0.1464
OW-01	0.0424	0.0023	0.00058 J	0.0017	0.04698
OW-03	0.0085	0.0206	0.0088	0.0559	0.0938
Central Area					
MW-09	0.001 U	0.001 U	0.001 U	0.001 U	ND
MW-71	0.001 U	0.001 U	0.001 U	0.001 U	ND
OW-04	0.001 U	0.001 U	0.001 U	0.001 U	ND
Southern Area					
MW-07	0.0045	0.0028 U	0.001 U	0.0045 U	0.0045
MW-55	0.0255	0.011	0.0562	0.0592	0.1519
MW-96	0.0026 U	0.001 U	0.001 U	0.001 U	ND

Notes:

- 1) Groundwater sampling conducted between June 7 and 10, 2005.
- 2) EPA 8260 Analysis with Benzene, Toluene, Ethylbenzene and Xylenes (total) reported.
- 3) ¹ - Maximum Contaminate Level, National Primary Drinking Water Regulations (40 CFR 141.11-141.16)
- 4) ² - New York State Ambient Water Quality Standards, Class GA Groundwater (NYCRR 700-706, TOG 1.1.1)
- 5) ³ - 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)

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

Table 4

**2005 Groundwater Chlorinated VOC Concentrations
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L)**

Well	cis-1,2-Dichloroethene	Vinyl chloride
MCL ¹	0.07	0.002
AWQS ²	0.005	0.002
Northern Area		
MW-10	0.001 U	0.001 U
MW-69A	0.0028	0.0048

Notes:

1) Groundwater sampling conducted between June 7 and 10, 2005.

2) EPA 8260 Analysis with cis-1,2-Dichloroethene and Vinyl chloride reported.

3) ¹ - Maximum Contaminate Level, National Primary Drinking Water Regulations (40 CFR 141.11-141.16)

4) ² - 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 AWQSS

Table 5

**2005 Groundwater Semi-Volatile Organic Compound Concentrations
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L)**

Well	2-Aminophenol	Aniline	Azobenzene	Azoxybenzene	Nitrobenzene
MCL ¹	NA	NA	NA	NA	NA
AWQS ²	0.001	0.005	0.005	NA	0.0004
Northern Area					
MW-10	0.02 U	0.002 U	0.005 U	0.005 U	0.002 U
MW-70 Area					
MW-70	0.02 U	0.0863	0.005 U	0.005 U	5.79
OW-01	0.02 U	2.230 J	0.005 U	0.005 U	0.002 U
OW-03	0.02 U	0.0496	0.005 U	0.005 U	6.03

Notes:

- 1) Groundwater sampling conducted between June 7 and 10, 2005.
- 2) EPA 8270 Analysis with 2-Aminophenol, Aniline, Azobenzene, Azoxybenzene and Nitrobenzene reported.
- 3) ¹ - Maximum Contaminate Level, National Primary
- 4) ² - New York State Ambient Water Quality
- 5) U - Analyte not detected at detection limit shown
- 6) 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

**2005 Groundwater Arsenic Concentrations
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L)**

Well	Arsenic
MCL ¹	0.010
AWQS ²	0.025
Northern Area	
MW-10	0.0348
MW-11	0.0524
MW-69A	0.0658
MW-78	0.0272
MW-70 Area	
MW-70	0.042
OW-01	0.0715
OW-03	0.0239
Central Area	
MW-09	0.005 U
MW-71	0.005 U
OW-04	0.0124
Southern Area	
MW-07	0.0192
MW-55	0.0676
MW-96	0.0414

Notes:

- 1) Groundwater sampling conducted between June 7 and 10, 2005.
- 2) EPA 6010 Analysis with Total Arsenic reported.
- 3) ¹ - Maximum Contaminant 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) ² - 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, TOGs 1.1.1)

Table 7

**2005 Groundwater Sampling Equipment Rinsate Blank Concentrations
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L)**

Parameter	EB1-605 6/8/2005	EB2-605 6/8/2005	EB 3-605 6/9/2005	EB 4-605 6/10/2005
Benzene	0.001 U	0.001 U	0.00093 J	0.001 U
Ethyl benzene	0.001 U	0.001 U	0.0015	0.00044 J
Toluene	0.001 U	0.00074 J	0.0032	0.0014
cis-1,2-Dichloroethene	0.001 U	0.001 U	NA	NA
Vinyl chloride	0.001 U	0.001 U	NA	NA
Xylenes (total)	0.001 U	0.001 U	0.0062	0.0025
2-Aminophenol	NA	0.02 U	0.02 U	0.02 U
Aniline	NA	0.002 U	0.002 U	0.002 U
Azobenzene	NA	0.005 U	0.005 U	0.005 U
Azoxybenzene	NA	0.005 U	0.005 U	0.005 U
Nitrobenzene	NA	0.002 U	0.0163	0.0092
Arsenic	0.005 U	0.005 U	0.005 U	0.005 U

Notes:

- 1) EB1-605 collected by pumping laboratory grade water through peristaltic pump and tubing; associated with samples collected from MW-9, MW-55 and MW-69A.
- 2) EB2-605 collected by pumping distilled water through submersible pump and tubing; associated with samples collected from MW-10, MW-11 and MW-78.
- 3) EB3-605 collected by pumping distilled water through submersible pump and tubing; associated with samples collected from MW-70, MW-71, MW-96 and OW-1.
- 4) EB4-605 collected by pumping distilled water through submersible pump and tubing; associated with samples collected from MW-7 and OW-3.
- 5) U - Analyte not detected at detection limit shown
- 6) J - Concentration value is approximate
- 7) NA - Not Analyzed

Table 8

**2005 Groundwater Field Duplicate Sample Comparison
Former Sinclair Refinery Site (OU2)
Wellsville, New York
(mg/L)**

Parameter	OW1-605	Dup of OW1-605
-----------	---------	----------------

Volatile Organic Compounds - Method 8260

Benzene	0.0424	0.0415
Ethyl benzene	0.00058 J	0.00056 J
Toluene	0.0023	0.0024
Xylenes (total)	0.0017	0.0018

Semivolatile Organic Compounds - Method 8270

2-Aminophenol	0.02 U	0.02 U
Aniline	2.230 J	0.0149 J
Azobenzene	0.005 U	0.005 U
Azoxybenzene	0.005 U	0.005 U
Nitrobenzene	0.002 U	0.002 U

Metals - Method 6010

Arsenic	0.0715	0.0707
---------	--------	--------

Notes:

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

Table 9

**2005 Groundwater Elevations
Former Sinclair Refinery Site (OU2)
Wellsville, New York**

Well	Depth to Water (ft)	Depth to LNAPL (ft)	Well Measuring Point Elevation (ft amsl¹)	Water Table Elevation (ft amsl¹)
MW-7	12.74	ND	1500.42	1487.68
MW-9	11.78	ND	1499.67	1487.89
MW-10	15.74	ND	1497.71	1481.97
MW-11	14.65	ND	1496.03	1481.38
MW-55	10.28	ND	1500.34	1490.06
MW-69A	16.10	ND	1497.91	1481.81
MW-70	14.14	ND	1495.30	1481.16
MW-71	14.04	ND	1499.19	1485.15
MW-78	16.32	ND	1497.79	1481.47
MW-96	12.76	ND	1500.00	1487.24
OW-1	17.20	ND	1498.28	1481.08
OW-3	15.61	ND	1498.20	1482.59
OW-4	13.79	ND	1499.01	1485.22

Notes:

- 1) ND - LNAPL Not Detected with interface probe
- 2) Water levels measured on 6/7/05 prior to commencing well purging and sampling activities
- 3) ¹ - feet above mean sea level (NGVD 29, U.S. Survey Feet)

Table 10

**2005 LNAPL Measurements and Removal
Former Sinclair Refinery Site (OU2)
Wellsville, New York**

Date	Depth to LNAPL (ft)	Depth to Water (ft)	Apparent LNAPL Thickness (ft)	Comment	Sock LNAPL Saturation (in)	Approximate Amount of LNAPL Removed¹ (oz)
-------------	----------------------------	----------------------------	--------------------------------------	----------------	-----------------------------------	---

MW-75

9/30/2005	7.58	7.60	0.02			
10/6/2005	8.01	8.15	0.14	Installed One 18" Sock		
10/13/2005	7.85	7.86	0.01	Removed Sock	4	3.8
2005 Total LNAPL Removed from MW-75 (oz):						3.8

MW-85

9/15/2005	3.01	3.15	0.14	Installed One 18" Sock		
9/21/2005		3.17	0.00	Removed Sock	1.5	1.4
2005 Total LNAPL Removed from MW-85 (oz):						1.4

MW-86

9/15/2005	7.10	7.50	0.40	Installed One 18" Sock		
9/21/2005	7.57	7.65	0.08	Removed / Installed One 18" Sock	18	16.9
9/30/2005	6.88	7.20	0.32	Removed / Installed One 18" Sock	18	16.9
10/6/2005	7.20	7.24	0.04	Removed / Installed One 18" Sock	16	15.0
10/13/2005	6.87	6.88	0.01	Removed Sock	4	3.8
2005 Total LNAPL Removed from MW-86 (oz):						52.6

Note:

¹ - The approximate amount of LNAPL removed during 2005 was calculated based on length of sock saturation and manufacturer information indicating that a 18" sock absorbs 17 oz NAPL.

Table 11

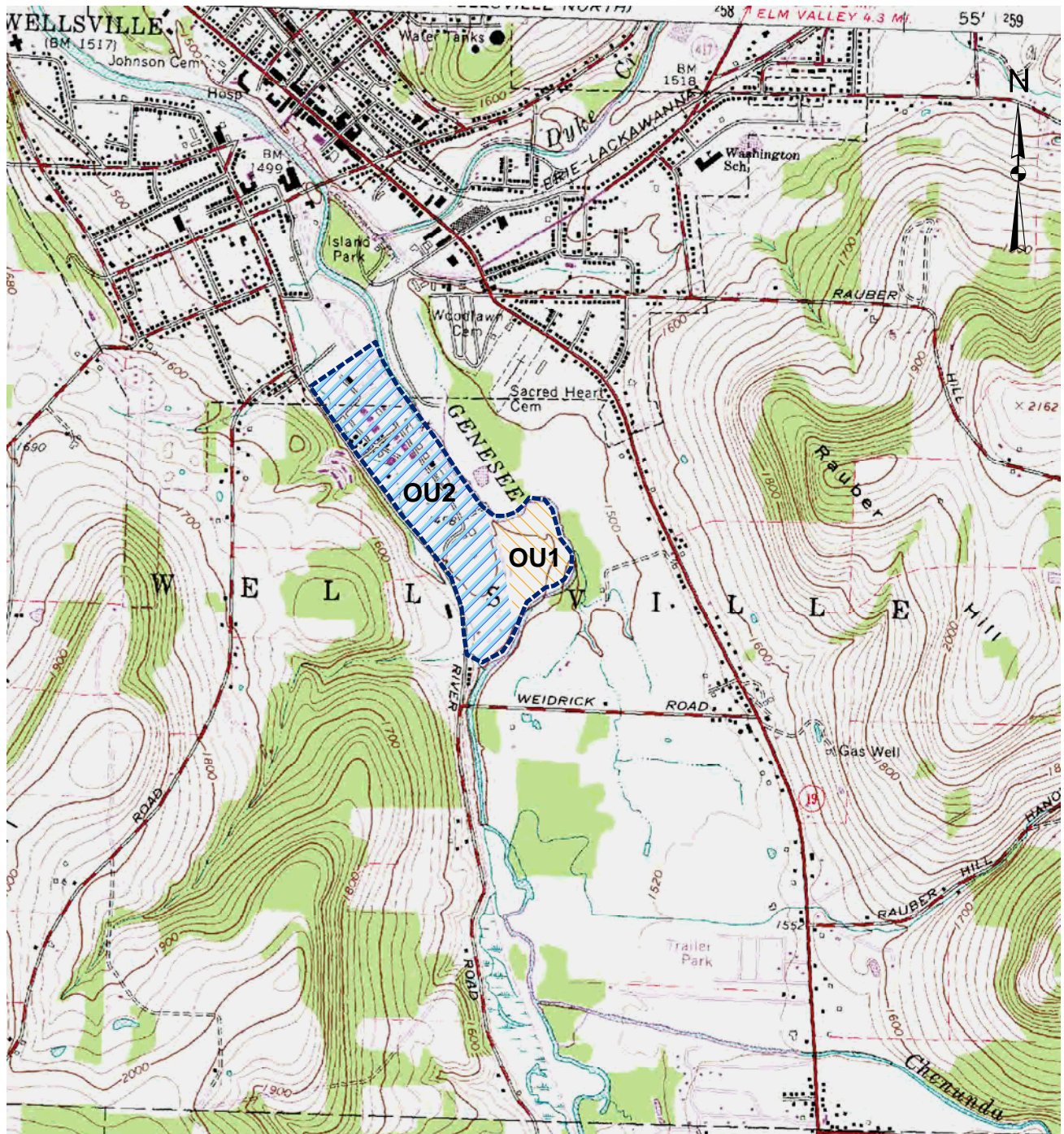
**2005 Groundwater Geochemical Parameters
Former Sinclair Refinery Site (OU2)
Wellsville, New York**

Well	Date	Parameter					
		pH (SU)	Conductivity (micro siemens)	Turbidity (NTU)	DO (mg/L)	Temperature (°C)	ORP (mV)
MW-7	6/10/2005	6.54	454	21.3	1.23	23.11	-100.0
MW-9	6/8/2005	6.56	1895	30.8	0.52	21.64	-172.4
MW-10	6/8/2005	6.41	895	3.89	0.11	21.05	-110.7
MW-11	6/8/2005	6.26	398	1.30	0.14	17.04	-91.9
MW-55	6/8/2005	6.74	424	0.64	0.21	15.34	-127.2
MW-69A	6/7/2005	6.14	807	0.39	0.23	15.78	-66.9
MW-70	6/9/2005	6.50	1171	5.03	0.46	24.16	-134.0
MW-71	6/9/2005	6.37	875	1.22	0.09	16.95	-101.1
MW-78	6/8/2005	6.17	692	0.76	0.09	17.06	-82.1
MW-96	6/9/2005	6.58	573	1.04	0.10	9.36	-125.7
OW-1	6/9/2005	6.79	831	1.65	0.08	17.82	-116.7
OW-3	6/10/2005	6.43	1091	1.92	0.63	19.17	-106.1
OW-4	6/9/2005	6.42	1054	1.24	0.10	14.90	-93.3

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

SITE LOCATION



SOURCE: WELLSVILLE SOUTH, NY USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, DATED 1965.

Legend



Approximate Site Boundary

0 1,000 2,000
Feet
1 inch equals 2,000 feet

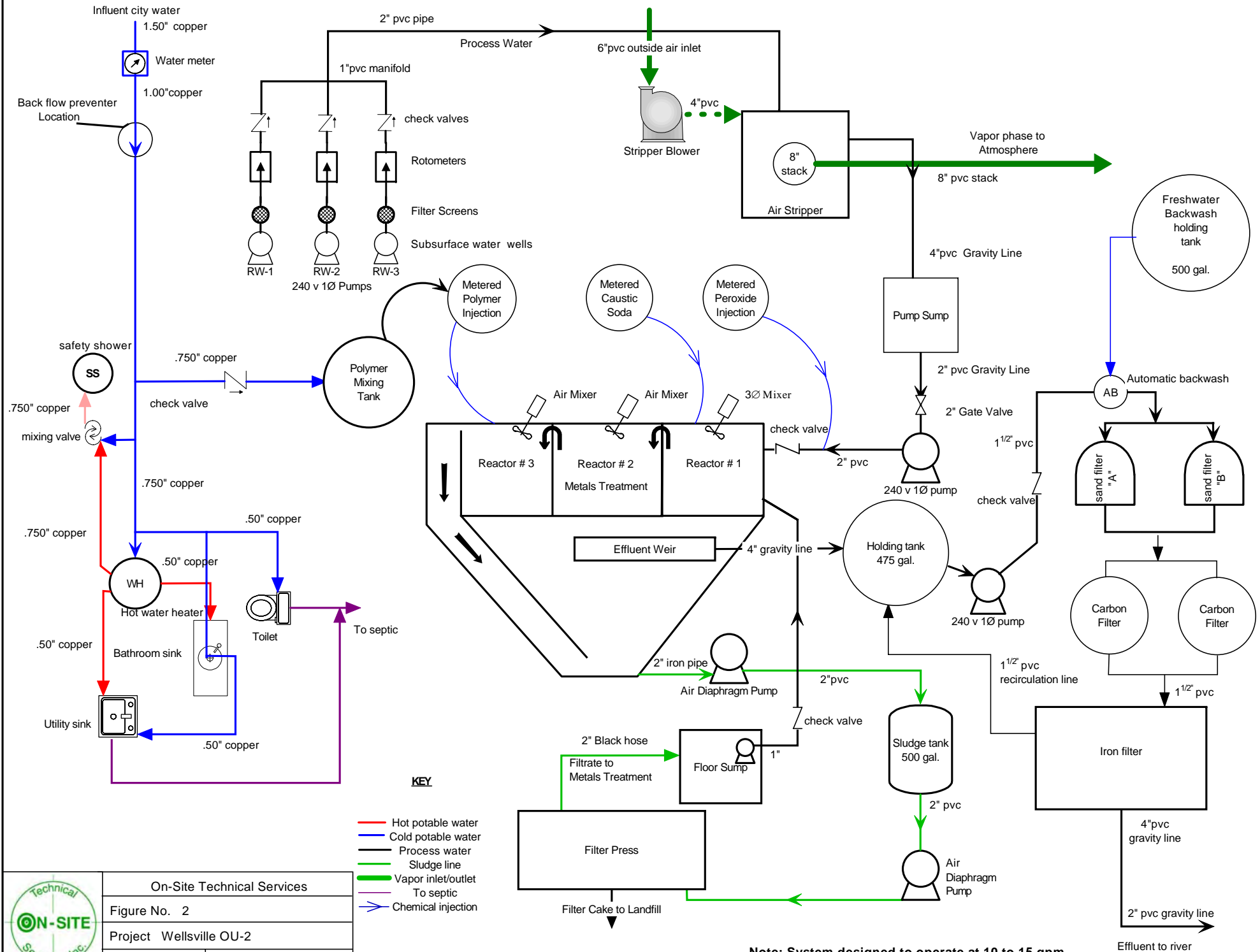


ON-SITE TECHNICAL SERVICES, INC.

72 Railroad Avenue Wellsville, NY 14895

FIGURE NO.	1
PROJECT	WELLSVILLE OU2
DOCUMENT NO.	2005 OU2 REPORT
FILE NO.	FIG1-SITELOC.MXD

GROUNDWATER TREATMENT PROCESS FLOW DIAGRAM

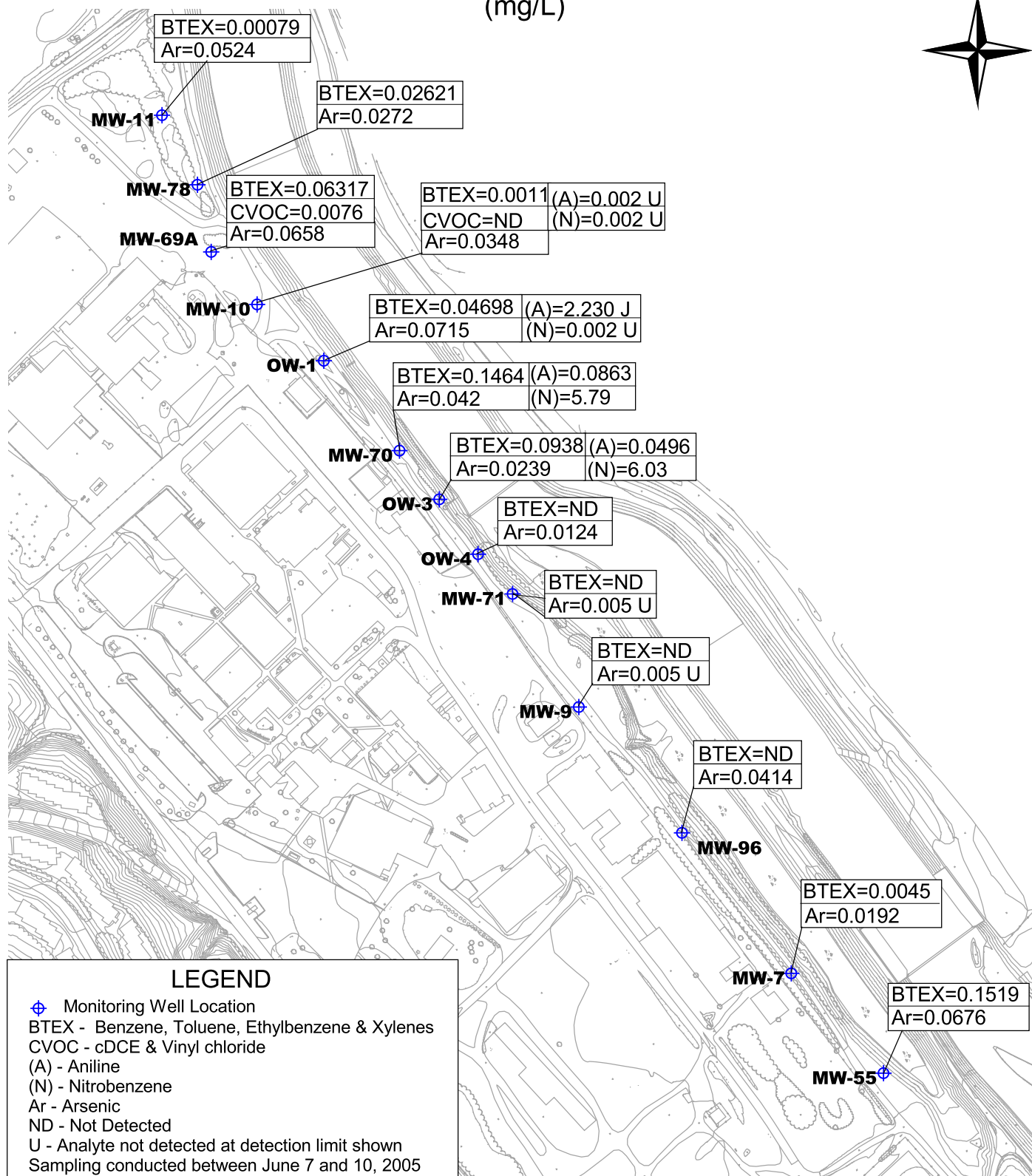


Note: System designed to operate at 10 to 15 gpm



On-Site Technical Services	
Figure No. 2	
Project Wellsville OU-2	
Date: 08/22/05	File: subsur.water.sdr

2005 GROUNDWATER ANALYTICAL RESULTS (mg/L)



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

FIGURE NO.	3
PROJECT	Wellsville OU2
DOCUMENT	2005 OU2 Annual Report
FILE NO.	FIG3.APR

Figure 4
Northern Area
Groundwater Total BTEX Concentrations

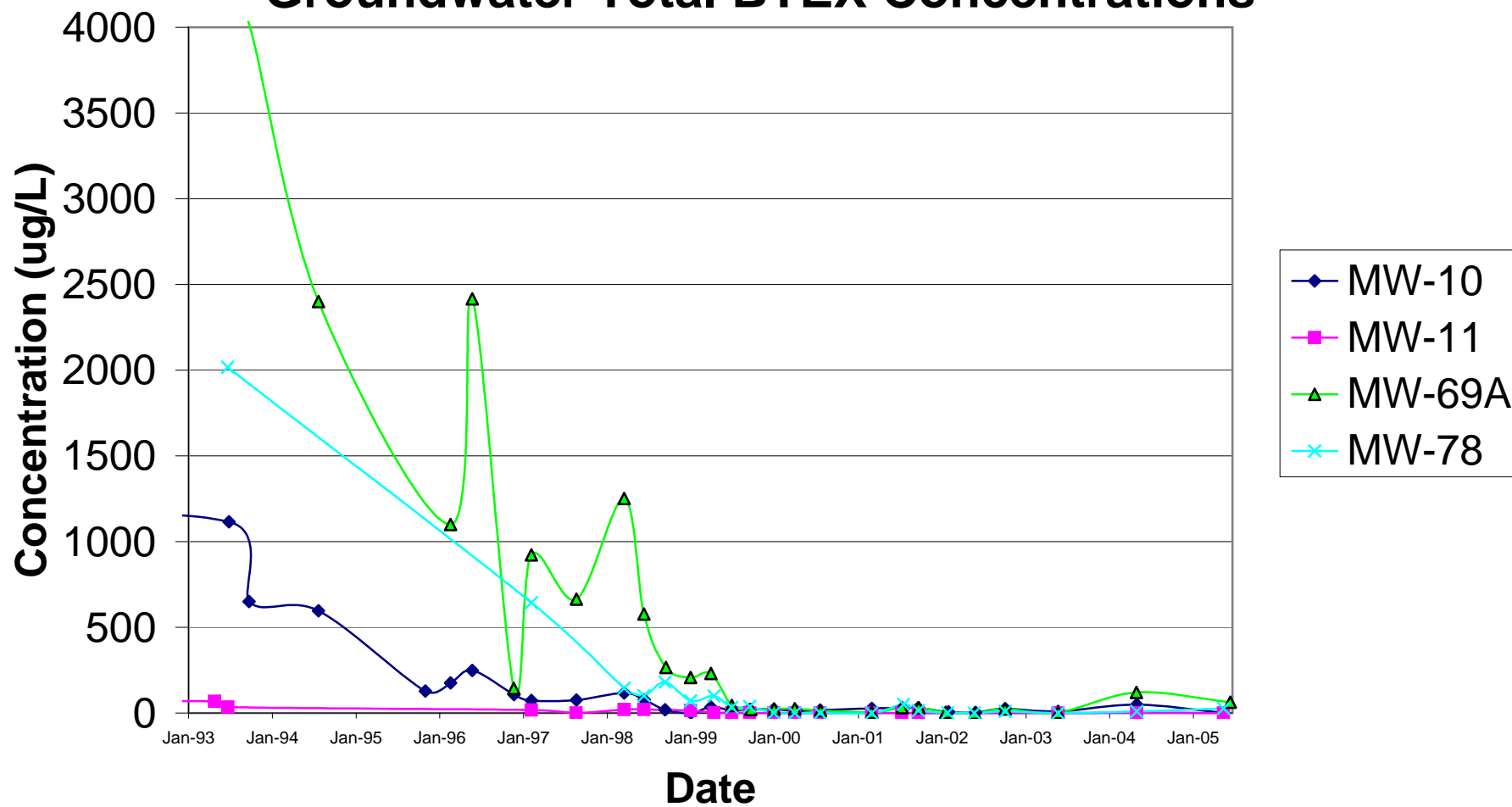


Figure 5
Northern Area Groundwater Elevations

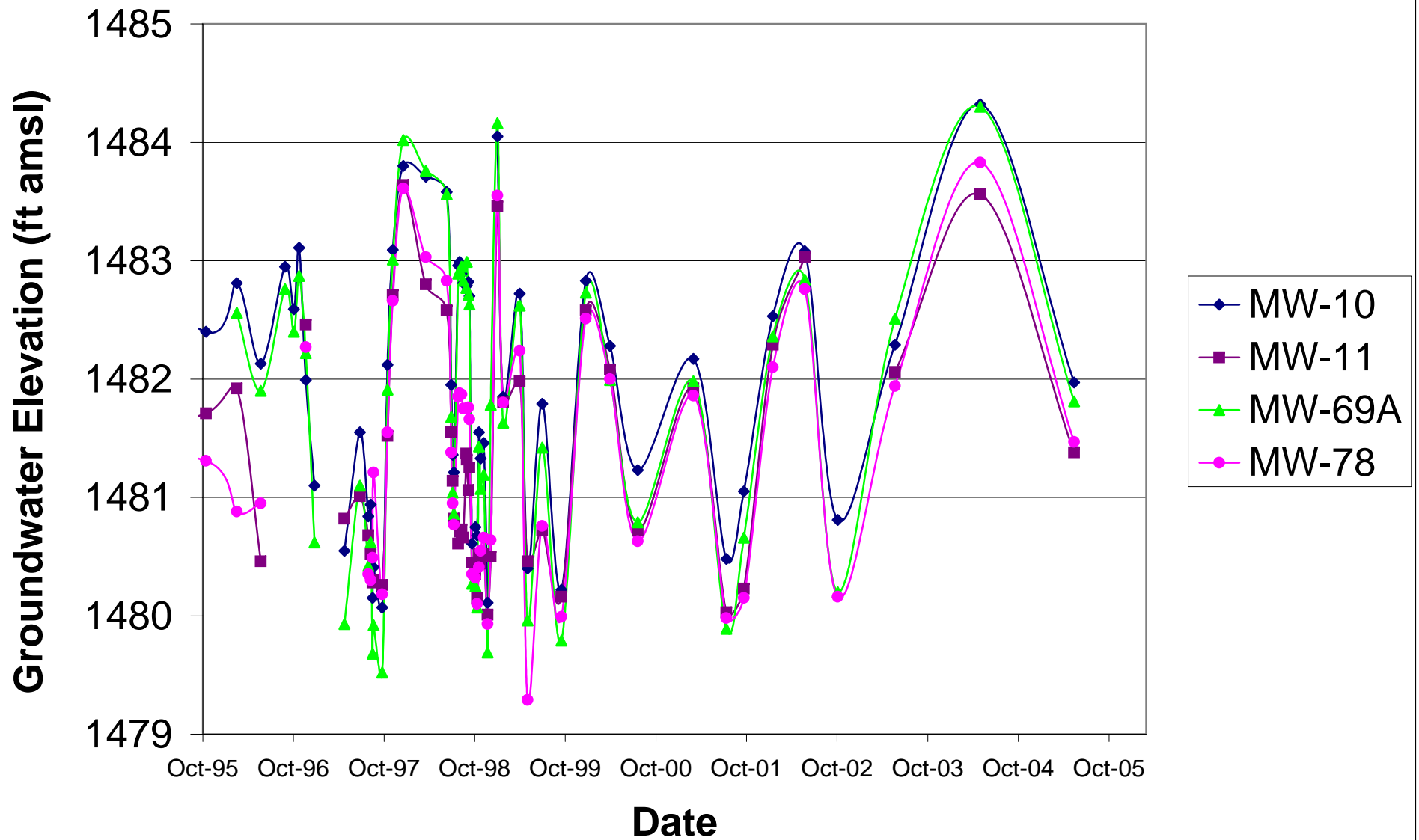


Figure 6
MW-70 Area Groundwater Elevations

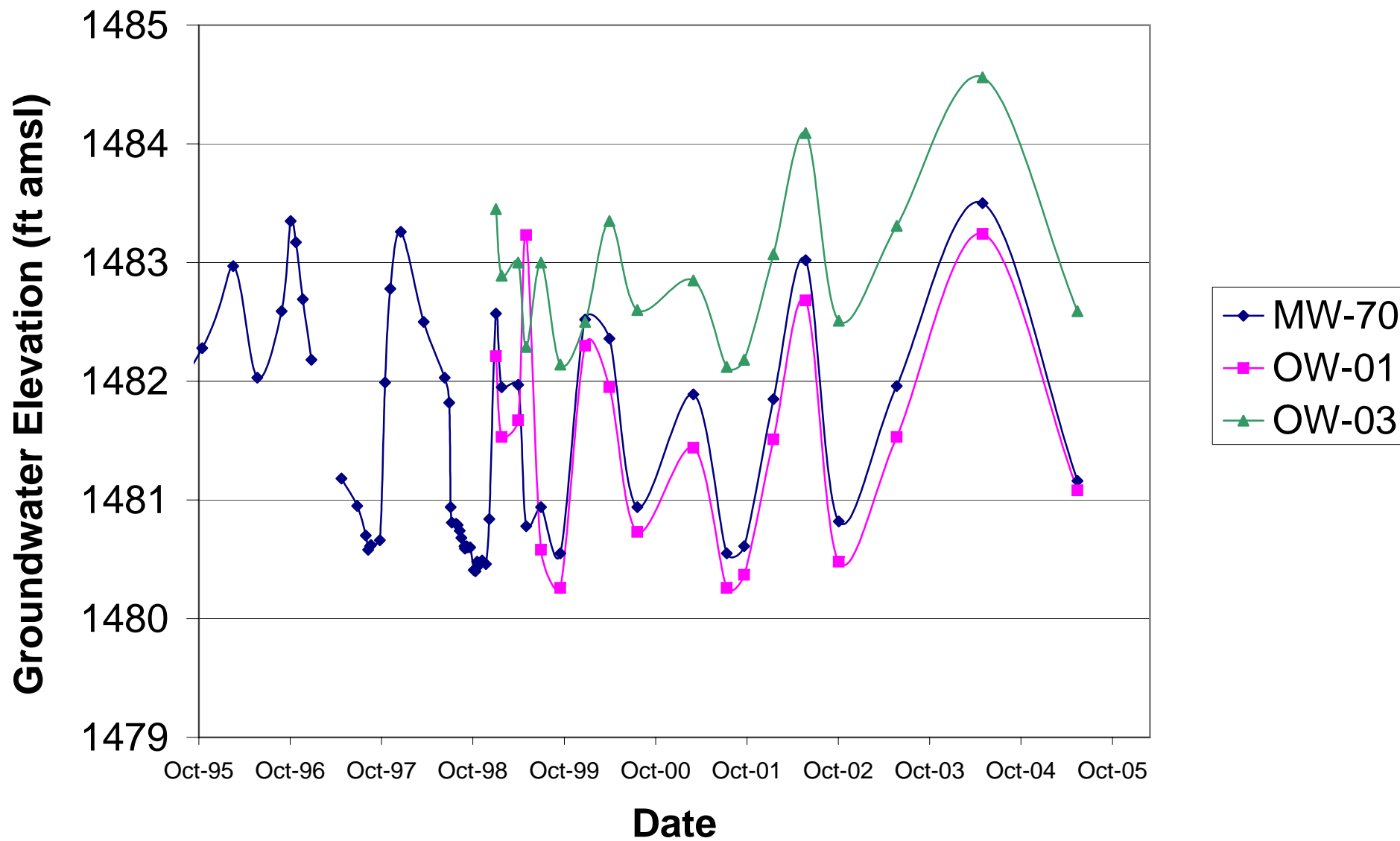


Figure 7
Central Area Groundwater Elevations

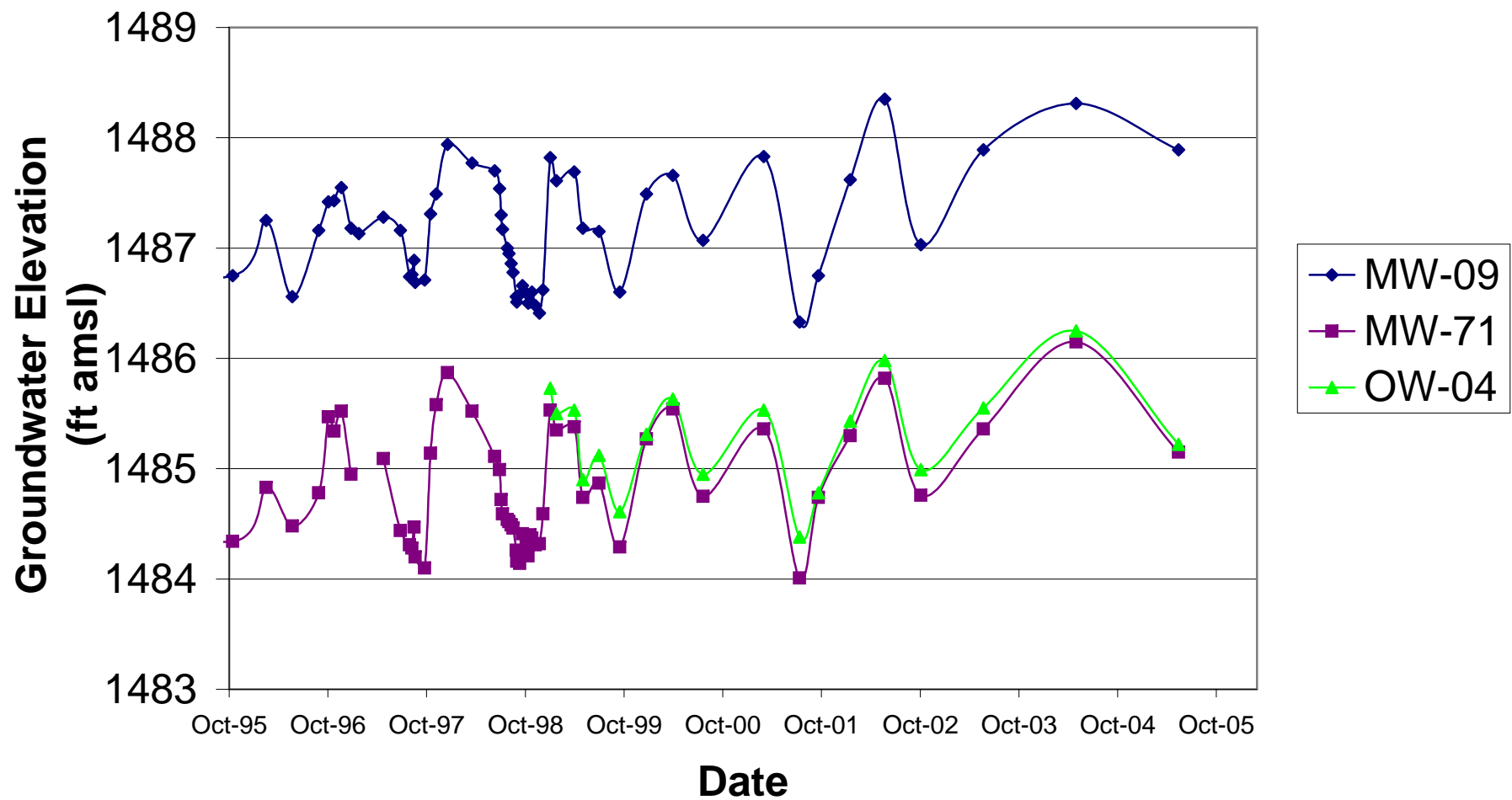
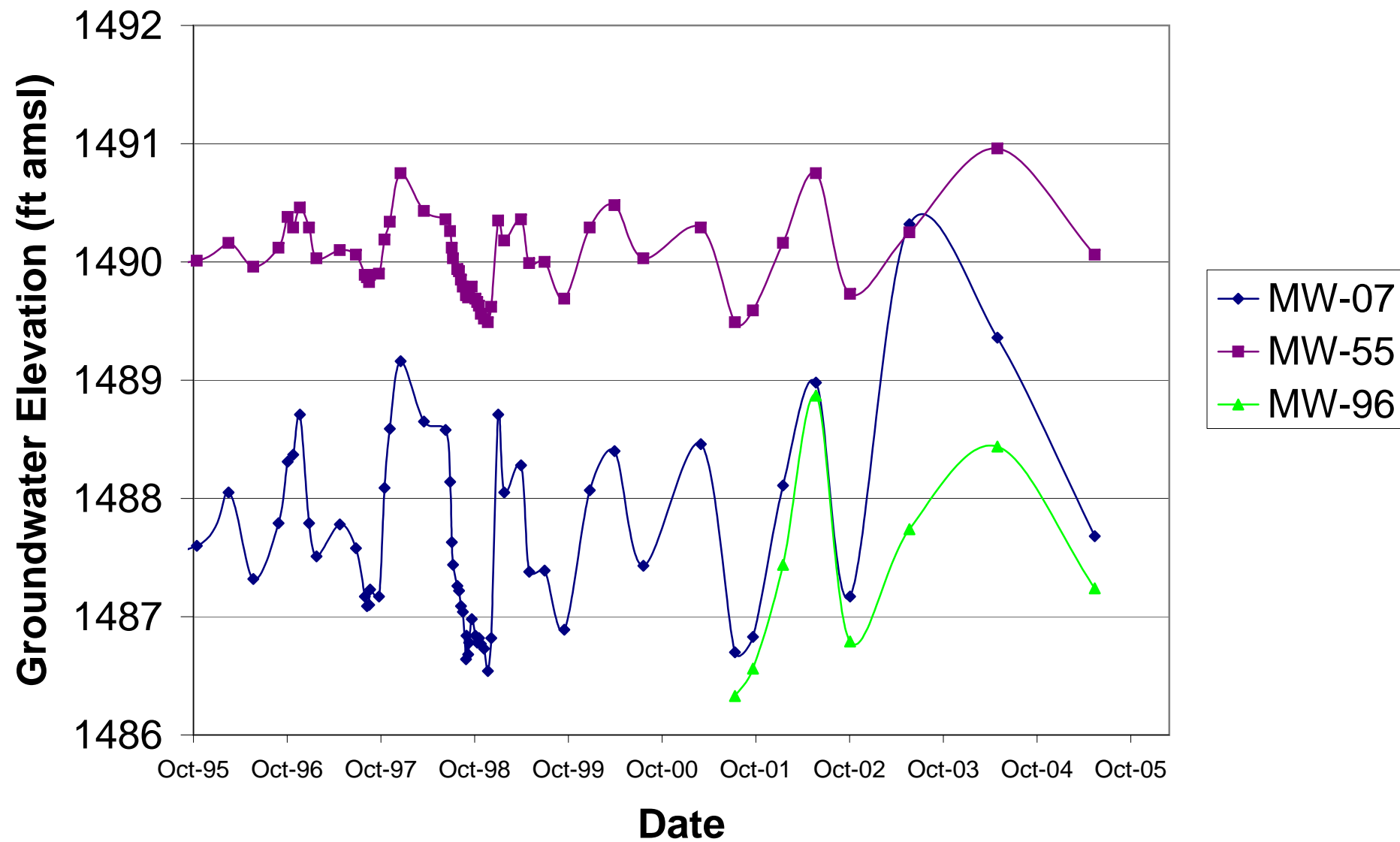


Figure 8
Southern Area Groundwater Elevations



DATA USABILITY SUMMARY REPORT FOR JANUARY 2005 MONTHLY COMPLIANCE MONITORING

FORMER SINCLAIR REFINERY SITE
WELLSVILLE, NEW YORK

Prepared For:

Atlantic Richfield Company

102 Pickering Way – Suite 200
Exton, Pennsylvania 19341

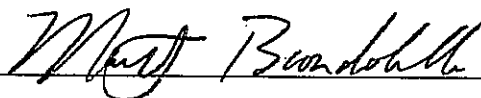
Prepared By:

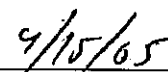
PARSONS

290 Elwood Davis Road, Suite 312
Liverpool, New York 13088
Phone: (315) 451-9560
Fax: (315) 451-9570

REVIEWED AND APPROVED BY:

Project Manager:

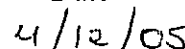




Date

Technical Manager:





Date

APRIL 2005

DATA USABILITY SUMMARY REPORT FOR JANUARY 2005 MONTHLY COMPLIANCE MONITORING

ATLANTIC RICHFIELD COMPANY WELLSVILLE, NEW YORK

Two groundwater samples and one field QC trip blank were collected from the Atlantic Richfield Company site in Wellsville, New York on January 18, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on January 19, 2005. 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 1664. Analytical results from these project samples were validated by performing a Level C data validation and reviewed by Parsons 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 4.2°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # N88774) was received by Parsons within 14 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.

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 (i.e., usable).

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 1664 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 the low matrix spike recoveries for cyanide (20.1%; QC limit 48-135%R) and oil and grease (74.8%R; QC limit 79-114%R) associated with all samples. As a result, the cyanide and oil and grease sample results were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ". However, nondetected cyanide sample results were considered unusable and qualified "R" since MS recoveries fell below 30%. Therefore, the inorganic data and the oil and grease data presented by Accutest were 95% complete with all data considered usable and valid.

Atlantic Richfield Company Wellsville, NY Validated Monthly Groundwater Data January 2005 Sampling		Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	SP-114 N88774-1/1F Accutest N88774 WATER 1/18/2005 4/11/2005	SP-219 N88774-2/2F Accutest N88774 WATER 1/18/2005 4/11/2005	TRIP BLANK N88774-3 Accutest N88774 WATER 1/18/2005 4/11/2005
Casno	Compound	Units			
	VOLEATILES				
75-27-4	Bromodichloromethane	UG/L	1 U	1 U	1 U
75-25-2	Bromoform	UG/L	1 U	1 U	1 U
74-84-9	Bromomethane	UG/L	1 U	1 U	1 U
56-24-5	Carbon tetrachloride	UG/L	1 U	1 U	1 U
108-90-7	Chlorobenzene	UG/L	0.68 J	1 U	1 U
75-00-4	Chloroethane	UG/L	1.3	1 U	1 U
67-66-4	Chloroform	UG/L	1 U	1 U	1 U
74-87-4	Chloromethane	UG/L	1 U	1 U	1 U
124-48-1	Dibromochloromethane	UG/L	1 U	1 U	1 U
95-50-1	1,2-Dichlorobenzene	UG/L	1 U	1 U	1 U
541-73-1	1,3-Dichlorobenzene	UG/L	1 U	1 U	1 U
106-46-7	1,4-Dichlorobenzene	UG/L	1 U	1 U	1 U
75-71-8	Dichlorodifluoromethane	UG/L	2 U	2 U	2 U
75-44-4	1,1-Dichloroethane	UG/L	20.7	0.6 J	1 U
107-06-2	1,2-Dichloroethane	UG/L	1 U	1 U	1 U
75-45-4	1,1-Dichloroethene	UG/L	1 U	1 U	1 U
156-59-2	cis-1,2-Dichloroethene	UG/L	62.7	2.3	1 U
156-60-5	trans-1,2-Dichloroethene	UG/L	1	1 U	1 U
78-87-5	1,2-Dichloropropane	UG/L	1 U	1 U	1 U
10061-01-5	cis-1,3-Dichloropropene	UG/L	1 U	1 U	1 U
10061-02-6	trans-1,3-Dichloropropene	UG/L	1 U	1 U	1 U
75-09-2	Methylene Chloride	UG/L	1 U	1 U	1 U
79-44-5	1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U	1 U
127-18-4	Tetrachloroethene	UG/L	1 U	1 U	1 U
71-55-6	1,1,1-Trichloroethane	UG/L	3.2	1 U	1 U
79-00-5	1,1,2-Trichloroethane	UG/L	0.6 J	1 U	1 U
79-01-6	Trichloroethene	UG/L	2.1	1 U	1 U
75-69-4	Trichlorofluoromethane	UG/L	2 U	2 U	2 U
75-01-4	Vinyl chloride	UG/L	75.3	2 U	2 U
71-44-2	Benzene	UG/L	77.8	1.8	1 U
108-88-4	Toluene	UG/L	4.4	0.31 J	1 U
100-41-4	Ethylbenzene	UG/L	5.2	1 U	1 U
1440-20-7	Xylenes (total)	UG/L	5.8	1 U	1 U
	METALS				
7429-90-5	Aluminum	MG/L	0.1 U	0.1 U	
7440-48-2	Arsenic	MG/L	0.081	0.0066	
7440-47-4	Chromium	MG/L	0.01 U	0.01 U	
7440-50-8	Copper	MG/L	0.025 U	0.025 U	
7449-89-6	Iron	MG/L	47.5	0.77	
7449-92-1	Lead	MG/L	0.003 U	0.003 U	
7440-02-0	Nickel	MG/L	0.04 U	0.04 U	
7440-66-6	Zinc	MG/L	0.02 U	0.02 U	
	FILTERED METALS				
7429-90-5	Aluminum-Filtered	MG/L	0.1 U	0.1 U	
	OTHER				
	Cyanide	MG/L		R	
	Oil and Grease	MG/L		5.1 UJ	
	Ph (Field)	SU	6.45	7.67	

DATA USABILITY SUMMARY REPORT FOR FEBRUARY 2005 MONTHLY COMPLIANCE MONITORING

FORMER SINCLAIR REFINERY SITE
WELLSVILLE, NEW YORK

Prepared For:

Atlantic Richfield Company

102 Pickering Way – Suite 200
Exton, Pennsylvania 19341

Prepared By:

PARSONS

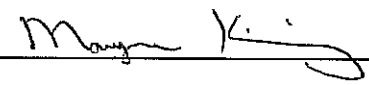
290 Elwood Davis Road, Suite 312
Liverpool, New York 13088
Phone: (315) 451-9560
Fax: (315) 451-9570

REVIEWED AND APPROVED BY:

Project Manager: 

4/15/05

Date

Technical Manager: 

4/12/05

Date

APRIL 2005

DATA USABILITY SUMMARY REPORT FOR FEBRUARY 2005 MONTHLY COMPLIANCE MONITORING

ATLANTIC RICHFIELD COMPANY WELLSVILLE, NEW YORK

Two groundwater samples and one field QC trip blank were collected from the Atlantic Richfield Company site in Wellsville, New York on February 2, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on February 3, 2005. 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 1664. Analytical results from these project samples were validated by performing a Level C data validation and reviewed by Parsons 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 2°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # N89880) was received by Parsons within 15 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.

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 (i.e., usable).

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 1664 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 the 0% matrix spike recovery for cyanide associated with all samples. As a result, the nondetected cyanide sample results were considered unusable and qualified "R". Therefore, the inorganic data and the oil and grease data presented by Accutest were 95% complete with all data considered usable and valid.

Atlantic Richfield Company Wellsville, NY Validated Monthly Groundwater Data February 2005 Sampling		Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	SP-114 N89880-1/1F Accutest N89880 WATER 2/2/2005 4/11/2005	SP-219 N89880-2/2F Accutest N89880 WATER 2/2/2005 4/11/2005	TRIP BLANK N89880-3 Accutest N89880 WATER 2/2/2005 4/11/2005
Casno	Compound	Units			
	VOLATILES				
75-27-4	Bromodichloromethane	UG/L	1 U	1 U	1 U
75-25-2	Bromoform	UG/L	1 U	1 U	1 U
74-84-9	Bromomethane	UG/L	1 U	1 U	1 U
56-24-5	Carbon tetrachloride	UG/L	1 U	1 U	1 U
108-90-7	Chlorobenzene	UG/L	1 U	1 U	1 U
75-00-4	Chloroethane	UG/L	1 U	1 U	1 U
67-66-4	Chloroform	UG/L	1 U	1 U	1 U
74-87-4	Chloromethane	UG/L	1 U	1 U	1 U
124-48-1	Dibromochloromethane	UG/L	1 U	1 U	1 U
95-50-1	1,2-Dichlorobenzene	UG/L	1 U	1 U	1 U
541-73-1	1,3-Dichlorobenzene	UG/L	1 U	1 U	1 U
106-46-7	1,4-Dichlorobenzene	UG/L	1 U	1 U	1 U
75-71-8	Dichlorodifluoromethane	UG/L	2 U	2 U	2 U
75-44-4	1,1-Dichloroethane	UG/L	30.4	4.3	1 U
107-06-2	1,2-Dichloroethane	UG/L	1 U	1 U	1 U
75-45-4	1,1-Dichloroethene	UG/L	1 U	1 U	1 U
156-59-2	cis-1,2-Dichloroethene	UG/L	62.7	8.1	1 U
156-60-5	trans-1,2-Dichloroethene	UG/L	1.2	1 U	1 U
78-87-5	1,2-Dichloropropane	UG/L	1 U	1 U	1 U
10061-01-5	cis-1,3-Dichloropropene	UG/L	1 U	1 U	1 U
10061-02-6	trans-1,3-Dichloropropene	UG/L	1 U	1 U	1 U
75-09-2	Methylene Chloride	UG/L	1 U	1 U	1 U
79-44-5	1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U	1 U
127-18-4	Tetrachloroethene	UG/L	1 U	1 U	1 U
71-55-6	1,1,1-Trichloroethane	UG/L	6.2	0.5 J	1 U
79-00-5	1,1,2-Trichloroethane	UG/L	1 U	1 U	1 U
79-01-6	Trichloroethene	UG/L	1 U	1 U	1 U
75-69-4	Trichlorofluoromethane	UG/L	2 U	2 U	2 U
75-01-4	Vinyl chloride	UG/L	72.4	1.9 J	2 U
71-44-2	Benzene	UG/L	86.8	7.6	1 U
108-88-4	Toluene	UG/L	6.5	0.86 J	1 U
100-41-4	Ethylbenzene	UG/L	11.2	0.89 J	1 U
1440-20-7	Xylenes (total)	UG/L	7.7	0.85 J	1 U
	METALS				
7429-90-5	Aluminum	MG/L	0.1 U	0.1 U	
7440-48-2	Arsenic	MG/L	0.0923	0.005 U	
7440-47-4	Chromium	MG/L	0.01 U	0.01 U	
7440-50-8	Copper	MG/L	0.025 U	0.025 U	
7449-89-6	Iron	MG/L	45.5	0.242	
7449-92-1	Lead	MG/L	0.003 U	0.003 U	
7440-02-0	Nickel	MG/L	0.04 U	0.04 U	
7440-66-6	Zinc	MG/L	0.02 U	0.02 U	
	FILTERED METALS				
7429-90-5	Aluminum-Filtered	MG/L	0.1 U	0.1 U	
	OTHER				
	Cyanide	MG/L		R	
	Oil and Grease	MG/L		5.1 U	

DATA USABILITY SUMMARY REPORT FOR MARCH 2005 MONTHLY COMPLIANCE MONITORING

FORMER SINCLAIR REFINERY SITE
WELLSVILLE, NEW YORK

Prepared For:

Atlantic Richfield Company

102 Pickering Way – Suite 200
Exton, Pennsylvania 19341

Prepared By:

PARSONS

290 Elwood Davis Road, Suite 312
Liverpool, New York 13088
Phone: (315) 451-9560
Fax: (315) 451-9570

REVIEWED AND APPROVED BY:

Project Manager:

Mark Brendahl

4/15/05

Date

Technical Manager:

Maryanne Kosciwicz (Pmn)

4/15/05

Date

APRIL 2005

DATA USABILITY SUMMARY REPORT FOR MARCH 2005 MONTHLY COMPLIANCE MONITORING

ATLANTIC RICHFIELD COMPANY WELLSVILLE, NEW YORK

Two groundwater samples and one field QC trip blank were collected from the Atlantic Richfield Company site in Wellsville, New York on March 2, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on March 3, 2005. 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 1664. Analytical results from these project samples were validated by performing a Level C data validation and reviewed by Parsons 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 package generated by Accutest (Accutest Job # N92126) was received by Parsons within 26 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.

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 (i.e., usable).

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 1664 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.

Atlantic Richfield Company Wellsville, NY Validated Monthly Groundwater Data March 2005 Sampling		Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	SP-114 N92126-1/1F Accutest N92126 WATER 3/2/2005 4/13/2005	SP-219 N92126-2/2F Accutest N92126 WATER 3/2/2005 4/13/2005	TRIP BLANK N92126-3 Accutest N92126 WATER 3/2/2005 4/13/2005
Casno	Compound	Units			
VOLATILES					
75-27-4	Bromodichloromethane	UG/L	1 U	1 U	1 U
75-25-2	Bromoform	UG/L	1 U	1 U	1 U
74-84-9	Bromomethane	UG/L	1 U	1 U	1 U
56-24-5	Carbon tetrachloride	UG/L	1 U	1 U	1 U
108-90-7	Chlorobenzene	UG/L	0.57 J	1 U	1 U
75-00-4	Chloroethane	UG/L	1 U	1 U	1 U
67-66-4	Chloroform	UG/L	1 U	1 U	1 U
74-87-4	Chloromethane	UG/L	1 U	1 U	1 U
124-48-1	Dibromochloromethane	UG/L	1 U	1 U	1 U
95-50-1	1,2-Dichlorobenzene	UG/L	1 U	1 U	1 U
541-73-1	1,3-Dichlorobenzene	UG/L	1 U	1 U	1 U
106-46-7	1,4-Dichlorobenzene	UG/L	1 U	1 U	1 U
75-71-8	Dichlorodifluoromethane	UG/L	2 U	2 U	2 U
75-44-4	1,1-Dichloroethane	UG/L	14.4	1 U	1 U
107-06-2	1,2-Dichloroethane	UG/L	1 U	1 U	1 U
75-45-4	1,1-Dichloroethene	UG/L	1 U	1 U	1 U
156-59-2	cis-1,2-Dichloroethene	UG/L	61.6	1.1	1 U
156-60-5	trans-1,2-Dichloroethene	UG/L	0.57 J	1 U	1 U
78-87-5	1,2-Dichloropropane	UG/L	1 U	1 U	1 U
10061-01-5	cis-1,3-Dichloropropene	UG/L	1 U	1 U	1 U
10061-02-6	trans-1,3-Dichloropropene	UG/L	1 U	1 U	1 U
75-09-2	Methylene Chloride	UG/L	1 U	1 U	1 U
79-44-5	1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U	1 U
127-18-4	Tetrachloroethene	UG/L	1 U	1 U	1 U
71-55-6	1,1,1-Trichloroethane	UG/L	3	1 U	1 U
79-00-5	1,1,2-Trichloroethane	UG/L	0.38 J	1 U	1 U
79-01-6	Trichloroethene	UG/L	1.8	1 U	1 U
75-69-4	Trichlorofluoromethane	UG/L	2 U	2 U	2 U
75-01-4	Vinyl chloride	UG/L	27.1	2 U	2 U
71-44-2	Benzene	UG/L	61.4	0.55 J	1 U
108-88-4	Toluene	UG/L	4.2	1 U	1 U
100-41-4	Ethylbenzene	UG/L	5.3	1 U	1 U
1440-20-7	Xylenes (total)	UG/L	5.8	1 U	1 U
MINERALS					
7429-90-5	Aluminum	MG/L	0.1 U	0.1 U	
7440-48-2	Arsenic	MG/L	0.0867	0.005 U	
7440-47-4	Chromium	MG/L	0.01 U	0.01 U	
7440-50-8	Copper	MG/L	0.025 U	0.025 U	
7449-89-6	Iron	MG/L	41.7	0.288	
7449-92-1	Lead	MG/L	0.0031 U	0.0035	
7440-02-0	Nickel	MG/L	0.04 U	0.04 U	
7440-66-6	Zinc	MG/L	0.02 U	0.02 U	
FILTERED MINERALS					
7429-90-5	Aluminum-Filtered	MG/L	0.1 U	0.1 U	
OTHER					
	Cyanide	MG/L		0.01 U	
	Oil and Grease	MG/L		5.1 U	
	pH (Field)	SU	6.47	7.59	

DATA USABILITY SUMMARY REPORT FOR APRIL 2005 MONTHLY COMPLIANCE MONITORING

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

Two groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on April 5, 2005; and three groundwater samples were collected from this site on April 28, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on April 6, 2005 and April 29, 2005, respectively. 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; oil and grease using the USEPA SW-846 method 1664; total dissolved solids (TDS) using the USEPA method 160.1; and total suspended solids (TSS) using the USEPA method 160.2. 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 3.6-5°C. All samples were received intact and in good condition at Accutest.

The analytical data packages generated by Accutest (Accutest Job # N95223 and #N97476) were received by On-Site within 22 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 laboratory result for sample SP219-0405 during the April 5, 2005 sampling event was considered estimated and qualified "UJ" in the "Valid Code" column as a result from data validation; and the nondetected bromomethane, chloroethane, trichlorofluoromethane, carbon tetrachloride, and 1,2-dichloroethane laboratory results for samples SP219-042805 and PRE-IF0405 during the April 28, 2005 sampling event 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 LCS recoveries and continuing calibrations. All LCS recoveries were within QC acceptance limits with the exception of the high LCS recovery for trichloroethene (130%R; QC limit 80-123%R) associated with samples SP219-0405 and TRIP BLANK (4/5/05); and the high LCS recovery for 1,2-dichloroethane (135%R; QC limit 69-133%R) associated with sample SP114-0405. Therefore, positive results for these noncompliant compounds were considered estimated, possibly biased high, and qualified "J" for the affected samples.

All continuing calibration compounds were considered compliant with relative response factors (RRFs) greater than 0.05 and percent differences (%Ds) within $\pm 25\%$ with the exception of bromomethane (-31.1%D), chloroethane (-29.7%D), trichlorofluoromethane (-31.3%D), carbon tetrachloride (-35.8%D), and 1,2-dichloroethane (-34.6%D) in the continuing calibration associated with samples SP219-042805 and PRE-IF0405. Therefore, results for these noncompliant compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ".

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, oil and grease method 1664, TDS method 160.1, and TSS method 160.2 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 within the 75-125%R QC acceptance limit with the exception of the low cyanide recovery (48.2%R) associated with sample SP219-0405. Therefore, the cyanide result for this sample which was nondetect, was considered estimated, possibly biased low, and qualified "UJ".

All LCS recoveries were within QC acceptance limits with the exception of the high cyanide recovery (115.6%R; QC limit 90-110%R) associated with sample SP219-0405. Validation qualification was not warranted for this sample due to this noncompliance since cyanide was not detected.

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	Resul	Valid Code
pH		150.1	N95223-1	05-Apr-05	23-May-05	SP114	0405	6.58			su			
Ethylbenzene	100-41-4	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	5.5		1	ug/l			
cis-1,3-Dichloropropene	10061-01-5	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
trans-1,3-Dichloropropene	10061-02-6	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
1,4-Dichlorobenzene	105-46-7	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
1,2-Dichloroethane	107-06-2	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Toluene	108-88-3	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	3.8		1	ug/l			
Chlorobenzene	108-90-7	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Dibromochloromethane	124-48-1	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Tetrachloroethene	127-18-4	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Xylenes (total)	1330-20-7	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	5.1		1	ug/l			
cis-1,2-Dichloroethene	156-59-2	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	32.7		1	ug/l			
trans-1,2-Dichloroethene	156-60-5	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
1,3-Dichlorobenzene	541-73-1	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Carbon tetrachloride	56-23-5	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Chloroform	67-66-3	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Benzene	71-43-2	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	69.1		1	ug/l			
1,1,1-Trichloroethane	71-55-6	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	4.6		1	ug/l			
Methyl bromide	74-83-9	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Chloromethane	74-87-3	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Chloroethane	75-00-3	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0.0	U	1	ug/l			
Vinyl chloride	75-01-4	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	58.6		2	ug/l			

Analyte	Casno	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid	Resul	Valid Code
Methylene chloride	75-09-2	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
Bromoform	75-25-2	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
Bromodichloromethane	75-27-4	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
1,1-Dichloroethane	75-34-3	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	15.5	15.5	1	ug/l			
1,1-Dichloroethene	75-35-4	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
Trichlorofluoromethane	75-69-4	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	2	ug/l			
Dichlorodifluoromethane	75-71-8	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	2	ug/l			
1,2-Dichloropropane	78-87-5	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
1,1,2-Trichloroethane	79-00-5	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
Trichloroethene	79-01-6	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	1.8	1.8	1	ug/l			
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
1,2-Dichlorobenzene	95-50-1	EPA 624	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	1	ug/l			
Aluminum, Total	7429-90-5	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	100	ug/l			
Iron, Total	7439-89-6	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	50200	50200	100	ug/l			
Lead, Total	7439-92-1	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	3	ug/l			
Nickel, Total	7440-02-0	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	40	ug/l			
Arsenic, Total	7440-38-2	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	87.3	87.3	5	ug/l			
Chromium, Total	7440-47-3	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	10	ug/l			
Copper, Total	7440-50-8	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	25	ug/l			
Zinc, Total	7440-66-6	200.7	N95223-1	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	20	ug/l			

Analyte	Casno	Method	LabsermId	Date Sampled	Validation Date	Sample	Location	Result	Code	Units	Valid	Result	Valid Code
pH		150.1	N95223-2	05-Apr-05	23-May-05	SP219	0405	7.42		su			
Oil And Grease		1664A	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	5.1 mg/l			
Cyanide	57-12-5	335.3	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	0 mg/l			UU
Ethylbenzene	100-41-4	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.81	J	1 ug/l			
cis-1,3-Dichloropropene	10061-01-5	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
trans-1,3-Dichloropropene	10061-02-6	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
1,4-Dichlorobenzene	106-46-7	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
1,2-Dichloroethane	107-06-2	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Toluene	108-88-3	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	1		1 ug/l			
Chlorobenzene	108-90-7	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Dibromochloromethane	124-48-1	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Tetrachloroethane	127-18-4	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Xylenes (total)	1330-20-7	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.81	J	1 ug/l			
cis-1,2-Dichloroethene	156-59-2	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	9.8		1 ug/l			
trans-1,2-Dichloroethene	156-60-5	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
1,3-Dichlorobenzene	541-73-1	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Carbon tetrachloride	56-23-5	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Chloroform	57-66-3	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Benzene	71-43-2	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	14.5		1 ug/l			
1,1,1-Trichloroethane	71-55-6	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	1.2		1 ug/l			
Methyl bromide	74-83-9	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Chloromethane	74-87-3	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			
Chloroethane	75-00-3	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	U	1 ug/l			

Analyte	Casno	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Code
Vinyl chloride	75-01-4	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	6.4	0 U	2	ug/l		
Methylene chloride	75-09-2	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
Bromoform	75-25-2	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	5.8	0 U	1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
Trichlorofluoromethane	75-59-4	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	2	ug/l		
Dichlorodifluoromethane	75-71-8	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	2	ug/l		
1,2-Dichloropropane	78-87-5	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
Trichloroethene	79-01-6	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.31	0 U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 624	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	1	ug/l		
Aluminum, Total	7429-90-5	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	100	ug/l		
Iron, Total	7439-89-6	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	329	0 U	100	ug/l		
Lead, Total	7439-92-1	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	3	ug/l		
Nickel, Total	7440-02-0	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	40	ug/l		
Arsenic, Total	7440-38-2	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	5	ug/l		
Chromium, Total	7440-47-3	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	10	ug/l		
Copper, Total	7440-50-8	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	25	ug/l		
Zinc, Total	7440-66-6	200.7	N95223-2	05-Apr-05	23-May-05	SP219	0405	0.0	0 U	20	ug/l		

Analyte	Casno	Method	LabSampleID	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Code
Ethylbenzene	100-41-4	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
cis-1,3-Dichloropropene	10061-01-5	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
1,2-Dichloroethane	107-06-2	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Toluene	108-88-3	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Chlorobenzene	108-90-7	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Dibromochloromethane	124-48-1	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Tetrachloroethene	127-18-4	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Xylenes (total)	1330-20-7	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Carbon tetrachloride	56-23-5	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Chloroform	67-66-3	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Benzene	71-43-2	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Methyl bromide	74-83-9	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Chloromethane	74-87-3	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Chloroethane	75-00-3	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		
Vinyl chloride	75-01-4	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	2	ug/l		
Methylene chloride	75-09-2	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP	0.0	U	1	ug/l		

Analyte	Casno	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Valid Code
Bromoform	75-25-2	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	2	ug/l		
Dichlorodifluoromethane	75-71-8	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	2	ug/l		
1,2-Dichloropropane	78-87-5	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
Trichloroethene	79-01-6	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 624	N95223-3	05-Apr-05	23-May-05	UNK	TRIP BLANK	0 U	0 U	1	ug/l		
Aluminum, Dissolved	7429-90-5	200.7	N95223-1F	05-Apr-05	23-May-05	SP114	0405	0 U	0 U	100	ug/l		
Aluminum, Dissolved	7429-90-5	200.7	N95223-2F	05-Apr-05	23-May-05	SP219	0405	0 U	0 U	100	ug/l		

Analyte	Casno	Method	Subsample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Valid Code
Ethylbenzene	100-41-4	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	13.7		1	ug/l		
cis-1,3-Dichloropropene	10061-01-6	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
1,2-Dichloroethane	107-06-2	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Toluene	108-88-3	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	6.9		1	ug/l		
Chlorobenzene	108-90-7	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Dibromochloromethane	124-48-1	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Tetrachloroethene	127-18-4	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Xylenes (total)	1330-20-7	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	6.4		1	ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	92.2		1	ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	1.3		1	ug/l		
1,3-Dichlorobenzene	641-73-1	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Carbon tetrachloride	56-23-5	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Chloroform	67-66-3	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	89.8		1	ug/l		
Benzene	71-43-2	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	8		1	ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Methyl bromide	74-83-9	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Chloromethane	74-87-3	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Chloroethane	75-00-3	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Vinyl chloride	75-01-4	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	79.3		2	ug/l		
Methylene chloride	75-09-2	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Bromoform	75-25-2	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Bromodichloromethane	75-27-4	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	26.9		1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0.55	J	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		2	ug/l		
Dichlorodifluoromethane	75-71-8	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		2	ug/l		
1,2-Dichloropropane	78-87-5	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
Trichloroethene	79-01-6	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	2.1		1	ug/l		
1,1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	ug/l		
1,2-Dichlorobenzene	96-50-1	EPA 624	N97476-1	28-Apr-05	23-May-05	SP114	042805	0:U		1	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	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
cis-1,3-Dichloropropene	10061-01-6	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,4-Dichlorobenzene	108-46-7	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,2-Dichloroethane	107-06-2	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		UU
Toluene	108-88-3	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Chlorobenzene	108-90-7	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Dimethylchloromethane	124-48-1	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Tetrachloroethene	127-18-4	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Xylenes (total)	1330-20-7	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
cis-1,2-Dichloroethane	156-59-2	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	1.8	0:U	1	ug/l		
trans-1,2-Dichloroethane	156-60-5	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Carbon tetrachloride	58-23-5	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		UU
Chloroform	67-68-3	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0.87	0:U	1	ug/l		
Benzene	71-43-2	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,1,1-Trichloroethane	71-55-8	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Methyl bromide	74-83-9	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		UU
Chloromethane	74-87-3	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Chloroethane	75-00-3	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		UU
Vinyl chloride	75-01-4	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	2	ug/l		
Methylene chloride	75-09-2	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Bromoform	75-25-2	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,1-Dichloroethane	75-35-4	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	2	ug/l		UU
Dichlorodifluoromethane	75-71-8	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	2	ug/l		
1,2-Dichloropropane	78-67-5	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
Trichloroethene	79-01-6	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 624	N97476-2	28-Apr-05	23-May-05	SP219	042805	0:U	0:U	1	ug/l		

Analyte	casno	Method	Lab/sampleid	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Valid Code
Solids, Total Dissolved		EPA 180.1	N97476-3	28-Apr-05	23-May-05	PRE	IF0405	426		10	mg/l		
Solids, Total Suspended		EPA 180.2	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	4	mg/l		
Ethylbenzene	100-41-4	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
cis-1,3-Dichloropropene	10081-01-5	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
trans-1,3-Dichloropropene	10061-02-8	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,2-Dichloroethane	107-08-2	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405	0.28	J	1	ug/l		UJ
Toluene	108-88-3	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Chlorobenzene	108-90-7	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Dibromochloromethane	124-48-1	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Tetrachloroethene	127-18-4	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Xylenes (total)	1330-20-7	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
cis-1,2-Dichloroethene	156-69-2	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405	1.7		1	ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Carbon tetrachloride	56-23-5	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		UJ
Chloroform	67-68-3	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Benzene	71-43-2	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405	0.95	J	1	ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Methyl bromide	74-83-9	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		UJ
Chloromethane	74-87-3	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Chloroethane	75-00-3	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	2	ug/l		
Vinyl chloride	75-01-4	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Methylene chloride	75-09-2	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Bromoform	75-26-2	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	2	ug/l		UJ
Dichlorodifluoromethane	75-71-8	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	2	ug/l		
1,2-Dichloropropane	78-87-5	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
Trichloroethene	79-01-6	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 624	N97476-3	28-Apr-05	23-May-05	PRE	IF0405		0:U	1	ug/l		

DATA USABILITY SUMMARY REPORT FOR MAY 2005 MONTHLY COMPLIANCE MONITORING

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

Two groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on May 3, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on May 4, 2005. 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 1664. 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 # N97891) were 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 cyanide

laboratory result for sample SP219-0505 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 with the exception of MS/MSD recoveries (i.e., accuracy). Validation qualification of sample results was not warranted since the MS/MSD samples were not designated project samples.

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 1664 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 within the 75-125%R QC acceptance limit with the exception of the low cyanide recovery (64.7%R) associated with sample SP219-0505. Therefore, the cyanide result for this sample which was nondetect, was considered estimated, possibly biased low, and qualified "UJ".

All LCS recoveries were within QC acceptance limits with the exception of the high cyanide recovery (113.1%R; QC limit 90-110%R) associated with sample SP219-0505. Validation qualification was not warranted for this sample due to this noncompliance since cyanide was not detected.

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	Labampid	Date Sampled	Validation Date	Sample	Location	Result Code	RL	Units	Valid Result	Valid Code
pH		EPA 150.1	N97891-1	03-May-05	06-Jun-05	SP219	0505	8		su		
Oil And Grease		EPA 1664A	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	5.1	mg/l		
Cyanide	57-12-5	EPA 336.3	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	0.01	mg/l		UJ
Aluminum, Total	7429-90-5	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	100	ug/l		
Iron, Total	7439-89-6	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	275	100	ug/l		
Lead, Total	7439-92-1	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	3	ug/l		
Nickel, Total	7440-02-0	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	40	ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	5	ug/l		
Chromium, Total	7440-47-3	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	10	ug/l		
Copper, Total	7440-50-8	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	25	ug/l		
Zinc, Total	7440-66-6	EPA 200.7	N97891-1	03-May-05	06-Jun-05	SP219	0505	0 U	20	ug/l		
pH		EPA 150.1	N97891-2	03-May-05	06-Jun-05	SP114	0505	6.65		su		
Aluminum, Total	7429-90-5	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	0 U	100	ug/l		
Iron, Total	7439-89-6	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	44600	100	ug/l		
Lead, Total	7439-92-1	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	0 U	3	ug/l		
Nickel, Total	7440-02-0	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	0 U	40	ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	82.8	5	ug/l		
Chromium, Total	7440-47-3	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	0 U	10	ug/l		
Copper, Total	7440-50-8	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	0 U	25	ug/l		
Zinc, Total	7440-66-6	EPA 200.7	N97891-2	03-May-05	06-Jun-05	SP114	0505	0 U	20	ug/l		

Analyte	Case No.	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Valid Code
Ethylbenzene	100-41-4	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
cis-1,3-Dichloropropene	5	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
trans-1,3-Dichloropropene	6	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,2-Dichloroethane	107-06-2	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Toluene	108-88-3	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chlorobenzene	108-90-7	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Dibromochloromethane	124-48-1	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Tetrachloroethene	127-18-4	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Xylenes (total)	1330-20-7	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Carbon tetrachloride	56-23-5	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chloroform	67-68-3	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Benzene	71-43-2	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Methyl bromide	74-83-9	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chloromethane	74-87-3	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chloroethane	75-00-3	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Vinyl chloride	75-01-4	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	2	ug/l		
Methylene chloride	75-09-2	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Bromoform	75-25-2	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	2	ug/l		
Dichlorodifluoromethane	75-71-8	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	2	ug/l		
1,2-Dichloropropane	78-87-5	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Trichloroethene	79-01-6	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 824	N97891-3	03-May-05	06-Jun-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		

Analyte	CASRN	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	N97891-1F	03-May-05	06-Jun-05	SP219	0505	0.0	U	100	ug/l		
Aluminum, Dissolved	7429-90-5	EPA 200.7	N97891-2F	03-May-05	06-Jun-05	SP114	0505	0.0	U	100	ug/l		
Ethylbenzene	100-41-4	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.33	J	1	ug/l		
cis-1,3-Dichloropropene	5	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
trans-1,3-Dichloropropene	6	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
1,2-Dichloroethane	107-06-2	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Toluene	108-88-3	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.7	J	1	ug/l		
Chlorobenzene	108-90-7	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Dibromochloromethane	124-48-1	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Tetrachloroethene	127-18-4	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Xylenes (total)	1330-20-7	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	4.1		1	ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Carbon tetrachloride	56-23-5	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Chloroform	67-66-3	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Benzene	71-43-2	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	2.6		1	ug/l		
1,1,1-Trichloroethane	71-55-8	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.16	J	1	ug/l		
Methyl bromide	74-83-9	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Chloromethane	74-87-3	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Chloroethane	75-00-3	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Vinyl chloride	75-01-4	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.52	J	2	ug/l		
Methylene chloride	76-09-2	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Bromoform	75-25-2	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	1.3		1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	2	ug/l		
Dichlorodifluoromethane	75-71-6	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	2	ug/l		
1,2-Dichloropropane	78-87-5	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
Trichloroethene	79-01-6	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 824	N97891-1A	03-May-05	06-Jun-05	SP219	0505	0.0	U	1	ug/l		

Analyte	Casno	Method	Lapsampid	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Valid Code
Ethylbenzene	100-41-4	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	12.9	0:U	1	ug/l		
cis-1,3-Dichloropropene	5	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
trans-1,3-Dichloropropene	9	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
1,2-Dichloroethane	107-06-2	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Toluene	108-88-3	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	7.3	0:U	1	ug/l		
Chlorobenzene	108-90-7	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Dibromochloromethane	124-46-1	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Tetrachloroethene	127-18-4	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Xylenes (total)	1330-20-7	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	8.2	0:U	1	ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	84.3	0:U	1	ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	1.2	0:U	1	ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Carbon tetrachloride	56-23-5	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Chloroform	67-66-3	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	88.4	0:U	1	ug/l		
Benzene	71-43-2	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	7.9	0:U	1	ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Methyl bromide	74-83-9	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Chloromethane	74-87-3	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Chloroethane	75-00-3	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	1	0:U	1	ug/l		
Vinyl chloride	75-01-4	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	99.6	0:U	2	ug/l		
Methylene chloride	75-09-2	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Bromoform	75-25-2	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	23.3	0:U	1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0.38	0:U	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	2	ug/l		
Dichlorodifluoromethane	76-71-8	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
1,2-Dichloropropane	78-87-5	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	2	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
Trichloroethene	79-01-6	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	2.8	0:U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 824	N97891-2A	03-May-05	06-Jun-05	SP114	0505	0:U	0:U	1	ug/l		

DATA USABILITY SUMMARY REPORT FOR JUNE 2005 MONTHLY COMPLIANCE MONITORING

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

Two groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on June 2, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on June 3, 2005. 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 1664. 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°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J552) was received by On-Site within 22 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

laboratory result for sample SP219-605; the nondetected dichlorodifluoromethane and trichlorofluoromethane laboratory results for samples SP219-605 and SP114-605; and the nondetected bromomethane laboratory result for the QC sample 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 MS/MSD precision and accuracy, LCS recoveries, and initial and continuing calibrations.

It was noted that there were many noncompliant MS/MSD relative percent difference (RPD; precision) and percent recovery (%R; accuracy) results. However, validation qualification was not warranted due these noncompliances since the spiked samples were not designated project samples.

It was also noted that there were many high LCS recoveries associated with the QC sample TRIP BLANK. Validation qualification of this sample was not warranted since TRIP BLANK sample results were nondetects.

All initial calibration compounds were compliant with percent relative standard deviations (%RSDs) less than 30% and relative response factors (RRFs) greater than 0.05 for all compounds with the exception of dichlorodifluoromethane (38.49%RSD) and trichlorofluoromethane (32.85%RSD) in the initial calibration associated with samples SP219-605 and SP114-605. Therefore, the results for these compounds which were nondetects for these samples, were considered estimated and qualified "UJ".

All continuing calibration compounds were compliant with percent differences (%Ds) within $\pm 25\%$ and RRFs greater than 0.05 for all compounds with the exception of bromomethane (-45.7%D) in the continuing calibration associated with TRIP BLANK; and dichlorodifluoromethane (-48.6%D) and trichlorofluoromethane (-38.6%D) in the continuing calibration associated with samples SP219-605 and SP114-605. Therefore,

the results for these compounds which were nondetects for these samples, were considered estimated and qualified "UJ".

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 1664 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 within the 75-125%R QC acceptance limit with the exception of the low cyanide recovery (42%R) associated with sample SP219-605. Therefore, the cyanide result for this sample which was nondetect, 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.

Chemical Name	Accession Number	Method	Parameter	Sample Date	Sample ID	Location	Result	Code	Unit	Value	Units	Value
Ethylbenzene	100-41-4	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
cis-1,3-Dichloropropene	10091-01-5	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
trans-1,3-Dichloropropene	10051-02-6	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
1,4-Dichlorobenzene	106-40-7	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
1,2-Dichloroethane	107-06-2	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Toluene	108-38-3	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.26 J	1 ug/l			
Chlorobenzene	108-90-7	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Dibromochloromethane	124-48-1	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Tetrachloroethane	127-18-4	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Xylenes (total)	1330-20-7	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
cis-1,2-Dichloroethene	166-59-2	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	2.1	1 ug/l			
trans-1,2-Dichloroethene	166-50-5	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
1,3-Dichlorobenzene	541-73-1	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Carbon tetrachloride	56-23-5	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Chloroform	67-66-3	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.67 J	1 ug/l			
Benzene	71-43-2	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.8 J	1 ug/l			
1,1,1-Trichloroethane	71-55-6	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Methyl bromide	74-83-9	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Chloromethane	74-87-3	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Chloroethane	75-00-3	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Vinyl chloride	75-01-4	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	2 ug/l			
Methylene chloride	75-09-2	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Bromoform	75-25-2	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Bromodichloromethane	75-27-4	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.28 J	1 ug/l			
1,1-Dichloroethane	75-34-3	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.37 J	1 ug/l			
1,1-Dichloroethene	75-35-4	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Trichlorofluoromethane	75-69-4	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	2 ug/l			
Dichlorodifluoromethane	75-71-8	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	2 ug/l			
1,2-Dichloropropane	78-87-5	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
1,1,2-Trichloroethane	79-00-5	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
Trichloroethene	79-01-9	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			
1,2-Dichlorobenzene	95-60-1	EPA 824	J552-1	02-Jun-05	14-Jul-05	SP219	605	0.0	1 ug/l			

Analyte	Comp	Method	Lab Method	Lab Sample ID	Validation Date	Sample	Location	Result	Units	Result	Units	Result	Units
Ethylbenzene	100-41-4	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	8.4	1 ug/l				
cis-1,3-Dichloropropene	10061-01-5	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
trans-1,3-Dichloropropene	10061-02-8	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
1,4-Dichlorobenzene	106-46-7	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
1,2-Dichloroethane	107-06-2	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Toluene	108-88-3	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	6.6	1 ug/l				
Chlorobenzene	108-90-7	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.83	1 ug/l				
Dibromochloromethane	124-48-1	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Tetrachloroethene	127-18-4	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Xylenes (total)	1330-20-7	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	10.6	1 ug/l				
cis-1,2-Dichloroethane	156-59-2	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	103	1 ug/l				
trans-1,2-Dichloroethane	156-60-5	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	1.2	1 ug/l				
1,3-Dichlorobenzene	541-73-1	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Carbon tetrachloride	56-23-5	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Chloroform	67-66-3	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Benzene	71-43-2	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	82.6	1 ug/l				
1,1,1-Trichloroethane	71-55-6	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	11.8	1 ug/l				
Methyl bromide	74-83-9	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Chloromethane	74-87-3	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Chloroethane	75-00-3	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Vinyl chloride	75-01-4	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	101	2 ug/l				
Methylene chloride	75-09-2	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Bromoform	75-25-2	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Bromodichloromethane	75-27-4	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
1,1-Dichloroethane	75-34-3	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	18.3	1 ug/l				
1,1-Dichloroethene	75-35-4	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	1.2	1 ug/l				
Trichlorofluoromethane	75-69-4	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	2 ug/l				UJ
Dichlorodifluoromethane	75-71-8	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	2 ug/l				UJ
1,2-Dichloropropane	78-87-5	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
1,1,2-Trichloroethane	78-00-6	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
Trichloroethene	78-01-6	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	7.4	1 ug/l				
1,1,2,2-Tetrachloroethane	78-34-6	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				
1,2-Dichlorobenzene	95-50-1	EPA 824	J552-2	02-Jun-05	14-Jul-05	SP114	605	0.0	1 ug/l				

Analyte	Method	Sample ID	Date Sampled	Location	Result	Unit	Valid Result	Valid Code
Ethylbenzene	EPA 824	100-41-4	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
cis-1,3-Dichloropropene	EPA 824	10081-01-5	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
trans-1,3-Dichloropropene	EPA 824	10081-02-0	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,4-Dichlorobenzene	EPA 824	108-49-7	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,2-Dichloroethane	EPA 824	107-06-2	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Toluene	EPA 824	108-88-3	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Chlorobenzene	EPA 824	108-90-7	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Dibromochloromethane	EPA 824	124-48-1	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Tetrachloroethene	EPA 824	127-18-4	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Xylenes (total)	EPA 824	1330-20-7	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
cis-1,2-Dichloroethane	EPA 824	156-59-2	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
trans-1,2-Dichloroethane	EPA 824	156-60-5	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,3-Dichlorobenzene	EPA 824	541-73-1	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Carbon tetrachloride	EPA 824	58-23-5	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Chloroform	EPA 824	67-66-3	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Benzene	EPA 824	71-43-2	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1,1-Trichloroethane	EPA 824	71-55-6	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Methyl bromide	EPA 824	74-83-9	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	UU
Chloromethane	EPA 824	74-87-3	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Chloroethane	EPA 824	75-00-3	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Vinyl chloride	EPA 824	75-01-4	02-Jun-05	UNK	TRIP BLANK	0:U	2 ug/l	
Methylene chloride	EPA 824	75-00-2	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Bromoform	EPA 824	75-25-2	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Bromodichloromethane	EPA 824	75-27-4	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1-Dichloroethane	EPA 824	75-34-3	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1-Dichloroethene	EPA 824	75-35-4	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Trichlorofluoromethane	EPA 824	75-69-4	02-Jun-05	UNK	TRIP BLANK	0:U	2 ug/l	
Dichlorodifluoromethane	EPA 824	75-71-8	02-Jun-05	UNK	TRIP BLANK	0:U	2 ug/l	
1,2-Dichloropropane	EPA 824	78-87-5	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1,2-Trichloroethane	EPA 824	79-00-5	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
Trichloroethene	EPA 824	79-01-6	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1,2,2-Tetrachloroethane	EPA 824	79-34-6	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,2-Dichlorobenzene	EPA 824	95-50-1	02-Jun-05	UNK	TRIP BLANK	0:U	1 ug/l	

Analysis	Cont	Method	Lab Sample	Env Sample	Field Date	Sample	Location	Result	Code	Unit	Pass/Fail	Value Code
Cyanide	57-12-5	EPA 335.3	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	0.01 mg/l		UJ
Lead, Total	7439-82-1	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	3 ug/l		
pH		EPA 150.1	J552-1A	02-Jun-05	14-Jul-05	SP219	605	7.96		su		
Oil And Grease		EPA 1684A	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	5.2 mg/l		
Aluminum, Total	7429-90-6	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	100 ug/l		
Iron, Total	7439-89-8	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	269		100 ug/l		
Nickel, Total	7440-02-0	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	40 ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	5 ug/l		
Chromium, Total	7440-47-3	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	10 ug/l		
Copper, Total	7440-50-8	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	26 ug/l		
Zinc, Total	7440-66-9	EPA 200.7	J552-1A	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	20 ug/l		
Lead, Total	7439-82-1	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	0:U	0:U	3 ug/l		
pH		EPA 150.1	J552-2A	02-Jun-05	14-Jul-05	SP114	605	6.64		su		
Aluminum, Total	7429-90-6	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	0:U	0:U	100 ug/l		
Iron, Total	7439-89-8	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	4400		100 ug/l		
Nickel, Total	7440-02-0	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	0:U	0:U	40 ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	87.4		5 ug/l		
Chromium, Total	7440-47-3	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	0:U	0:U	10 ug/l		
Copper, Total	7440-50-8	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	0:U	0:U	26 ug/l		
Zinc, Total	7440-66-9	EPA 200.7	J552-2A	02-Jun-05	14-Jul-05	SP114	605	0:U	0:U	20 ug/l		
Aluminum, Dissolved	7429-90-6	EPA 200.7	J552-1F	02-Jun-05	14-Jul-05	SP219	605	0:U	0:U	100 ug/l		
Aluminum, Dissolved	7429-90-6	EPA 200.7	J552-2F	02-Jun-05	14-Jul-05	SP114	605	0:U	0:U	100 ug/l		

DATA USABILITY SUMMARY REPORT FOR JULY 2005 MONTHLY COMPLIANCE MONITORING

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

Two groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on July 8, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on July 9, 2005. 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 1664. 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°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J3747) 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. However, the laboratory data did not

require qualification resulting from data validation for these samples. Therefore, there are 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. 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 1664 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	Unit	Method	Sample ID	Sample Date	Sample	Result	Unit	Pass/Fail
Ethylbenzene	100-41-4	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
cis-1,3-Dichloropropene	10061-01-6	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
trans-1,3-Dichloropropene	10061-02-6	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,4-Dichlorobenzene	106-46-7	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,2-Dichloroethane	107-06-2	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Toluene	106-98-3	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Chlorobenzene	106-90-7	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Dibromochloromethane	124-48-1	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Tetrachloroethene	127-18-4	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Xylenes (total)	1330-20-7	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
cis-1,2-Dichloroethene	156-59-2	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
trans-1,2-Dichloroethene	168-90-6	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,3-Dichlorobenzene	541-73-1	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Carbon tetrachloride	58-23-5	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Chloroform	67-66-3	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Benzene	71-43-2	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,1,1-Trichloroethane	71-56-6	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Methyl bromide	74-83-9	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Chloromethane	74-87-3	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Chloroethane	75-00-3	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Vinyl chloride	75-01-4	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	2:ug/l
Methylene chloride	75-08-2	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Bromoform	75-25-2	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Bromodichloromethane	75-27-4	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,1-Dichloroethane	75-34-3	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,1-Dichloroethene	75-35-4	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Trichlorofluoromethane	75-69-4	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	2:ug/l
Dichlorodifluoromethane	75-71-8	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	2:ug/l
1,2-Dichloropropane	78-87-5	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,1,2-Trichloroethane	79-00-6	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
Trichloroethene	79-01-6	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	1:ug/l
1,2-Dichlorobenzene	96-50-1	EPA 824	J3747-1	08-Jul-05	SP219	605	0:U	3:ug/l
Lead, Total	7438-92-1	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	10:ug/l
Chromium, Total	7440-47-3	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	26:ug/l
Copper, Total	7440-50-8	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	20:ug/l
Zinc, Total	7440-56-6	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	8.01
pH		EPA 150.1	J3747-1A	08-Jul-05	SP219	605	0:U	5.1
Oil And Grease		EPA 1684A	J3747-1A	08-Jul-05	SP219	605	0:U	0.01
Cyanide	57-12-5	EPA 335.3	J3747-1A	08-Jul-05	SP219	605	0:U	100:ug/l
Aluminum, Total	7429-90-5	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	100:ug/l
Iron, Total	7439-89-8	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	40:ug/l
Nickel, Total	7440-02-0	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	6:ug/l
Arsenic, Total	7440-38-2	EPA 200.7	J3747-1A	08-Jul-05	SP219	605	0:U	100:ug/l
Aluminum, Dissolved	7429-90-5	EPA 200.7	J3747-1F	08-Jul-05	SP219	605	0:U	100:ug/l

Chemical Name	Method	Sample ID	Sample Date	Sample Type	Result	Unit	Valid Result	Valid Code
Ethylbenzene	100-41-4 EPA 624	J3747-2	08-Jul-05	SP-114	005	2.8	1 ug/l	
cis-1,3-Dichloropropene	10061-01-5 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
trans-1,3-Dichloropropene	10061-02-6 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
1,4-Dichlorobenzene	108-48-7 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
1,2-Dichloroethane	107-06-2 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Toluene	108-88-3 EPA 624	J3747-2	08-Jul-05	SP-114	005	3.5	1 ug/l	
Chlorobenzene	108-90-7 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.83 J	1 ug/l	
Dibromochloromethane	124-48-1 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Tetrachloroethene	127-18-4 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Xylenes (total)	1330-20-7 EPA 624	J3747-2	08-Jul-05	SP-114	005	3.7	1 ug/l	
cis-1,2-Dichloroethene	156-69-2 EPA 624	J3747-2	08-Jul-05	SP-114	005	64.2	1 ug/l	
trans-1,2-Dichloroethene	156-60-6 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.91 J	1 ug/l	
1,3-Dichlorobenzene	541-73-1 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Carbon tetrachloride	56-23-5 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Chloroform	67-66-3 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Benzene	71-43-2 EPA 624	J3747-2	08-Jul-05	SP-114	005	72.6	1 ug/l	
1,1,1-Trichloroethane	71-55-6 EPA 624	J3747-2	08-Jul-05	SP-114	005	7.7	1 ug/l	
Methyl bromide	74-83-9 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Chloromethane	74-87-3 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Chloroethane	75-00-3 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.92 J	1 ug/l	
Vinyl chloride	75-01-4 EPA 624	J3747-2	08-Jul-05	SP-114	005	63.5	2 ug/l	
Methylene chloride	75-08-2 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Bromoform	75-25-2 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Bromodichloromethane	75-27-4 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
1,1-Dichloroethane	75-34-3 EPA 624	J3747-2	08-Jul-05	SP-114	005	16.5	1 ug/l	
1,1-Dichloroethene	75-35-4 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Trichlorofluoromethane	75-69-4 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	2 ug/l	
Dichlorodifluoromethane	75-71-8 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	2 ug/l	
1,2-Dichloropropane	78-87-5 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
1,1,2-Trichloroethane	78-00-5 EPA 624	J3747-2	08-Jul-05	SP-114	005	2.3	1 ug/l	
Trichloroethene	79-01-8 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
1,1,2,2-Tetrachloroethane	79-34-5 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
1,2-Dichlorobenzene	95-50-1 EPA 624	J3747-2	08-Jul-05	SP-114	005	0.0	1 ug/l	
Lead, Total	7439-92-1 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	0.0	3 ug/l	
Arsenic, Total	7440-38-2 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	82.8	6 ug/l	
Chromium, Total	7440-47-3 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	0.0	10 ug/l	
Copper, Total	7440-50-8 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	0.0	25 ug/l	
Zinc, Total	7440-66-6 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	0.0	20 ug/l	
pH		J3747-2A	08-Jul-05	SP-114	005	6.5	su	
Aluminum, Total	7429-90-5 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	0.0	100 ug/l	
Iron, Total	7439-89-8 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	41700	100 ug/l	
Nickel, Total	7440-02-0 EPA 200.7	J3747-2A	08-Jul-05	SP-114	005	0.0	40 ug/l	
Aluminum, Dissolved	7429-90-5 EPA 200.7	J3747-2F	08-Jul-05	SP-114	005	0.0	100 ug/l	

Analyte	Lab No	Method	Lab Sample	Validation Date	Result	Unit	Range	Unit	Range
Ethylbenzene	100-41-4	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
cis-1,3-Dichloropropene	10061-01-6	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
trans-1,3-Dichloropropene	10061-02-6	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,4-Dichlorobenzene	106-46-7	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,2-Dichloroethane	107-06-2	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Toluene	108-88-3	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Chlorobenzene	108-90-7	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Dibromochloromethane	124-48-1	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Tetrachloromethane	127-18-4	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Xylenes (total)	1330-20-7	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
cis-1,2-Dichloroethane	156-59-2	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
trans-1,2-Dichloroethane	156-60-6	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,3-Dichlorobenzene	541-73-1	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Carbon tetrachloride	58-23-5	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Chloroform	67-66-3	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Benzene	71-43-2	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,1,1-Trichloroethane	71-55-6	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Methyl bromide	74-83-9	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Chloroethane	74-87-3	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Vinyl chloride	75-00-3	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Methylene chloride	75-01-4	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Bromoform	75-09-2	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Bromodichloromethane	75-25-2	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,1-Dichloroethane	75-27-4	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,1-Dichloroethene	75-34-3	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Trichlorofluoromethane	75-35-4	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Dichlorodifluoromethane	75-69-4	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,2-Dichloropropane	75-71-8	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,1,2-Trichloroethane	78-87-5	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
Trichloroethane	79-00-5	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,1,2,2-Tetrachloroethane	79-01-6	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
1,2-Dichlorobenzene	79-34-5	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0
	95-60-1	EPA 824	J3747-3	08-Jul-05	0.0	1 ug/l	0.0	1 ug/l	0.0

DATA USABILITY SUMMARY REPORT FOR AUGUST 2005 MONTHLY COMPLIANCE MONITORING

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

Two groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on August 4, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on August 5, 2005. 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 1664. 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 # J6176) 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, 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 SP219-0805 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. 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 1664 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

considered acceptable and within QC acceptance limits with the exception of the low MS recovery for cyanide (39.7%R; QC limit 75-125%R) associated with sample SP219-0805. The nondetected cyanide result for this sample 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	Matrix	Method	Sample ID	Sample Date	Sample	Result	Code	Unit	Value	Result	Unit	Code
Oil And Grease		EPA 1664A	J6176-1	04-Aug-05	SP219	0805	0:U	6.1	mg/l			
Cyanide	57-12-5	EPA 335.3	J6176-1	04-Aug-05	SP219	0805	0:U	0.01	mg/l			UU
Aluminum, Total	7429-90-6	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	100	ug/l			
Iron, Total	7439-89-6	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	100	ug/l			
Lead, Total	7439-92-1	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	3	ug/l			
Nickel, Total	7440-02-0	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	40	ug/l			
Arsenic, Total	7440-38-2	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	6	ug/l			
Chromium, Total	7440-47-3	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	10	ug/l			
Copper, Total	7440-60-8	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	25	ug/l			
Zinc, Total	7440-66-8	EPA 200.7	J6176-1	04-Aug-05	SP219	0805	0:U	20	ug/l			
Ethylbenzene	100-41-4	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
cis-1,3-Dichloropropene	10061-01-5	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
trans-1,3-Dichloropropene	10061-02-6	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,4-Dichlorobenzene	106-46-7	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,2-Dichloroethane	107-06-2	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Toluene	108-88-3	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Chlorobenzene	108-90-7	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Dibromochloromethane	124-48-1	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Tetrachloroethane	127-18-4	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Xylenes (Total)	1330-20-7	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
cis-1,2-Dichloroethene	156-59-2	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
trans-1,2-Dichloroethene	156-60-5	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,3-Dichlorobenzene	541-73-1	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Carbon tetrachloride	56-23-6	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Chloroform	67-66-3	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Benzene	71-43-2	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,1,1-Trichloroethane	71-55-8	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Methyl bromide	74-83-9	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Chloromethane	74-87-3	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Chloroethane	76-00-3	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Vinyl chloride	75-01-4	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	2	ug/l			
Methylene chloride	75-09-2	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Bromoform	75-26-2	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Bromodichloromethane	75-27-4	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,1-Dichloroethane	75-34-3	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,1-Dichloroethene	75-35-4	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Trichlorofluoromethane	75-69-4	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	2	ug/l			
Dichlorodifluoromethane	75-71-8	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	2	ug/l			
1,2-Dichloropropane	78-87-6	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,1,2-Trichloroethane	79-00-6	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
Trichloroethene	79-01-6	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,1,2,2-Tetrachloroethane	79-34-6	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			
1,2-Dichlorobenzene	96-60-1	EPA 624	J6176-1	04-Aug-05	SP219	0805	0:U	1	ug/l			

Analyte	Radio	Method	Calculated	Date Sampled	Validation Date	Sample	Concentration	Resili	Code	Unit	Valid Result	Valid Code
Aluminum, Total	7428-00-6	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	100 ug/l		
Iron, Total	7439-89-8	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	41600	0:U	100 ug/l		
Lead, Total	7439-92-1	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	4.2	0:U	3 ug/l		
Nickel, Total	7440-02-0	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	40 ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	94.2	0:U	5 ug/l		
Chromium, Total	7440-47-3	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	10 ug/l		
Copper, Total	7440-60-8	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	25 ug/l		
Zinc, Total	7440-66-6	EPA 200.7	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	20 ug/l		
Ethylbenzene	100-41-4	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	3.4	0:U	1 ug/l		
cis-1,3-Dichloropropene	10081-01-6	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
trans-1,3-Dichloropropene	10081-02-8	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
1,2-Dichloroethane	107-06-2	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Toluene	108-88-3	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	4.6	0:U	1 ug/l		
Chlorobenzene	108-90-7	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	1	0:U	1 ug/l		
Dibromochloromethane	124-46-1	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Tetrachloroethene	127-18-4	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Xylenes (total)	1330-20-7	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	4.5	0:U	1 ug/l		
cis-1,2-Dichloroethane	156-59-2	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	63.4	0:U	1 ug/l		
trans-1,2-Dichloroethane	156-60-6	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	1.6	0:U	1 ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Carbon tetrachloride	56-23-5	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Chloroform	67-66-3	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Benzene	71-43-2	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	80.6	0:U	1 ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	9.3	0:U	1 ug/l		
Methyl bromide	74-83-9	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Chloromethane	74-87-3	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Chloroethane	75-00-3	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Vinyl chloride	75-01-4	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	102	0:U	2 ug/l		
Methylene chloride	75-09-2	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Bromoform	75-25-2	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Bromodichloromethane	75-27-4	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	18	0:U	1 ug/l		
1,1-Dichloroethene	75-35-4	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Trichlorofluoromethane	75-69-4	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	2 ug/l		
Dichlorodifluoromethane	75-71-8	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	2 ug/l		
1,2-Dichloropropane	78-67-5	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
1,1,2-Trichloroethane	78-00-6	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
Trichloroethene	79-01-6	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	1.1	0:U	1 ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 824	J6176-2	04-Aug-05	12-Sep-05	SP114	0805	0:U	0:U	1 ug/l		

Analyte	Case No	Method	Sample	Date Sampled	Validation Date	Sample	Location	Result Code	Units	Valid Result	Valid Date
Ethylbenzene	100-41-4	EPA 824	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
cis-1,3-Dichloropropene	10061-01-6	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
trans-1,3-Dichloropropene	10061-02-8	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,2-Dichloroethane	107-06-2	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Toluene	108-88-3	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Chlorobenzene	108-90-7	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Dibromochloromethane	124-46-1	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Tetrachloroethene	127-18-4	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Xylenes (total)	1330-20-7	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
cis-1,2-Dichloroethene	158-56-2	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
trans-1,2-Dichloroethene	158-60-5	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Carbon tetrachloride	56-23-5	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Chloroform	67-68-3	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Benzene	71-43-2	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,1,1-Trichloroethane	71-55-8	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Methyl bromide	74-83-9	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Chloromethane	74-87-3	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Chloroethane	76-00-3	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Vinyl chloride	76-01-4	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	2 ug/l		
Methylene chloride	75-09-2	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Bromoform	75-26-2	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Bromodichloromethane	75-27-4	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	2 ug/l		
Dichlorodifluoromethane	75-71-8	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	2 ug/l		
1,2-Dichloropropane	78-87-6	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,1,2-Trichloroethane	78-00-6	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Trichloroethene	78-01-6	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
1,2-Dichlorobenzene	96-60-1	EPA 624	J6176-3	04-Aug-05	12-Sep-05	UNK	TRIP BLANK	0:U	1 ug/l		
Aluminum, Dissolved	7429-90-5	EPA 200.7	J6176-1F	04-Aug-05	12-Sep-05	SP219	Q805	0:U	100 ug/l		
Aluminum, Dissolved	7429-90-5	EPA 200.7	J6176-2F	04-Aug-05	12-Sep-05	SP114	Q805	0:U	100 ug/l		

DATA USABILITY SUMMARY REPORT FOR SEPTEMBER 2005 MONTHLY COMPLIANCE MONITORING

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

Two groundwater samples and one field QC trip blank were collected from the Former Sinclair Refinery Site in Wellsville, New York on September 6, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on September 7, 2005. 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 1664. 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 package generated by Accutest (Accutest Job # J8870) 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 chloromethane

results for samples SP219-0805 and SP114-0805; and the nondetected bromomethane, dichlorodifluoromethane, and trichlorofluoromethane results for sample 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 MS/MSD precision and accuracy, LCS recoveries, and continuing calibrations.

It was noted that there were noncompliant precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements. However, validation qualification of the project samples was not warranted since the MS/MSD samples were not designated spiked project samples.

All LCS recoveries were compliant and within QC acceptance limits with the exception of the high LCS recoveries for bromomethane (154%R; QC limit 66-152%R) and cis-1,2-dichloroethene (120%R; QC limit 74-116%R) associated with sample TRIP BLANK. Validation qualification of this sample was not warranted since these compounds were not detected.

All continuing calibration compounds were compliant with percent differences within $\pm 25\%$ and minimum relative response factors (RRFs) of 0.05 with the exception of chloromethane (-25.5%D) in the continuing calibration associated with samples SP219-0805 and SP114-0805; and bromomethane (-27.7%D), dichlorodifluoromethane (-41%D), and trichlorofluoromethane (-25.1%D) in the continuing calibration associated with TRIP BLANK. Therefore, the results for these noncompliant compounds which were nondetects for the affected 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 1664 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	Can No	Method	Lab Sample ID	Lab Sample Date	Sample ID	Occurrence	Result	Case	Unit	Valid Result	Valid Date
Ethylbenzene	100-41-4	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
cis-1,3-Dichloropropene	10061-01-5	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
trans-1,3-Dichloropropene	10081-02-6	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,2-Dichloroethane	107-06-2	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Toluene	108-88-3	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Chlorobenzene	108-90-7	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Dibromochloromethane	124-48-1	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Tetrachloroethene	127-18-4	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Xylenes (total)	1330-20-7	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,3-Dichlorobenzene	641-73-1	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Carbon tetrachloride	58-23-5	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Chloroform	67-66-3	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Benzene	71-43-2	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Methyl bromide	74-83-9	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Chloromethane	74-87-3	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		UJ
Chloroethane	75-00-3	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Vinyl chloride	75-01-4	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	2 ug/l		
Methylene chloride	75-08-2	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Bromoform	75-25-2	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Bromodichloromethane	75-27-4	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,1-Dichloroethene	75-35-4	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Trichlorofluoromethane	75-69-4	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	2 ug/l		
Dichlorodifluoromethane	75-71-8	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	2 ug/l		
1,2-Dichloropropane	78-87-5	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Trichloroethene	79-01-6	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 824	J8870-1	06-Sep-05	03-Oct-05	SP219	0805	0:U	1 ug/l		
Lead, Total	7439-92-1	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	3 ug/l		
Copper, Total	7440-50-8	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	26 ug/l		
pH		EPA 150.1	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	7.48	su		
Oil And Grease		EPA 1684A	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	6.1 mg/l		
Aluminum, Total	7429-90-6	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	100 ug/l		
Iron, Total	7439-89-6	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	203	100 ug/l		
Nickel, Total	7440-02-0	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	40 ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	5 ug/l		
Chromium, Total	7440-47-3	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	10 ug/l		
Zinc, Total	7440-68-9	EPA 200.7	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	20 ug/l		
Cyanide	57-12-5	EPA 335.3	J8870-1A	06-Sep-05	03-Oct-05	SP219	0805	0:U	0.01 mg/l		
Aluminum, Dissolved	7429-90-6	EPA 200.7	J8870-1F	06-Sep-05	03-Oct-05	SP219	0805	0:U	100 ug/l		

Analyte	Sample	Method	Sample ID	Date Sampled	Valuation Date	Sample	Co-Filter	Result	Units	Unit	Valid Result	Valid Units
Ethylbenzene	100-41-4	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	2.3	1:ug/l			
cis-1,3-Dichloropropene	10081-01-5	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
trans-1,3-Dichloropropene	10081-02-6	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
1,4-Dichlorobenzene	106-46-7	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
1,2-Dichloroethane	107-06-2	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Toluene	108-88-3	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	4.3	1:ug/l			
Chlorobenzene	108-90-7	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0.66J	1:ug/l			
Dibromochloromethane	124-48-1	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Tetrachloroethene	127-18-4	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Xylenes (total)	1330-20-7	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	5.6	1:ug/l			
cis-1,2-Dichloroethene	156-60-2	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	25.2	1:ug/l			
trans-1,2-Dichloroethene	158-60-5	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
1,3-Dichlorobenzene	641-73-1	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Carbon tetrachloride	56-23-6	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Chloroform	67-66-3	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Benzene	71-43-2	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	66	1:ug/l			
1,1,1-Trichloroethane	71-55-6	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	6.7	1:ug/l			
Methyl bromide	74-83-0	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Chloromethane	74-87-3	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Vinyl chloride	75-00-3	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Methylene chloride	75-01-4	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	79.3	2:ug/l			
Bromoform	75-09-2	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Bromodichloromethane	75-25-2	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
1,1-Dichloroethane	75-27-4	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
1,1-Dichloroethane	75-34-3	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	11.2	1:ug/l			
Trichlorofluoromethane	75-35-4	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Dichlorodifluoromethane	75-69-4	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	2:ug/l			
1,2-Dichloropropane	75-71-8	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	2:ug/l			
1,1,2-Trichloroethane	79-07-5	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Trichloroethene	79-00-6	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
1,1,2,2-Tetrachloroethane	79-01-6	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
1,2-Dichlorobenzene	79-34-5	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	1:ug/l			
Lead, Total	95-60-1	EPA 824	J8870-2	06-Sep-05	03-Oct-05	SP114	0805	0:U	3:ug/l			
Copper, Total	7439-92-1	EPA 200.7	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	0:U	25:ug/l			
pH	7440-60-8	EPA 150.1	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	6.52	eu			
Aluminum, Total	7429-90-6	EPA 200.7	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	0:U	100:ug/l			
Iron, Total	7439-89-6	EPA 200.7	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	45800	100:ug/l			
Nickel, Total	7440-02-0	EPA 200.7	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	0:U	40:ug/l			
Arsenic, Total	7440-38-2	EPA 200.7	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	112	5:ug/l			
Chromium, Total	7440-47-3	EPA 200.7	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	0:U	10:ug/l			
Zinc, Total	7440-66-5	EPA 200.7	J8870-2A	06-Sep-05	03-Oct-05	SP114	0805	0:U	20:ug/l			
Aluminum, Dissolved	7429-90-6	EPA 200.7	J8870-2F	06-Sep-05	03-Oct-05	SP114	0805	0:U	100:ug/l			

Analyte	Calno	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	Unit	Stat	Val	Code
Ethylbenzene	100-41-4	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
cis-1,3-Dichloropropene	10061-01-5	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
trans-1,3-Dichloropropene	10061-02-8	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,4-Dichlorobenzene	108-48-7	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,2-Dichloroethane	107-06-2	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Toluene	108-88-3	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Chlorobenzene	108-90-7	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Dibromochloromethane	124-48-1	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Tetrachloroethene	127-18-4	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Xylenes (total)	1330-20-7	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
cis-1,2-Dichloroethane	156-59-2	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
trans-1,2-Dichloroethane	156-60-5	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,3-Dichlorobenzene	641-73-1	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Carbon tetrachloride	56-23-5	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Chloroform	67-66-3	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Benzene	71-43-2	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,1,1-Trichloroethane	71-65-6	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Methyl bromide	74-83-9	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			UJ
Chloromethane	74-87-3	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Chloroethane	75-00-3	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Vinyl chloride	75-01-4	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		2 ug/l			
Methylene chloride	75-08-2	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Bromoform	75-25-2	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Bromodichloromethane	75-27-4	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,1-Dichloroethane	75-34-3	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,1-Dichloroethene	75-35-4	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			UJ
Trichlorofluoromethane	75-69-4	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		2 ug/l			UJ
Dichlorodifluoromethane	75-71-8	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		2 ug/l			
1,2-Dichloropropane	78-87-5	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,1,2-Trichloroethane	79-00-5	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
Trichloroethene	79-01-6	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			
1,2-Dichlorobenzene	95-50-1	EPA 624	J8870-3	06-Sep-05	03-Oct-05	UNK	TRIP BLANK	0:U		1 ug/l			

DATA USABILITY SUMMARY REPORT FOR OCTOBER 2005 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 4, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on October 5, 2005. 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 1664. 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 4.8°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J11676) 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 bromoform

results for all samples were considered estimated and qualified "UP" 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 percent differences within $\pm 25\%$ and minimum relative response factors (RRFs) of 0.05 with the exception of bromoform (-26.5%D) in the continuing calibration associated with all samples. Therefore, the bromoform results which were nondetects, were considered estimated and qualified "UP".

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 1664 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.

Chemical Name	Material	Sample	Sample Date	Sample ID	Sample Volume	Sample Weight	Sample Concentration	Sample Units	Sample Notes
Ethylbenzene	100-41-4	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
cis-1,3-Dichloropropene	10061-01-6	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
trans-1,3-Dichloropropene	10061-02-6	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,4-Dichlorobenzene	106-46-7	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,2-Dichloroethane	107-06-2	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Toluene	108-88-3	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Chlorobenzene	108-90-7	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Dibromochloromethane	124-48-1	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Tetrachloroethene	127-18-4	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Xylenes (total)	1330-20-7	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
cis-1,2-Dichloroethene	156-59-2	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.83 J	1 ug/l
trans-1,2-Dichloroethene	156-60-5	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,3-Dichlorobenzene	541-79-1	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Carbon tetrachloride	58-23-5	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Chloroform	67-66-3	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.58 J	1 ug/l
Benzene	71-43-2	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,1,1-Trichloroethane	71-55-5	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Methyl bromide	74-83-9	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Chloromethane	74-87-3	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Chloroethane	75-00-3	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Vinyl chloride	75-01-4	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.7 J	2 ug/l
Methylene chloride	75-00-2	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Bromoform	75-25-2	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Bromodichloromethane	75-27-4	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.21 J	1 ug/l
1,1-Dichloroethane	75-34-3	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.44 J	1 ug/l
1,1-Dichloroethene	75-35-4	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Trichlorofluoromethane	75-68-4	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	2 ug/l
Dichlorodifluoromethane	75-71-8	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,2-Dichloropropane	78-87-6	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,1,2-Trichloroethane	79-00-6	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
Trichloroethene	79-01-6	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,1,2,2-Tetrachloroethane	79-34-6	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l
1,2-Dichlorobenzene	95-50-1	EPA 624	J11676-3	04-Oct-05	07-Nov-05	SP217	1005	0.0	1 ug/l

Analyte	Sample	Method	Sample ID	Sample Date	Sample Date	Sample	Location	Result	Units	Notes
Ethylbenzene	100-41-4	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
cis-1,3-Dichloropropene	10061-01-5	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
trans-1,3-Dichloropropene	10061-02-8	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,4-Dichlorobenzene	106-46-7	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,2-Dichloroethane	107-06-2	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Toluene	108-88-3	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Chlorobenzene	108-80-7	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Dibromochloromethane	124-48-1	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Tetrachloroethene	127-18-4	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Xylenes (total)	1330-20-7	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
cis-1,2-Dichloroethene	156-59-2	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
trans-1,2-Dichloroethene	156-60-5	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,3-Dichlorobenzene	541-73-1	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Carbon tetrachloride	56-23-5	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Chloroform	87-86-3	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Benzene	71-43-2	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1,1-Trichloroethane	71-55-6	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Methyl bromide	74-83-9	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Chloromethane	74-87-3	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Chloroethane	75-00-3	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Vinyl chloride	75-01-4	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	2 ug/l	
Methylene chloride	75-09-2	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Bromoform	75-25-2	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Bromodichloromethane	75-27-4	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1-Dichloroethane	75-34-3	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1-Dichloroethene	75-36-4	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Trichlorofluoromethane	75-49-4	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	2 ug/l	
Dichlorodifluoromethane	75-71-8	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	2 ug/l	
1,2-Dichloropropane	78-87-5	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1,2-Trichloroethane	79-00-5	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
Trichloroethene	79-01-8	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	
1,2-Dichlorobenzene	95-50-1	EPA 824	J11678-4	04-Oct-05	07-Nov-05	UNK	TRIP BLANK	0:U	1 ug/l	

Sample	Analysis	Method	Substrate	Date Sampled	Validation Date	Sample	Result	Code	Unit	Valid Result	Valid Date
Ethylbenzene	100-41-4	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	2.4	0	1 ug/l		
cis-1,3-Dichloropropene	10061-01-5	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
1,2-Dichloroethane	107-08-2	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Toluene	108-88-3	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	4.7	0	1 ug/l		
Chlorobenzene	108-90-7	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	0.74	J	1 ug/l		
Dibromochloromethane	124-48-1	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Tetrachloroethene	127-18-4	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Xylenes (total)	1330-20-7	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	6	0	1 ug/l		
cis-1,2-Dichloroethene	166-59-2	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	37.1	0	1 ug/l		
trans-1,2-Dichloroethene	156-50-5	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	0.93	J	1 ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Carbon tetrachloride	58-23-5	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Chloroform	67-66-3	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	87.7	0	1 ug/l		
Benzene	71-43-2	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	8.4	0	1 ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Methyl bromide	74-83-9	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Chloromethane	74-87-3	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Chloroethane	75-00-3	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Vinyl chloride	75-01-4	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	0.86	J	1 ug/l		
Methylene chloride	75-09-2	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	83.1	0	2 ug/l		
Bromoform	75-25-2	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Bromodichloromethane	75-27-4	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
1,1-Dichloroethene	75-35-4	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	14	0	1 ug/l		
Trichlorofluoromethane	75-69-4	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Dichlorodifluoromethane	75-71-8	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	2 ug/l		
1,2-Dichloropropane	78-87-5	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Trichloroethene	79-01-6	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114	0.64	J	1 ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 824	J11876-2	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
pH		EPA 150.1	J11876-2A	04-Oct-05	07-Nov-05	SP114		0	1 ug/l		
Aluminum, Total	7429-90-5	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114	8.58	0	1 ug/l		
Iron, Total	7439-89-6	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114	46300	0	100 ug/l		
Lead, Total	7439-92-1	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114		0	3 ug/l		
Nickel, Total	7440-02-0	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114		0	40 ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114	116	0	5 ug/l		
Chromium, Total	7440-47-3	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114		0	10 ug/l		
Copper, Total	7440-50-8	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114		0	25 ug/l		
Zinc, Total	7440-66-6	EPA 200.7	J11876-2A	04-Oct-05	07-Nov-05	SP114		0	20 ug/l		
Aluminum, Dissolved	7429-90-5	EPA 200.7	J11876-2F	04-Oct-05	07-Nov-05	SP114		0	100 ug/l		

Analyte	Source	Method	Lab Sample ID	Date Sampled	Valuation Date	Sample	Location	Result Code	Units	Valid Result	Unit Code
pH		EPA 150.1	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	7.42	BU		
Oil And Grease		EPA 1664A	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	5.1 mg/l		
Aluminum, Total	7429-90-5	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	100 ug/l		
Iron, Total	7439-89-6	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	100 ug/l		
Lead, Total	7439-92-1	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	3	3 ug/l		
Nickel, Total	7440-02-0	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	40 ug/l		
Arsenic, Total	7440-38-2	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	5 ug/l		
Chromium, Total	7440-47-3	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	10 ug/l		
Copper, Total	7440-50-8	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	25 ug/l		
Zinc, Total	7440-66-6	EPA 200.7	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	20 ug/l		
Cyanide	57-12-5	EPA 335.3	J11676-1A	04-Oct-05	07-Nov-05	SP219	1005	0:U	0 mg/l		
Ethylbenzene	100-41-4	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
cis-1,3-Dichloropropene	10061-01-6	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,2-Dichlorobenzene	107-06-2	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Toluene	108-88-3	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Chlorobenzene	108-90-7	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Dibromochloromethane	124-48-1	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Tetrachloroethene	127-18-4	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Xylenes (total)	1330-20-7	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
cis-1,2-Dichloroethene	156-58-2	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Carbon tetrachloride	56-23-5	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Chloroform	67-66-3	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Benzene	71-43-2	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Methyl bromide	74-83-9	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Chloromethane	74-87-3	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Chloroethane	78-00-3	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Vinyl chloride	75-01-4	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0.45	2 ug/l		
Methylene chloride	75-09-2	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Bromoform	75-26-2	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Bromodichloromethane	75-27-4	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,1-Dichloroethene	75-35-4	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Trichlorofluoromethane	75-69-4	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	2 ug/l		
Dichlorodifluoromethane	75-71-8	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	2 ug/l		
1,2-Dichloropropane	78-87-5	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Trichloromethane	79-01-6	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
1,2-Dichlorobenzene	96-50-1	EPA 824	J11676-1	04-Oct-05	07-Nov-05	SP219	1005	0:U	1 ug/l		
Aluminum, Dissolved	7429-90-5	EPA 200.7	J11676-1F	04-Oct-05	07-Nov-05	SP219	1005	0:U	100 ug/l		

DATA USABILITY SUMMARY REPORT FOR NOVEMBER 2005 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 3, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on November 4, 2005. 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 # J14668) was received by On-Site within 22 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 SP-219 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 with the exception of MS/MSD precision and accuracy.

It was noted that the percent recoveries for ethylbenzene during the MS/MSD spiked analyses were noncompliant. However, since the MS/MSD samples were not designated project samples, validation qualification was not warranted and the project sample data were not affected.

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 cyanide (70.8%R; QC limit 75-125%R). As a result, the nondetected cyanide result for sample SP-219 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.

It was noted that sample SP-219 contained aluminum at a concentration of 708 µg/L. Since this result was considered an outlier compared with historical data, the laboratory reanalyzed this sample. As a result, aluminum was not detected and this reanalyzed sample result was reported in the validated laboratory data since the original aluminum result was considered to be contamination from the laboratory.

Analyte	Sample	Method	Lab Sample	Date Sampled	Validation Date	Sample	Location	Result	Units	Valid Result	Valid Code
Ethylbenzene	100-41-4	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	3	1 ug/l		
cis-1,3-Dichloropropene	10061-01-5	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
1,4-Dichlorobenzene	100-40-7	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
1,2-Dichloroethane	107-06-2	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Toluene	108-88-3	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	4.1	1 ug/l		
Chlorobenzene	108-90-7	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0.56 J	1 ug/l		
Dibromochloromethane	124-48-1	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Tetrachloroethene	127-18-4	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Xylenes (total)	1330-20-7	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	4.9	1 ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	15.2	1 ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0.83 J	1 ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Carbon tetrachloride	56-23-5	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Chloroform	67-66-3	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Benzene	71-43-2	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	68.5	1 ug/l		
1,1,1-Trichloroethane	71-55-5	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	3.1	1 ug/l		
Methyl bromide	74-83-9	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Chloromethane	74-87-3	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0.61 J	1 ug/l		
Chloroethane	75-00-3	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	54.4	2 ug/l		
Vinyl chloride	75-01-4	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Methylene chloride	75-09-2	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Bromoform	75-25-2	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Bromodichloromethane	75-27-4	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	12	1 ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	2 ug/l		
Dichlorodifluoromethane	75-71-8	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	2 ug/l		
1,2-Dichloropropane	78-87-5	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
Trichloroethene	79-01-6	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 624	J14668-1	03-Nov-05	27-Nov-05	SP	114	0 U	1 ug/l		

Analyte	Case No	Method	Sub Sample	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Valid Code
Ethylbenzene	100-41-4	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
cis-1,3-Dichloropropene	10061-01-5	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
1,2-Dichloroethane	107-06-2	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Toluene	108-88-3	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Chlorobenzene	108-90-7	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Dibromochloromethane	124-48-1	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Tetrachloroethene	127-18-4	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Xylenes (total)	1330-20-7	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.81	J	1ug/l	1ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Carbon tetrachloride	58-23-5	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Chloroform	67-66-3	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.73	J	1ug/l	1ug/l		
Benzene	71-43-2	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Methyl bromide	74-83-9	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Chloromethane	74-87-3	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Chloroethane	75-00-3	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Vinyl chloride	75-01-4	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.69	J	2ug/l	2ug/l		
Methylene chloride	75-09-2	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Bromoform	75-25-2	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Bromodichloromethane	75-27-4	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.21	J	1ug/l	1ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.6	J	1ug/l	1ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	2ug/l	2ug/l		
Dichlorodifluoromethane	75-71-8	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	2ug/l	2ug/l		
1,2-Dichloropropane	78-87-5	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
Trichloroethene	79-01-6	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 624	J14668-2	03-Nov-05	27-Nov-05	SP	217	0.0	U	1ug/l	1ug/l		

Analyte	casno	Method	Subsample	Date Sampled	Validation Date	Sample	Location	Result	Code	Units	Valid	Result	Valid Code
Ethylbenzene	100-41-4	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
cis-1,3-Dichloropropene	10061-01-5	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
trans-1,3-Dichloropropene	10061-02-6	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,4-Dichlorobenzene	106-46-7	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,2-Dichloroethane	107-06-2	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Toluene	108-88-3	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Chlorobenzene	108-90-7	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Dibromochloromethane	124-48-1	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Tetrachloroethene	127-18-4	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Xylenes (total)	1330-20-7	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
cis-1,2-Dichloroethene	156-59-2	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
trans-1,2-Dichloroethene	156-60-5	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,3-Dichlorobenzene	541-73-1	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Carbon tetrachloride	56-23-5	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Chloroform	67-66-3	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Benzene	71-43-2	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,1,1-Trichloroethane	71-55-6	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Methyl bromide	74-83-9	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Chloromethane	74-87-3	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Chloroethane	75-00-3	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Vinyl chloride	75-01-4	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Methylene chloride	75-08-2	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Bromoform	75-26-2	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Bromodichloromethane	75-27-4	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,1-Dichloroethane	75-34-3	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,1-Dichloroethene	75-35-4	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Trichlorofluoromethane	75-69-4	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Dichlorodifluoromethane	75-71-8	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,2-Dichloropropane	78-87-5	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,1,2-Trichloroethane	79-00-5	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
Trichloroethene	79-01-6	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			
1,2-Dichlorobenzene	95-50-1	EPA 824	J14668-3	03-Nov-05	27-Nov-05	SP	219	0.0	0.0	1 ug/l			

Analysis	Gascode	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	RU	Units	Valid Result	Valid Code
Ethylbenzene	100-41-4	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
cis-1,3-Dichloropropene	10051-01-5	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
trans-1,3-Dichloropropene	10051-02-6	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,2-Dichloroethane	107-06-2	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Toluene	108-88-3	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chlorobenzene	108-90-7	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Dibromochloromethane	124-48-1	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Tetrachloroethene	127-18-4	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Xylenes (total)	1330-20-7	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
trans-1,2-Dichloroethene	156-60-6	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Carbon tetrachloride	56-23-5	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chloroform	67-66-3	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Benzene	71-43-2	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Methyl bromide	74-83-9	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chloromethane	74-87-3	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Chloroethane	75-00-3	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Vinyl chloride	75-01-4	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	2	ug/l		
Methylene chloride	75-09-2	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Bromoform	75-25-2	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Bromodichloromethane	75-27-4	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1-Dichloroethane	75-34-3	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1-Dichloroethene	75-35-4	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Trichlorofluoromethane	75-69-4	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	2	ug/l		
Dichlorodifluoromethane	75-71-8	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	2	ug/l		
1,2-Dichloropropane	78-87-5	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1,2-Trichloroethane	79-00-5	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
Trichloroethene	79-01-6	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,1,2,2-Tetrachloroethane	79-34-5	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 624	J14668-4	03-Nov-05	27-Nov-05	UNK	TRIP BLANK	0:U	0:U	1	ug/l		

Analyte	Passio	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Code	RL	Units	Valid Result	Valid Cause
Lead, Total	7430-02-1	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	0.0	U	3 ug/l			
Arsenic, Total	7440-38-2	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	119		5 ug/l			
Zinc, Total	7440-66-6	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	0.0	U	20 ug/l			
Aluminum, Total	7429-90-5	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	0.0	U	100 ug/l			
Iron, Total	7439-89-6	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	50600		100 ug/l			
Nickel, Total	7440-02-0	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	0.0	U	40 ug/l			
Chromium, Total	7440-47-3	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	0.0	U	10 ug/l			
Copper, Total	7440-50-8	EPA 200.7	J14668-1A	03-Nov-05	27-Nov-05	SP	114	0.0	U	25 ug/l			
Lead, Total	7439-02-1	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	3 ug/l			
Arsenic, Total	7440-38-2	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	5 ug/l			
Zinc, Total	7440-66-6	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	20 ug/l			
Aluminum, Total	7429-90-5	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	100 ug/l			
Iron, Total	7439-89-6	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	100 ug/l			
pH		EPA 150.1	J14668-3A	03-Nov-05	27-Nov-05	SP	219	6.87		su			
Oil And Grease		EPA 1664A	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	5.2 mg/l			
Cyanide	57-12-5	EPA 335.3	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	0.01 mg/l			UJ
Nickel, Total	7440-02-0	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	40 ug/l			
Chromium, Total	7440-47-3	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	10 ug/l			
Copper, Total	7440-50-8	EPA 200.7	J14668-3A	03-Nov-05	27-Nov-05	SP	219	0.0	U	25 ug/l			
Aluminum, Dissolved	7429-90-5	EPA 200.7	J14668-1F	03-Nov-05	27-Nov-05	SP	114	0.0	U	100 ug/l			
Aluminum, Dissolved	7429-90-5	EPA 200.7	J14668-3F	03-Nov-05	27-Nov-05	SP	219	0.0	U	100 ug/l			

DATA USABILITY SUMMARY REPORT FOR DECEMBER 2005 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 5, 2005. These samples were received by Accutest Laboratories (Accutest) within one day of collection on December 6, 2005. 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 3.5°C. All samples were received intact and in good condition at Accutest.

The analytical data package generated by Accutest (Accutest Job # J17227) 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 SP219-1205 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 cyanide (73.2%R; QC limit 75-125%R). As a result, the nondetected cyanide result for sample SP219-1205 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.

Analysis	Compound	Method	Lab Sample ID	Lab Sample Date	Valid For	Sample	Location	Result	Code	Units	Valid	Result	Valid	Code
Ethylbenzene	100-41-4	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
cis-1,3-Dichloropropene	10061-01-5	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
trans-1,3-Dichloropropene	10081-02-8	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,4-Dichlorobenzene	106-46-7	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,2-Dichloroethane	107-06-2	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Toluene	108-88-3	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Chlorobenzene	108-90-7	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Dibromochloromethane	124-48-1	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Tetrachloroethene	127-18-4	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Xylenes (total)	1330-20-7	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
cis-1,2-Dichloroethene	156-59-2	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	1.2		1 ug/l				
trans-1,2-Dichloroethene	156-60-5	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,3-Dichlorobenzene	541-73-1	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Carbon tetrachloride	56-23-5	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Chloroform	67-68-3	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0.95	J	1 ug/l				
Benzene	71-43-2	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,1,1-Trichloroethane	71-55-6	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Methyl bromide	74-83-9	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Chloromethane	74-87-3	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Chloroethane	75-00-3	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Vinyl chloride	75-01-4	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		2 ug/l				
Methylene chloride	75-09-2	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Bromoform	75-25-2	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Bromodichloromethane	75-27-4	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,1-Dichloroethane	75-34-3	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0.92	J	1 ug/l				
1,1-Dichloroethene	75-36-4	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Trichlorofluoromethane	75-69-4	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		2 ug/l				
Dichlorodifluoromethane	75-71-8	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		2 ug/l				
1,2-Dichloropropane	78-87-6	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,1,2-Trichloroethane	79-00-6	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
Trichloroethane	79-01-6	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,1,2,2-Tetrachloroethane	79-34-5	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				
1,2-Dichlorobenzene	95-60-1	EPA 824	J17227-2	05-Dec-05	31-Jan-06	SP217	1205	0:U		1 ug/l				

Analysis	Sample	Method	Lab Sample ID	Date Sampled	Analysis Date	Sample	Concentration	Result Code	Unit	Valid	Valid Date
Aluminum, Dissolved	7429-80-6	EPA 200.7	J17227-3F	06-Dec-05	31-Jan-06	SP216	1205	0:U	100:ug/l		
Ethylbenzene	100-41-4	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
cis-1,3-Dichloropropene	10061-01-6	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
trans-1,3-Dichloropropene	10061-02-6	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,4-Dichlorobenzene	106-46-7	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,2-Dichloroethane	107-06-2	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Toluene	108-88-3	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Chlorobenzene	108-90-7	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Dibromochloromethane	124-48-1	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Tetrachloroethene	127-18-4	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Xylenes (total)	1330-20-7	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
cis-1,2-Dichloroethene	156-59-2	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
trans-1,2-Dichloroethene	156-60-5	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,3-Dichlorobenzene	541-73-1	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Carbon tetrachloride	56-23-5	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Chloroform	67-66-3	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Benzene	71-43-2	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,1,1-Trichloroethane	71-55-6	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Methyl bromide	74-83-9	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Chloromethane	74-87-3	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Chloroethane	76-00-3	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Vinyl chloride	75-01-4	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	2:ug/l		
Methylene chloride	76-08-2	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Bromoform	75-25-2	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Bromodichloromethane	75-27-4	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,1-Dichloroethane	75-34-3	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,1-Dichloroethane	75-36-4	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Trichlorofluoromethane	75-89-4	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	2:ug/l		
Dichlorodifluoromethane	75-71-8	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	2:ug/l		
1,2-Dichloropropane	78-87-6	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,1,2-Trichloroethane	79-00-6	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
Trichloroethane	79-01-8	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,1,2,2-Tetrachloroethane	78-34-6	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		
1,2-Dichlorobenzene	95-50-1	EPA 824	J17227-4	06-Dec-05	31-Jan-06	UNK	TRIP BLANK	0:U	1:ug/l		

DATA USABILITY SUMMARY REPORT FOR INTERIM GROUNDWATER MONITORING

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

Fourteen groundwater samples, four field QC equipment blanks, and three field QC trip blanks were collected from the Former Sinclair Refinery Site in Wellsville, New York on June 7, 2005 through June 10, 2005. These samples were received by Accutest Laboratories (Accutest) within one to two days of collection on June 9, 2005, June 10, 2005, and June 11, 2005. 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 4-6°C. All samples were received intact and in good condition at Accutest.

The analytical data packages generated by Accutest (Accutest Job #s J1158, J1260, and J1409) were received by On-Site within 17-20 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 and equipment blank contamination, instrument calibrations, 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 positive aniline results for

samples OW1-605 and DUP1-605 were considered estimated and qualified "J" in the "Valid Code" column; the toluene results for samples MW78-605 and MW96-605 and the ethylbenzene result for sample MW7-605 were considered not detected at the quantitation limit as indicated in the "Valid Result" column and qualified "U" in the "Valid Code" column; and the benzene result for sample MW96-605 and the toluene and total xylenes results for sample MW7-605 were considered not detected and qualified "U" 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 with the exception of MS/MSD precision and accuracy and equipment blank contamination.

It was noted that there were many noncompliant MS/MSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements. However, since the MS/MSD samples were not designated spiked project samples, validation qualification was not warranted.

The field QC equipment blank EB2-605 associated with samples MW11-605, MW78-605, and MW10-605 contained toluene at a concentration of 0.74 µg/L; the field QC equipment blank EB3-605 associated with samples MW96-605, MW71-605, MW70-605, OW4-605, OW1-605, and DUP1-605 contained BTEX at concentrations of 0.93, 3.2, 1.5, and 6.2 µg/L, respectively; and the field QC equipment blank EB4-605 associated with samples MW7-605 and OW3-605 contained toluene, ethylbenzene, and total xylenes at concentrations of 1.4, 0.44, and 2.5 µg/L, respectively. Therefore, all associated sample results less than the validation action concentrations were considered not detected and qualified "U".

As a result, 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 field duplicate precision and equipment blank contamination.

All field duplicate precision results were compliant and considered acceptable with the exception of the precision result for aniline (197%RPD) for the field duplicate pair OW1-605 and DUP1-605. Therefore, the aniline results were considered estimated and qualified "J" for these samples.

The field QC equipment blank EB3-605 associated with samples MW70-605, OW1-605, and DUP1-605 contained nitrobenzene at a concentration of 16.3 µg/L; and the field QC equipment blank EB4-605 associated with sample OW3-605 contained nitrobenzene at a concentration of 9.2 µg/L. Therefore, all associated sample results less than the validation action concentrations were considered not detected and qualified "U".

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.

Analysis	Sample ID	Method	Sample ID	Sample Date	Sample	Concentration	Unit	Result	Unit	Valid Code
Arenic, Total	7440-38-2	SW846 6010B	J1158-1	07-Jun-05	09-Oct-05	MW69A	605	95.9	5 ug/l	
Ethylbenzene	100-41-4	SW846 8260B	J1158-1	07-Jun-05	09-Oct-05	MW69A	605	0.61	1 ug/l	
Toluene	108-88-3	SW846 8260B	J1158-1	07-Jun-05	09-Oct-05	MW69A	605	0.45	1 ug/l	
Xylene (total)	1330-20-7	SW846 8260B	J1158-1	07-Jun-05	09-Oct-05	MW69A	605	0.31	1 ug/l	
cis-1,2-Dichloroethene	158-59-2	SW846 8260B	J1158-1	07-Jun-05	09-Oct-05	MW69A	605	2.8	1 ug/l	
Benzene	71-43-2	SW846 8260B	J1158-1	07-Jun-05	09-Oct-05	MW69A	605	61.8	1 ug/l	
Vinyl chloride	75-01-4	SW846 8260B	J1158-1	07-Jun-05	09-Oct-05	MW69A	605	4.8	1 ug/l	
Arenic, Total	7440-38-2	SW846 6010B	J1158-2	08-Jun-05	09-Oct-05	MW65	605	87.9	5 ug/l	
Ethylbenzene	100-41-4	SW846 8260B	J1158-2	08-Jun-05	09-Oct-05	MW65	605	58.2	1 ug/l	
Toluene	108-88-3	SW846 8260B	J1158-2	08-Jun-05	09-Oct-05	MW65	605	11	1 ug/l	
Xylene (total)	1330-20-7	SW846 8260B	J1158-2	08-Jun-05	09-Oct-05	MW65	605	59.2	1 ug/l	
Benzene	71-43-2	SW846 8260B	J1158-2	08-Jun-05	09-Oct-05	MW65	605	25.5	1 ug/l	
Arenic, Total	7440-38-2	SW846 6010B	J1158-3	08-Jun-05	09-Oct-05	EBI	605	0.0	5 ug/l	
Ethylbenzene	100-41-4	SW846 8260B	J1158-3	08-Jun-05	09-Oct-05	EBI	605	0.0	1 ug/l	
Toluene	108-88-3	SW846 8260B	J1158-3	08-Jun-05	09-Oct-05	EBI	605	0.0	1 ug/l	
Xylene (total)	1330-20-7	SW846 8260B	J1158-3	08-Jun-05	09-Oct-05	EBI	605	0.0	1 ug/l	
cis-1,2-Dichloroethene	158-59-2	SW846 8260B	J1158-3	08-Jun-05	09-Oct-05	EBI	605	0.0	1 ug/l	
Benzene	71-43-2	SW846 8260B	J1158-3	08-Jun-05	09-Oct-05	EBI	605	0.0	1 ug/l	
Vinyl chloride	75-01-4	SW846 8260B	J1158-3	08-Jun-05	09-Oct-05	EBI	605	0.0	1 ug/l	
Arenic, Total	7440-38-2	SW846 6010B	J1158-4	08-Jun-05	09-Oct-05	MW9	605	0.0	5 ug/l	
Ethylbenzene	100-41-4	SW846 8260B	J1158-4	08-Jun-05	09-Oct-05	MW9	605	0.0	1 ug/l	
Toluene	108-88-3	SW846 8260B	J1158-4	08-Jun-05	09-Oct-05	MW9	605	0.0	1 ug/l	
Xylene (total)	1330-20-7	SW846 8260B	J1158-4	08-Jun-05	09-Oct-05	MW9	605	0.0	1 ug/l	
Benzene	71-43-2	SW846 8260B	J1158-4	08-Jun-05	09-Oct-05	MW9	605	0.0	1 ug/l	
Arenic, Total	7440-38-2	SW846 6010B	J1158-5	08-Jun-05	09-Oct-05	MW11	605	52.4	5 ug/l	
Ethylbenzene	100-41-4	SW846 8260B	J1158-5	08-Jun-05	09-Oct-05	MW11	605	0.0	1 ug/l	
Toluene	108-88-3	SW846 8260B	J1158-5	08-Jun-05	09-Oct-05	MW11	605	0.0	1 ug/l	
Xylene (total)	1330-20-7	SW846 8260B	J1158-5	08-Jun-05	09-Oct-05	MW11	605	0.0	1 ug/l	
Benzene	71-43-2	SW846 8260B	J1158-5	08-Jun-05	09-Oct-05	MW11	605	0.79	1 ug/l	
Ethylbenzene	100-41-4	SW846 8260B	J1158-6	08-Jun-05	09-Oct-05	UNK	TRIP BLANK	0.0	1 ug/l	
Toluene	108-88-3	SW846 8260B	J1158-6	08-Jun-05	09-Oct-05	UNK	TRIP BLANK	0.0	1 ug/l	
Xylene (total)	1330-20-7	SW846 8260B	J1158-6	08-Jun-05	09-Oct-05	UNK	TRIP BLANK	0.0	1 ug/l	
cis-1,2-Dichloroethene	158-59-2	SW846 8260B	J1158-6	08-Jun-05	09-Oct-05	UNK	TRIP BLANK	0.0	1 ug/l	
Benzene	71-43-2	SW846 8260B	J1158-6	08-Jun-05	09-Oct-05	UNK	TRIP BLANK	0.0	1 ug/l	
Vinyl chloride	75-01-4	SW846 8260B	J1158-6	08-Jun-05	09-Oct-05	UNK	TRIP BLANK	0.0	1 ug/l	

Chemical Name	Location	Sample ID	Sample Date	Sample Type	Sample	Result	Unit	Valid	Reprint	Valid Code
Arsenic, Total	7440-38-2	SW846 6010B	J1260-1	08-Jun-05	MW78	27.2	6 ug/l			
Ethylbenzene	100-41-4	SW846 8260B	J1260-1	08-Jun-05	MW78	0.0	1 ug/l			
Toluene	108-88-3	SW846 8260B	J1260-1	08-Jun-05	MW78	0.28 J	1 ug/l			1 U
Xylene (total)	1330-20-7	SW846 8260B	J1260-1	08-Jun-05	MW78	0.31 J	1 ug/l			
Benzene	71-43-2	SW846 8260B	J1260-1	08-Jun-05	MW78	25.9	1 ug/l			
Azobenzene	103-33-3	SW846 8270C	J1260-2	08-Jun-05	MW10	0.0	6 ug/l			
Azoxylbenzene	495-48-7	SW846 8270C	J1260-2	08-Jun-05	MW10	0.0	6 ug/l			
Aniline	62-53-3	SW846 8270C	J1260-2	08-Jun-05	MW10	0.0	2 ug/l			
2-Aminophenol	95-66-6	SW846 8270C	J1260-2	08-Jun-05	MW10	0.0	20 ug/l			
Nitrobenzene	98-95-3	SW846 8270C	J1260-2	08-Jun-05	MW10	0.0	2 ug/l			
Arsenic, Total	7440-38-2	SW846 6010B	J1260-2	08-Jun-05	MW10	34.8	6 ug/l			
Ethylbenzene	100-41-4	SW846 8260B	J1260-2	08-Jun-05	MW10	0.0	1 ug/l			
Toluene	108-88-3	SW846 8260B	J1260-2	08-Jun-05	MW10	0.0	1 ug/l			
Xylene (total)	1330-20-7	SW846 8260B	J1260-2	08-Jun-05	MW10	0.0	1 ug/l			
cis-1,2-Dichloroethane	156-59-2	SW846 8260B	J1260-2	08-Jun-05	MW10	0.0	1 ug/l			
Benzene	71-43-2	SW846 8260B	J1260-2	08-Jun-05	MW10	1.1	1 ug/l			
Vinyl chloride	75-01-4	SW846 8260B	J1260-2	08-Jun-05	MW10	0.0	1 ug/l			
Azobenzene	103-33-3	SW846 8270C	J1260-3	08-Jun-05	EB2	0.0	6 ug/l			
Azoxylbenzene	495-48-7	SW846 8270C	J1260-3	08-Jun-05	EB2	0.0	6 ug/l			
Aniline	62-53-3	SW846 8270C	J1260-3	08-Jun-05	EB2	0.0	2 ug/l			
2-Aminophenol	95-66-6	SW846 8270C	J1260-3	08-Jun-05	EB2	0.0	20 ug/l			
Nitrobenzene	98-95-3	SW846 8270C	J1260-3	08-Jun-05	EB2	0.0	2 ug/l			
Arsenic, Total	7440-38-2	SW846 6010B	J1260-3	08-Jun-05	EB2	0.0	6 ug/l			
Ethylbenzene	100-41-4	SW846 8260B	J1260-3	08-Jun-05	EB2	0.0	1 ug/l			
Toluene	108-88-3	SW846 8260B	J1260-3	08-Jun-05	EB2	0.74 J	1 ug/l			
Xylene (total)	1330-20-7	SW846 8260B	J1260-3	08-Jun-05	EB2	0.0	1 ug/l			
cis-1,2-Dichloroethane	156-59-2	SW846 8260B	J1260-3	08-Jun-05	EB2	0.0	1 ug/l			
Benzene	71-43-2	SW846 8260B	J1260-3	08-Jun-05	EB2	0.0	1 ug/l			
Vinyl chloride	75-01-4	SW846 8260B	J1260-3	08-Jun-05	EB2	0.0	1 ug/l			
Ethylbenzene	100-41-4	SW846 8260B	J1260-4	08-Jun-05	UNK	TRIP BLANK	0.0	1 ug/l		
Toluene	108-88-3	SW846 8260B	J1260-4	08-Jun-05	UNK	TRIP BLANK	0.0	1 ug/l		
Xylene (total)	1330-20-7	SW846 8260B	J1260-4	08-Jun-05	UNK	TRIP BLANK	0.0	1 ug/l		
cis-1,2-Dichloroethane	156-59-2	SW846 8260B	J1260-4	08-Jun-05	UNK	TRIP BLANK	0.0	1 ug/l		
Benzene	71-43-2	SW846 8260B	J1260-4	08-Jun-05	UNK	TRIP BLANK	0.0	1 ug/l		
Vinyl chloride	75-01-4	SW846 8260B	J1260-4	08-Jun-05	UNK	TRIP BLANK	0.0	1 ug/l		

Analysis	Sample	Method	Sample ID	Date Sampled	Valid Date	Sample	Location	Result	Code	Units	Valid Result	Valid Code
Arsenic, Total	7440-38-2	SW846 6010B	J1260-5	09-Jun-05	09-Oct-05	MW96	605	41.4		6 ug/l		
Ethylbenzene	100-41-4	SW846 8260B	J1260-5	09-Jun-05	09-Oct-05	MW96	605	0.0	U	1 ug/l		
Toluene	108-88-3	SW846 8260B	J1260-5	09-Jun-05	09-Oct-05	MW96	605	0.44	J	1 ug/l		1U
Xylene (total)	1330-20-7	SW846 8260B	J1260-5	09-Jun-05	09-Oct-05	MW96	605	0.0	U	1 ug/l		
Benzene	71-43-2	SW846 8260B	J1260-5	09-Jun-05	09-Oct-05	MW96	605	2.6		1 ug/l		U
Arsenic, Total	7440-38-2	SW846 6010B	J1260-6	09-Jun-05	09-Oct-05	MW71	605	0.0	U	6 ug/l		
Ethylbenzene	100-41-4	SW846 8260B	J1260-6	09-Jun-05	09-Oct-05	MW71	605	0.0	U	1 ug/l		
Toluene	108-88-3	SW846 8260B	J1260-6	09-Jun-05	09-Oct-05	MW71	605	0.0	U	1 ug/l		
Xylene (total)	1330-20-7	SW846 8260B	J1260-6	09-Jun-05	09-Oct-05	MW71	605	0.0	U	1 ug/l		
Benzene	71-43-2	SW846 8260B	J1260-6	09-Jun-05	09-Oct-05	MW71	605	0.0	U	1 ug/l		
Arsenic, Total	7440-38-2	SW846 6010B	J1260-7	09-Jun-05	09-Oct-05	OW4	605	12.4		6 ug/l		
Ethylbenzene	100-41-4	SW846 8260B	J1260-7	09-Jun-05	09-Oct-05	OW4	605	0.0	U	1 ug/l		
Toluene	108-88-3	SW846 8260B	J1260-7	09-Jun-05	09-Oct-05	OW4	605	0.0	U	1 ug/l		
Xylene (total)	1330-20-7	SW846 8260B	J1260-7	09-Jun-05	09-Oct-05	OW4	605	0.0	U	1 ug/l		
Benzene	71-43-2	SW846 8260B	J1260-7	09-Jun-05	09-Oct-05	OW4	605	0.0	U	1 ug/l		

Analyte	Sample	Method	Lab Sample	Val. Date	Sample	Result	Conc. Unit	Val. Code
Aniline	62-53-3	SW846 8270C	J1409-1	09-Jun-05	OW1	605	230	J
Arenic, Total	7440-38-2	SW846 8010B	J1409-1	09-Jun-05	OW1	605	71.5	
Azobenzene	103-33-3	SW846 8270C	J1409-1	09-Jun-05	OW1	605	0 U	
Azobenzene	495-48-7	SW846 8270C	J1409-1	09-Jun-05	OW1	605	0 U	
2-Aminophenol	95-55-6	SW846 8270C	J1409-1	09-Jun-05	OW1	605	0 U	
Nitrobenzene	98-95-3	SW846 8270C	J1409-1	09-Jun-05	OW1	605	0 U	
Ethylbenzene	100-41-4	SW846 8260B	J1409-1	09-Jun-05	OW1	605	0.88 J	
Toluene	108-88-3	SW846 8260B	J1409-1	09-Jun-05	OW1	605	2.3	
Xylene (total)	1330-20-7	SW846 8260B	J1409-1	09-Jun-05	OW1	605	1.7	
Benzene	71-43-2	SW846 8260B	J1409-1	09-Jun-05	OW1	605	42.4	
Arenic, Total	7440-38-2	SW846 8010B	J1409-2	09-Jun-05	DUP1	605	70.7	
Azobenzene	103-33-3	SW846 8270C	J1409-2	09-Jun-05	DUP1	605	0 U	
Azobenzene	495-48-7	SW846 8270C	J1409-2	09-Jun-05	DUP1	605	0 U	
Aniline	62-53-3	SW846 8270C	J1409-2	09-Jun-05	DUP1	605	14.9	J
2-Aminophenol	95-55-6	SW846 8270C	J1409-2	09-Jun-05	DUP1	605	0 U	
Nitrobenzene	98-95-3	SW846 8270C	J1409-2	09-Jun-05	DUP1	605	0 U	
Ethylbenzene	100-41-4	SW846 8260B	J1409-2	09-Jun-05	DUP1	605	0.56 J	
Toluene	108-88-3	SW846 8260B	J1409-2	09-Jun-05	DUP1	605	2.4	
Xylene (total)	1330-20-7	SW846 8260B	J1409-2	09-Jun-05	DUP1	605	1.8	
Benzene	71-43-2	SW846 8260B	J1409-2	09-Jun-05	DUP1	605	41.6	
Nitrobenzene	98-95-3	SW846 8270C	J1409-3	09-Jun-05	MW70	605	6780	
Arenic, Total	7440-38-2	SW846 8010B	J1409-3	09-Jun-05	MW70	605	42	
Azobenzene	103-33-3	SW846 8270C	J1409-3	09-Jun-05	MW70	605	0 U	
Azobenzene	495-48-7	SW846 8270C	J1409-3	09-Jun-05	MW70	605	0 U	
Aniline	62-53-3	SW846 8270C	J1409-3	09-Jun-05	MW70	605	86.3	
2-Aminophenol	95-55-6	SW846 8270C	J1409-3	09-Jun-05	MW70	605	0 U	
Ethylbenzene	100-41-4	SW846 8260B	J1409-3	09-Jun-05	MW70	605	16.8	
Toluene	108-88-3	SW846 8260B	J1409-3	09-Jun-05	MW70	605	39.4	
Xylene (total)	1330-20-7	SW846 8260B	J1409-3	09-Jun-05	MW70	605	74.9	
Benzene	71-43-2	SW846 8260B	J1409-3	09-Jun-05	MW70	605	16.3	
Arenic, Total	7440-38-2	SW846 8010B	J1409-4	10-Jun-05	MW7	605	19.2	
Ethylbenzene	100-41-4	SW846 8260B	J1409-4	10-Jun-05	MW7	605	0.7 J	1 U
Toluene	108-88-3	SW846 8260B	J1409-4	10-Jun-05	MW7	605	2.8	U
Xylene (total)	1330-20-7	SW846 8260B	J1409-4	10-Jun-05	MW7	605	4.6	U
Benzene	71-43-2	SW846 8260B	J1409-4	10-Jun-05	MW7	605	4.6	

Analysis	GA000	Method	Lab Sample ID	Date Sampled	Validation Date	Sample	Location	Result	Conc	PL	Unit	Valid Result	Valid Conc
Nitrobenzene	98-95-3	SW846 8270C	J1409-5	10-Jun-05	09-Oct-05	OW3	605	6030			200 ug/l		
Arsenic, Total	7440-38-2	SW846 8010B	J1409-5	10-Jun-05	09-Oct-05	OW3	605	23.9			5 ug/l		
Azobenzene	103-33-3	SW846 8270C	J1409-5	10-Jun-05	09-Oct-05	OW3	605	0:U			6 ug/l		
Azoxypbenzene	495-48-7	SW846 8270C	J1409-5	10-Jun-05	09-Oct-05	OW3	605	0:U			5 ug/l		
Aniline	62-53-3	SW846 8270C	J1409-5	10-Jun-05	09-Oct-05	OW3	605	49.8			2 ug/l		
2-Aminophenol	95-55-8	SW846 8270C	J1409-5	10-Jun-05	09-Oct-05	OW3	605	0:U			20 ug/l		
Ethylbenzene	100-41-4	SW846 8260B	J1409-5	10-Jun-05	09-Oct-05	OW3	605	8.8			1 ug/l		
Toluene	108-88-3	SW846 8260B	J1409-5	10-Jun-05	09-Oct-05	OW3	605	20.6			1 ug/l		
Xylene (total)	1330-20-7	SW846 8260B	J1409-5	10-Jun-05	09-Oct-05	OW3	605	65.9			1 ug/l		
Benzene	71-43-2	SW846 8260B	J1409-5	10-Jun-05	09-Oct-05	OW3	605	8.5			1 ug/l		
Arsenic, Total	7440-38-2	SW846 8010B	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	0:U			6 ug/l		
Azobenzene	103-33-3	SW846 8270C	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	0:U			5 ug/l		
Azoxypbenzene	495-48-7	SW846 8270C	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	0:U			5 ug/l		
Aniline	62-53-3	SW846 8270C	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	0:U			2 ug/l		
2-Aminophenol	95-55-8	SW846 8270C	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	0:U			20 ug/l		
Nitrobenzene	98-95-3	SW846 8270C	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	9.2			2 ug/l		
Ethylbenzene	100-41-4	SW846 8260B	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	0.44	J		1 ug/l		
Toluene	108-88-3	SW846 8260B	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	1.4			1 ug/l		
Xylene (total)	1330-20-7	SW846 8260B	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	2.5			1 ug/l		
Benzene	71-43-2	SW846 8260B	J1409-6	10-Jun-05	09-Oct-05	EB	4-605	0:U			1 ug/l		
Ethylbenzene	100-41-4	SW846 8260B	J1409-7	10-Jun-05	09-Oct-05	UNK	TRIP BLANK	0:U			1 ug/l		
Toluene	108-88-3	SW846 8260B	J1409-7	10-Jun-05	09-Oct-05	UNK	TRIP BLANK	0:U			1 ug/l		
Xylene (total)	1330-20-7	SW846 8260B	J1409-7	10-Jun-05	09-Oct-05	UNK	TRIP BLANK	0:U			1 ug/l		
Benzene	71-43-2	SW846 8260B	J1409-7	10-Jun-05	09-Oct-05	UNK	TRIP BLANK	0:U			1 ug/l		
Arsenic, Total	7440-38-2	SW846 8010B	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	0:U			6 ug/l		
Azobenzene	103-33-3	SW846 8270C	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	0:U			5 ug/l		
Azoxypbenzene	495-48-7	SW846 8270C	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	0:U			5 ug/l		
Aniline	62-53-3	SW846 8270C	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	0:U			2 ug/l		
2-Aminophenol	95-55-8	SW846 8270C	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	0:U			20 ug/l		
Nitrobenzene	98-95-3	SW846 8270C	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	16.3			2 ug/l		
Ethylbenzene	100-41-4	SW846 8260B	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	1.6			1 ug/l		
Toluene	108-88-3	SW846 8260B	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	3.2			1 ug/l		
Xylene (total)	1330-20-7	SW846 8260B	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	6.2			1 ug/l		
Benzene	71-43-2	SW846 8260B	J1409-8	09-Jun-05	09-Oct-05	EB	3-605	0.93	J		1 ug/l		

