CLOSURE REPORT

PHASE II RCRA FACILITY ASSESSMENT – SAMPLING VISIT
INTERIM CORRECTIVE MEASURE:
INACTIVE LINE ABANDONMENT
Former Texaco Research Center
Beacon, New York

SITE ID# 314004

RCRA PERMIT# 3-1330-00048/16-0

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ENGINEER'S CERTIFICATION

Certification of Completion

I certify that the Interim Corrective Measure has been completed as described in this document and in accordance with the Work Plan – Industrial Sewer System, Phase II Facility Assessment- Sampling Visit, Inactive Line Abandonment dated October 2005 and approved by the NYSDEC. This area was included in the Part 373 Hazardous Waste Management Permit (NYSDEC ID No. 3-1330-48/16-0; U.S. EPA Identification No. NYD091894899) held by Chevron.

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SECTION 1

INTRODUCTION

1.1 PROJECT BACKGROUND

This report summarizes the Industrial Sewer System (ISS) closure activities conducted at the Chevron Corporation (Chevron, formerly Texaco, Inc.) Glenham, New York Research Center in accordance with the RCRA Facility Assessment (RFA) – Sampling Visit of the industrial sewer system. Chevron holds a Hazardous Waste Management Permit ("the Permit") for the Property from the New York State Department of Environmental Conservation (NYSDEC ID #3-1330-48/16-0). The closure activities were performed in accordance with the conditions of the Permit. Chevron completed Phase I of the ISS RFA in March, 2002, and submitted a report to the NYSDEC, which was accepted on June 5, 2003. In October 2005 the New York State Department of Environmental Conservation (NYSDEC) approved the Phase II Work Plan. (Parsons October 2005).

The Phase II work included cleaning, inspection, and investigation of potential leaks in the remaining sections of the ISS piping system, confirmation soil and rinse water sampling, as well as any follow-up activities recommended in the Phase I RFA Report.

This document presents a summary of the work completed under the Phase II work plan and presents the results of the sampling completed during that work.

1.2 SITE DESCRIPTION

Chevron Corporation (Chevron, formerly Texaco, Inc.) operated a Research Center in Glenham, New York from 1931 until its closure in 2003 (Figure 1-1). The Property is located on approximately 140 acres of land, and has been used as an on-shore, non-production, non-transportation laboratory complex engaged in research, development, and technical services related to petroleum products and energy. Petroleum, coal products, and solvents have been used at the Property in connection with the research functions. Wastes generated during the use of these products were transported to the facility industrial sewer system, treated and discharged in accordance with the facility's existing State Pollution Discharge Elimination System (SPDES) permit. Portions of the ISS have been in service since Texaco took ownership of the Property in the 1930's.

The ISS consists of four main branches with eleven operating sections, all of which flow to the ISS section of the waste water treatment plant (WWTP). The receiving basin of the ISS WWTP consists of the grit chamber and settling basins identified as Building 45. The ISS operating sections have been identified as ISS-1 thought ISS-11. A description of each of the operating sections is included below.

The ISS has been divided into four main branches;

The A-line branch services the western part of the property with all of the flows being directed to Manhole A-1 (MH-A1) prior to flowing to the WWTP (Figure 1-2). The A-line enters the grit chamber at the northwest corner. ISS sections that are part of the A-line include;

- ISS-1 services the shallow groundwater recovery piping to the east of Building 58, and the line from former drum disposal area within Building 83. This system drained to Tank 200 wherein the water was pumped through a force main to MH-A1.
- ISS-2 services Building 42 and gravity flows directly to MH-A1.
- ISS-3 includes the drainage from the tank farm for the boiler house tank farm (Building 26) and includes a small valve pit located between MH-A1 and Building 36.
- ISS-4 encompasses the sewer line from MH-A1 to Building 45 and the abandoned line from the base of the cliff below MH-A1 to the WWTP.

The B-line branch services the central part of the property (Figure 1-3). The "B" line consists of two separate main sewer lines that enter the grit chamber in the northeast corner. The B-line ISS sections include;

- ISS-5 which services the western side of the central part of the Property. Buildings within ISS-5 include: the boiler house (Building 26) and the containment basins for the fuel oil offloading area. The section of the ISS that was closed during the Phase I Work Plan included connections upstream of Manhole B-1 (MH-B1) and from MH-B1 to the southwest corner of Building 55. The "blowdown chamber" from the boiler house and the "3x3 vault" south Building 55 are also included in this ISS. From the "3x3 vault" the flow intercepts a pipe run that was formerly connected to Manhole B-2 (MH-B2). Use of this the upper part of this section was discontinued following the construction of facilities located in the northern part of the Site. From this junction, the sewer line goes down the hill and enters the grit chamber.
- ISS-6 consists of the new B-line and includes all of the ISS that flows into MH-B2. ISS-6 includes flows from Buildings 29, 56, 30, 70, 39, 37, 38, 40, 50 and 65. From MH-B2 all flows are directed into the northeast corner of the grit chamber.

The C-line branch services the eastern part of the property (Figure 1-4). All flows in this section flow through Manhole C-1 (MH-C1) and enter the grit chamber on the east side. The C-line ISS sections include;

- ISS-8 which extends from Manhole C-2 (MH-C2) to the grit chamber. Flow within this section includes any flows from ISS-9, ISS-10 and ISS-11, in addition to those from Buildings 1, and 6.
- ISS-9 consists of the transfer piping from the tank farm lift station, crossing the bridge over Fishkill Creek. ISS-9 flows into MH-C2 for transfer to the WWTP.

- ISS-10 was removed during the Phase I work. ISS-10 formerly served the central eastern part of the Property including Buildings 41, 51, and 57, and any flow directed from ISS-11. Flow from ISS-10 enters MH-C2.

- ISS-11 was closed during Phase I ISS closure work (IT Corp, 2002) ISS-11 formerly served the eastern part of the Property including Building 67, 68 and 74. Flows from ISS-11 drained to ISS-10 and MH-C2.

The D-line branch services Building 3 (Figure 1-4). Flow from the D-line enters the east side of the grit chamber through two separate PVC lines. The D-line ISS sections include;

- ISS-7 which is made up of two PVC solvent welded pipes installed in 1997. This section collects water from Building 3.

1.3 PROJECT OBJECTIVES

The goal of the proposed work is to complete the assessment of the ISS in accordance with the conditions of the Permit. Because the site is no longer operational, assessment objectives included achieving ISS closure in a manner that ensures that the system is no longer a conveyance for industrial wastes. An addition goal was to locations that may have been impacted by the former operation of the ISS.

This scope-of-work for the ISS closure is outlined in the Work Plan; ISS Phase II RFA-Sampling Visit, Interim Corrective Measure: Inactive Line Abandonment (Parsons, October 2005).

Tasks included in the scope-of-work included;

- Cleaning of the ISS piping to remove any residue and sludge.
- Completion of performance sampling from the ISS piping.
- Completion of an evaluation of the integrity of the ISS piping using remote video camera techniques
- Collection of soil samples beneath or adjacent to the ISS piping and manholes.
- Closure of the ISS to prevent further use of the piping as a conveyance.
- Removal of portions of the sewer system and associated soils where potential compromises in ISS integrity are observed.
- Completion of follow-up activities recommended in the Phase I RFA Report.

SECTION 2

ISS CLEANING AND INVESTIGATION

2.1 INDUSTRIAL SEWER SYSTEM LINE CLEANING

The initial step in the Phase II investigation was to utilize high pressure water to jet wash the internal surfaces of ISS piping. This step was necessary to clear the piping of any residual material and scaling, and to facilitate the access to the ISS with a video camera.

The water source used to conduct the sewer cleaning and flushing was the facility fire water protection system that utilizes water pumped from Fishkill Creek. At the start of field activities each day, hoses were attached to one of the active fire hydrants at the facility and a sufficient volume of water to complete the work planned for the day would be discharged to the holding tank on the cleaning/vacuum truck. The high pressure jetting nozzle would be inserted into the ISS piping section that was to be cleaned and inspected that day, and the nozzle would travel up the line to the desired endpoint, or to a point where a piping constriction occurred that prevented further nozzle advancement. All rinse water introduced to the pipeline during cleaning was either permitted to flow to the grit chamber or collected in a vacuum truck and later discharged to the WWTP. Water used to clean and rinse the ISS piping sections would be collected and returned to the pressure/vacuum truck using a vacuum hose that was placed into the entry point of the jetting nozzle.

2.2 INDUSTRIAL SEWER SYSTEM PERFORMANCE SAMPLING

Performance sampling from the cleaned ISS piping was completed to demonstrate that cleaning of the ISS had removed any residuals that would require management of these lines as listed hazardous waste. The performance criteria established by NYSDEC Solid and Hazardous Materials Division are that samples of rinseate water collected after the cleaning of the ISS must meet the NYS Part 703.5 drinking water standards as described in the Division of Water Technical and Operational Guidance Series 1.1.1 (1998) document. Results of the performance sampling have been included as Table 2-1.

A total of 24 rinseate samples were collected and analyzed for volatile organic compounds (VOCs) in accordance with the RFA Sampling Plan included in the Phase II ISS RFA work plan. The Data Review Summary Report has been included as Appendix A and a complete set of the laboratory data and documentation is included in Appendix C.

Performance sampling consisted of passing a flow of water through the piping run and collecting a sample of water at the discharge point. Water used for the cleaning of the line and the performance sampling was obtained from the facility fire control system. Fire water is obtained directly from an intake on Fishkill Creek. Two samples of the fire water supply were collected during the sampling period to provide background water quality documentation. None of the fire water samples contained measurable concentrations of VOCs or lead.

The procedures used to collect the rinse water samples were as follows:

- The sample container(s) were clearly labeled.
- The water was allowed to flow through the cleaned pipe and into the sample container, which was positioned at the lower end of the cleaned pipe section.
- The VOC sample was completed as a discrete grab sample in triplicate; i.e., three VOA vials were filled continuously until full.
- Teflon-lined caps were secured onto each of the three container(s).
- The sample containers were placed on ice in a cooler for transport to the laboratory.
- All Chain-of-Custody (COC) documentation was completed and recorded on the daily field report forms.

2.3 INDUSTRIAL SEWER SYSTEM INTEGRITY EVALUATION

Following the cleaning of the ISS piping, the lines were inspected using remote video camera techniques. Video inspection of the ISS was generally completed using the access points provided through existing manholes. When obstructions were found in the line, including joints and turns that prevented passage of the video equipment, additional excavations were completed to expose the piping and create access locations.

The results of the ISS piping integrity inspection program, as summarized below, indicated that the overwhelming majority of the pipe segments were in good condition with no breaches or structural deformities. A listing of the observed deficiencies in the ISS piping segments is as follows:

ISS – 1

<u>UST 200 Catch Basin to Bldg 58 (4" Clay Pipe) ISS-1</u>

1. 30' from catch basin- pipe cracked at 12 o'clock, minor damage
2. 50' from catch basin- slight rupture in pipe invert
3. 56' from catch basin - break in top a pipe at 12 o'clock
4. Soil samples SS-031-ISS1 (2-6') and SS-032-ISS1 (2-6') collected in this area on 2-28-06

<u>UST 200 Catch Basin to Bldg 83 (4" Steel Pipe) ISS-1</u>

1. 32' from catch basin- slight rupture (small hole) between 4 and 5 o'clock (invert)
2. Soil sample # SS-030-ISS1 (3-7') collected near this location on February 27, 2006

ISS – 6

MH B-3 South (8" Cast Iron Pipe)

1. 46' from manhole - a repaired spot approximately 12 inches wide between 12 and 5 o'clock

2. 58' from manhole - root mass seen

3. Pipe observed to be in good condition with the exception of the repaired location at 46' and root mass found at 58'

4. A cutting blade was sent down the line and the root mass was removed, and the location was videoed again. A breach was found in the location of the root mass

5. Soil sample # SS-006-B3 (3–7') collected at this location on 2-21-06

MH B-4 East to Bldg 39 (8" Cast Iron Pipe)

1. 153' from manhole- 4" service connection at 12 o'clock (top), roots in pipe, poor connection

2. Soil sample #SS-011-B4 (4-7') collected at this location on 2-22-06

ISS – 8

MH C-2 to MH C-1 (6" Vitreous Clay Pipe)

1. 8' from manhole - Crack in pipe at 12 o'clock

2. 27' from manhole - Crack in pipe invert approx 6" long

3. 30' from manhole - 2-3 inch hole in top of pipe, 1 o'clock

4. 58' from manhole - Crack in pipe between 9 and 4 o'clock

5. 64'from manhole - Crack in pipe between 9 and 2 o'clock

6. 82' from manhole - Crack in pipe between 2 and 4 o'clock

7. 90' from manhole - Crack in pipe at 12 o'clock

8. 100' from manhole - Crack in pipe at 12 o'clock

9. 102' from manhole - Crack in pipe at 12 o'clock

10. 111' from manhole - Crack in pipe at 3 o'clock

11. 128'from manhole - Evidence of repair on top of pipe

12. 133'from manhole - Hole in top of pipe at 11 o'clock

13. 134'from manhole - Hole in top of pipe at 12 o'clock

14. Soil samples SS-034 (2-6'), 035 (3-7'), 036 (3-7'), and 037 (3-7') were collected along this area on 2-28-06

The summary reports documenting the results of the ISS line video camera inspections are included in Appendix B of this report. Also included in Appendix B are the DVDs that provide the video camera results along with the audio narration of observations made by the National Water Main inspection technician.

SECTION 3
PHASE II ISS RFA SOIL SAMPLING PROGRAM

3.1 OVERVIEW

The Phase II soil sampling program consisted of two parts. The first was a follow up to the Phase I RFA. The second part was in support of the Phase II ISS assessment and closure activities. Sampling activities associated with each of these parts is described below.

3.2 PHASE I RFA FOLLOW-UP SOIL SAMPLING

During the Phase I ISS RFA, sections of the ISS were identified where the integrity of the ISS piping had potentially been compromised. Soil samples were required during the Phase II ISS assessment to determine the extent of any impacts that releases from the ISS could have had on the subsurface soil conditions.

The areas that were identified in the Phase I RFA included ISS-5 north of Building 42 and ISS-8 at the north corner of Building 3. The soil sampling locations are shown on the accompanying figures.

Three soil borings were completed in the vicinity of the ISS-5 line north of Building 42, between Building 42 and Building 26 [SS-020 (4-6'), SS-021 (4-6'), SS-022 (3-4')]. At each of these locations, subsurface soil samples were collected with a Geoprobe® utilizing macrocore-sampling techniques. Soil samples were collected in accordance with the project Quality Assurance Project Plan (QAPP) and analyzed for the presence of VOCs, semivolatile organic compounds (SVOCs), and mercury. The results from the soil boring analytical samples are included on Table 3-1 and discussed by ISS in Section 4.

An attempt was made to locate the ISS section identified in the Phase I report as potentially being impacted near the northeast corner of Building 3. One soil sample was able to be collected in this area [SS-040 (4-8')]. Attempts were made to access this location by excavation; however the proximity of additional structures and the presence of multiple underground utilities in the area rendered this approach ineffective. The analytical results from this area are included on Table 3-1 and discussed in Section 4.

3.3 PHASE II RFA SOIL SAMPLING

The Phase II ISS RFA Soil Sampling Program included the collection of soil samples to support the in-place closure of the ISS piping. Soil samples were collected in accordance with the Work Plan and the project QAPP and analyzed for the presence of VOCs, SVOCs, and mercury.

A total of 48 soil sampling points were identified and sampled using a Geoprobe® equipped with macrocore-sampling equipment. Sampling points included each of the eleven manholes identified in the Work Plan. Borings were also completed adjacent to the ISS piping to depths

equal to the reported invert of the pipe. The locations of the soil borings are shown on Figures 1-2, 1-3, and 1-4.

The results from the soil boring analytical samples are included on Table 3-1 and discussed for each of the ISS branches in Section 4. A copy of the complete analytical data package is included as Appendix C.

SECTION 4

ISS CLOSURE

4.1 OVERVIEW

The 2005 Work Plan included a discussion of the variety of procedures that would be used to close the ISS. Options included excavation of the pipelines or closure in place by sealing the piping ends with cement based grout. It was intended that the method of closure would be based upon the accessibility of the pipe and the results of the integrity evaluation.

During the course of the investigation it was determined that the ISS piping observed was generally intact and in good condition. The results of the soil sampling indicated that there were no major impacts to the site soils as a result of deficiencies in the ISS piping.

During excavations to access the piping for video inspection, it was determined that the presence of other utilities would make excavation of the ISS piping difficult. A series of construction progress photographs documenting the original site construction was found and showed the location of utilities such as product lines, gas lines, water, sewer, and communication lines. In many cases the ISS piping was installed first with the other utility lines installed over the top of, or parallel to, the ISS pipe sections. Based on this information, the decision was made to close all of the ISS lines in place by completely grouting the lines with a cement/bentonite grout.

4.2 WASTE CHARACTERIZATION AND DISPOSAL

Soils were excavated for disposal from three locations during the closure of the ISS. The first excavation was for the removal of Tank 200, located at the west side of the Site. Tank 200 was used as a lift station to pump water collected from the Building 58 groundwater recovery system and from the Building 83 drum crushing area to Manhole A1. Tank 200 was removed following the procedures outlined in the work plan dated April 24, 2006 approved by the NYSDEC. A discussion of the Tank 200 removal has been included in a separate closure report submitted to the NYSDEC in September 2006.

Based on the information provided in the Phase I report and the results of the Phase II soil sampling, an attempt was made to excavate soils from the ISS-5 line between Building 42 and Building 26. During this attempt, it was determined that the ISS piping was located in a shallow trench along side an 8-inch diameter fire water line. Both of the pipes were placed inside of a narrow trench cut into the bedrock. There was no way to remove the line and the underlying soils without disrupting the fire line. As a result, only approximately 5 cubic yards of accessible soils were removed from this area.

An excavation of impacted soils was made in the grassed area located at the northeast corner of the ISS WWTP grit chamber (Building 45). Soils in this area generally consisted of fill material. The fill material was excavated to a depth of approximately 4 feet below grade until native soil

was encountered. Soils were removed to the overhead pipe bridge to the south and the roadway to the north. The extent of the excavation was limited by the grit chamber to the west and the presence of a concrete slab encountered at a depth of 1-foot below grade on the east. Approximately 10 cubic yards of soils were removed from this area. Two samples of the fill material under the slab were collected.

In order to prevent the contamination of clean areas with impacted soils, excavated material was loaded directly into covered rolloff containers and staged for removal. Soils were characterized as non-hazardous waste based on the results of Toxicity Characteristic Leaching Procedure (TCLP) samples collected from the vicinity of excavations made to access the piping for the integrity evaluation.

Rolloff containers were taken to the High Acres landfill operated by Waste Management in Fairport, New York for disposal. A copy of the disposal manifests for the soils disposed of as part of the ISS are included as Appendix D.

4.3 SITE RESTORATION

Following the excavation of the soils, the excavations were backfilled with material from an offsite source.

Material used for backfilling the excavations was obtained from Thalle Industries, Inc. from the quarry on Route 9, Fishkill, NY. Material used as backfill has been identified as 1-1/2 inch stone and Item 4 (New York State Department of Transportation classification). Backfill material was tested by ASTM method D422 for gradation, and analytical testing was completed for the presence of VOCs, SVOCs, pesticides, herbicides, polychlorinated biphenyls (PCBs), and metals. A copy of the gradation and analytical results are included as Appendix E.

4.4 CLOSURE DESCRIPTION

The ISS was permanently closed in accordance with the Line Abandonment Procedures included in the October 2005 Work Plan. This section includes a description of each ISS section, and a summary of the cleaning and performance sampling, integrity evaluation, soil sampling results and the final closure activities.

4.4.1 Line A (ISS-1)

Description

ISS-1 includes Tank 200, the shallow groundwater recover system the east of Building 58, and the line from former drum disposal area within Building 83 (Figure 1-2). This piping discharged to Tank 200. Tank 200 served as a lift station wherein the water was pumped through a force main to be discharged to MH-A1.

Cleaning/Performance Sampling

Three piping runs within ISS-1 were cleaned by flushing with a high pressure nozzle. Following flushing, the following performance sampling was completed.

- RW-018-A1 – from MH-A1 back to Tank 200
- RW-020-58 – from the 4-inch tile line from the Building 58 collection system into the catch basin located at the west end of Tank 200
- RW021-83; from the drum crushing area in Building B3 to Tank 200

There were no detectable concentrations of VOC compounds in the performance sampling exceeding the NYSDEC Class GA criteria.

Integrity Evaluation

With the exception of the four minor piping deficiencies described in Section 2, the piping was observed to be in good condition in the ISS-1 Branch, and there were no structural breaches in this segment of the piping.

Soil Sampling

Four soil samples were collected along the ISS-1 section to demonstrate that in-place closure of the ISS had not left unacceptable soil impacts.

Samples SS-030 (3-7'), SS-031 (2-6'), SS-032 (2-6') were located within the Building 58/83 AOC near the west end of the Site. Analytical results from these soil samples indicated that there is mercury and some SVOCs in the form of Polycyclic Aromatic Hydrocarbons (PAHs) present in the soils.

Samples SS-028 (3-7') and SS-029 (3-7') were located near the east end of the ISS-1 section. Analytical results show that there were some PAHs present. Mercury was also detected.

Closure

During the closure of ISS-1, underground storage Tank 200 and associated piping and catch basins were removed. This work was completed under the Work Plan approved by the NYSDEC in April 2006. Soil samples were collected from the tank sidewalls and the bottom of the tank excavation. The sample results have been reported to the NYSDEC in the Tank 200 Closure Report dated September 2006.

An attempt was made to access the line that was reportedly installed across the east side of Building 53. Two exploratory excavations were made but the reported line was not found. On this basis, it was concluded that the line had been previously removed.

To close ISS-1, the following lines were grouted with a cement/bentonite grout.

- From the former drum crushing area within Building 83 to Tank 200 (50 gallons of grout)
- From MH-A1 to Tank 200 (630 gallons of grout)

4.4.2 Line A (ISS-2)

Description

ISS-2 includes the piping entering into the concrete vault outside of the southwest corner of Building 42, and the discharge from the vault to MH-A1 (Figure 1-2)

Cleaning/Performance Sampling

The piping run extending to the east from the vault was back flushed and sampled (RW-015-42). The line from the vault to MH-A1 was flushed from the vault and a sample of the rinseate was collected at the manhole (RW-016-A1).

There were no detections of VOCs in the performance samples.

Integrity Evaluation

The piping was observed to be in good condition in the ISS-2 Branch, and there were no structural deficiencies or apparent breaches in this segment of the piping.

Soil Sampling

Three soil samples were collected along the ISS-2 section to demonstrate that in-place closure of the ISS had not left unacceptable soil impacts.

Samples SS-025(4-8'), SS-026(4-8') and SS-026(8-10') were located along the ISS line between Manhole A-1 and Building 42 (Figure 1-2). Analytical results from the SS-025 samples indicated that there are PAH compounds and mercury present in the soils with elevated concentrations.

Closure

During the closure of ISS-2, the concrete vault located outside of the southwest corner of Building 42 was closed by backfilling with stone. The roof drain from Building 42 was disconnected from the vault. The piping entering the vault from the east side was plugged at the vault and grouted from the north side with cement/bentonite grout (90 gallons of grout).

The piping run from the vault to MH-A1 was grouted (50 gallons of grout).

4.4.3 Line A (ISS-3)

Description

ISS-3 includes the ISS line that drains the above ground storage tank containment area. The last of the tanks within this containment was permanently closed in June 2006.

Cleaning/Performance Sampling

The ISS-3 line was flushed from the valve box to MH-A1. A rinseate sample was collected at MH-A1 and identified as RW-017-A1. There were no detections of VOCs in the performance sample exceeding the NYSDEC Class GA criteria.

Integrity Evaluation

The piping was observed to be in good condition in the ISS-3 Branch, and there were no structural deficiencies or apparent breaches in this segment of the piping.

Soil Sampling

Two soil samples were collected along the ISS-3 section to demonstrate that in-place closure of the ISS had not left unacceptable soil impacts.

Samples SS-023 (2-4) and SS-024 (2-4.5) were located along the ISS line between MH-A1 and the valve pit (Figure 1-2). No elevated concentrations of organic compounds are present in the soils. Elevated mercury concentrations were found in 2 soil samples.

Closure

To close the ISS-3 line, the drain from the tank containment area was disconnected from the ISS. The line was grouted from the valve pit to MH-A1 (200 gallons of grout).

4.4.4 Line A (ISS-4)

Description

ISS-4 includes MH-A1, the buried vault located directly north of the MH-A1, and the spill containment pad located northwest of MH-A1. This section also includes the line from MH-A1 to Building 45 (grit chamber) and the abandoned line from the base of the cliff below MH-A1 that formerly led to the WWTP.

Cleaning/Performance Sampling

The ISS-4 line was cleaned by jet washing from the grit chamber to MH-A1.

Two performance samples were collected. RW-001-A1 was collected from the section of the ISS-4 line from the base of the cliff to the grit chamber and RW-002-A1 was collected from MH-A1 to the grit chamber. There were no detectable concentrations of VOC compounds in the performance sampling exceeding the NYSDEC Class GA criteria.

Integrity Evaluation

The piping was observed to be in good condition in the ISS-4 branch, and there were no structural deficiencies or apparent breaches in this segment of the piping.

Soil Sampling

Three soil samples were collected from the ISS-4 section to demonstrate that in-place closure of the ISS had not left unacceptable soil impacts. Sample SS-027-A1 (3-7') was collected beside MH-A1, SS-043 (3-7') was located near Building 45, and SS-044 (3-7') is located beside the lower section near Building 85.

Analytical results from the SS-025 (4-8') samples indicated that there are PAH compounds and mercury present in the soils with elevated concentrations.

Closure

During the closure of ISS-4, the vault located north of MH-A1 was excavated and grouted. MH-A1 was backfilled with grout to the point at which all of the piping was covered. The upper part of the manhole was filled with stone. The ISS-4 line from the base of the cliff to the grit chamber was opened and backfilled with grout (340 gal). The former ISS pipeline from the base of the cliff was also grouted (100gal).

4.4.5 Line B (ISS-5)

Description

ISS-5 includes the all of the areas with flow to the WWTP originating from Buildings 70, 26, and 55 (Figure 1-3). All flow from this section enters the grit chamber through the line that formerly serviced the north part of the site from MH-B2.

During the Phase I RFA, ISS-5 was partially closed by grouting. The ISS-5 section includes the piping passing south of Building 26, including the spill containment system for the boiler house fuel-oil offloading area. The ISS-5 work completed in the Phase II work also included the section from MH-B1 that was not previously closed during the Phase 1 ISS investigation and the boiler house blowdown pit. These sections all flow into and through the "3x3 vault" that was identified near the south east corner of Building 55. Also included in ISS-5 is the floor drain/cleanout located in the bottom of the steps east of Building 55.

Cleaning/Performance Sampling

Piping runs within ISS-5 were cleaned by flushing with a high pressure nozzle. Following flushing, a performance samples was collected (RW-024).

There were no detections of VOCs in the performance sampling exceeding the NYSDEC Class GA criteria.

Integrity Evaluation

The piping was observed to be in good condition in the ISS-5 Branch, and there were no structural deficiencies or apparent breaches in this segment of the piping

Soil Sampling

Eight soil samples were collected along the ISS-5 section to demonstrate that in-place closure of the ISS had not left unacceptable soil impacts.

Samples SS-020 (4-6'), SS-021 (4-6'), and SS-022 (3-4') were located along the ISS-5 line between the boiler house (Building 26) and Building 42. This section was closed during the Phase I work. These samples were collected in response to recommendations from Phase I. PAH concentrations were elevated in the three samples. In the SS-021 sample, other SVOCs were detected and the concentrations of dibenzofuran and Indeno(1,2,3-cd)pyrene were elevated. The concentration of mercury in the SS-021 was 0.364 mg/kg.

Soil Sample SS-015 (4-7') was located along the former line to Building 70 at the northeast corner of Building 26. Soil samples from this location contained some elevated PAH concentrations. Mercury was detected at this location with a concentration of 0.211 mg/kg.

Soil Sample SS-016 (4-5') was located between Building 26 and the above ground storage tank (AST) containment area. This area was used for the offloading of fuel oil for use in the boilers. No organic compounds were detected and the mercury concentration was 0.15 mg/kg.

Samples SS-017 (8-12'), SS-018 (4-8') and SS-019 (4-8') were located along the ISS piping south of Building 55. PAHs and mercury were found in all three of these samples with elevated concentrations. In addition to the PAHs, the SVOC phenol was found to be elevated in sample SS-018 (4-8'). The concentration of mercury in the three soil samples ranged from 0.139 to 1.84 mg/kg.

Closure

During the closure of ISS-5, the vault previously identified as the "3x3 vault" located south of Building 55 was excavated for grouting. The section from the vault was grouted to the grit chamber and the vault was grouted full (300 gal). The section from the boiler house blow down chamber to the vault was also grouted (320 gal).

The floor drain/cleanout east of Building 55 to the ISS-5 line was sealed with 30 gallons of grout. The spill containment basins near the fuel oil unloading area for Building 26 were grouted to the top of the discharge piping (210 gal). The upper sections of the containment structures were backfilled with stone fill.

Based on the results of the soil samples an attempt was made to excavate soils in the vicinity of SS-020 and SS-021. The former ISS-5 line was exposed and was found to have been installed within a trench cut into the shallow bedrock at a depth of approximately 2.5 feet. Also within the trench was an 8-inch diameter freshwater fire line. The size of the trench and the need to keep the fire line intact prevented the excavation of any additional material in this area.

4.4.6 Line B (ISS-6)

Description

ISS-6 includes all of the areas with flows passing through Manhole B2 to Building 45. This includes Buildings 28 (east end), 29, 30, 37, 38, 39, 40, 56, 65, 70, and manholes B2, B3, B4, B5, B6.

During the integrity evaluation an error in the site plan was identified. The drawings show that the Building 56 and Building 29 floor drains are connected to the old B-line sewer to the grit chamber that is included in ISS-5. The performance of dye testing showed that the drains are actually connected to MH-B2 through the former Building 30 service connection. This correction has been made to the plans (Figure 1-3).

Cleaning/Performance Sampling

All of the piping within ISS-6 was cleaned by flushing with a high pressure nozzle. Following flushing, the following performance sampling was completed.

- RW-003-B2 - from MH-B2 to Building 45
- RW-005-BG - from former Building 30 service connection into MH-B2
- RW-006-B3 - from piping north of MH-B3
- RW-007-B3 - from piping north of MH-B3
- RW-008-B3 - from Building 70 to MH-B3
- RW-009-B2 - from MH-B3 to MH-B2
- RW-010-B6 - from Building 38 to MH-B6
- RW-011-B5 - from MH-B6 to MH-B5
- RW-012-B4 - from Building 39 and Building 37 to MH-B4
- RW-013-B3 - from MH-B4 through MH-B5 to MH-B2
- RW-014-B2 - from Building 56 floor drain to MH-B2

Chlorobenzene was detected in samples that were collected in MH-B2 of water coming from the connection to the Building 29/56 floor drains (RW-005-BG). As a result of this flow, the sample from MH-B2 to the grit chamber also indicated detectable chlorobenzene concentrations. Following the collection of performance samples, it was noted that there was a continuous water flow entering MH-B2 from the former Building 30 service line. The source of this flow was identified as coming from a break in the connection coming from the Building 56 area.

Benzene was detected in the RW-005-BG sample in exceedance of the Class GA guidance. This water was found to originate from the groundwater in the Building 56 AOC.

Integrity Evaluation

There were several observed deficiencies during the video camera inspection of the ISS-6 branch piping, as summarized in Section 2. In addition to the deficiencies noted in the video inspection, there was an observed breach in a rubber "Fernco" piping connection near the Building 56 wash rack area. This breach created a gap in the piping sections and, as a result, groundwater infiltration continuously entered the ISS piping at that location. The remaining segments of the ISS–6 Branch were observed to be in good condition with no apparent structural deficiencies or breaches.

Soil Sampling

A total of fourteen soil samples were collected within the ISS-6 section to demonstrate that in-place closure of the ISS had not left unacceptable soil impacts. The locations of the soil samples are shown on Figure 1-3.

Samples SS-001-B20 (2-6') and SS-002-B3 (3-7') are located in the northern section of the Site north of MH-B3. No VOCs were detected; PAHs with slightly elevated concentrations were detected and elevated mercury was found in the SS-001-B20 (2-6') sample.

Samples SS-008-B6 (3-7') and SS-009-B6 (3-7') are located in the northern section of the Site south of MH-B6. No VOCs were detected, a number of SVOCs were detected, although the concentrations were not excessive. Mercury was found with slightly elevated levels.

Sample SS-011-B4 (4-7') was located east of MH-B4 on the service connection from Building 39. No VOCs were detected, and SVOC concentrations were not elevated. The concentration of mercury was 0.206 mg/kg.

Samples SS-014-MHB2 (4-8') and SS-014-MHB2 (8-11') were located beside Manhole B2. In the shallow sample, a number of SVOCs were detected and the mercury concentration was 0.366 mg/kg. In the deep sample, no SVOCs were detected and the mercury concentration was 0.025 mg/kg.

Closure

To complete the closure of the ISS-6, all of the lines upgradient of MH-B5 were grouted with cement. The section from MH-B5 through MH-B2 to the grit chamber was grouted with cement/bentonite grout. The section from Building 29 and Building 56 to MH-B2 was also grouted. Manholes were grouted to the top of the pipes and then the remainder was backfilled with stone.

4.4.7 Line C (ISS-8)

Description

ISS-8 includes piping from Manhole C-2, between Buildings 1 and 4, through Building 2 to Manhole C-1 to Building 45. ISS-8 was the trunk line that formerly carried flow from ISS-9, ISS-10 and ISS-11 (Figure 1-4).

Cleaning/Performance Sampling

The ISS-8 line and accessible service lines were cleaned by flushing with a high pressure nozzle. Following flushing, the following performance sampling was completed.

- RW-025-GC - from MH-C2 to Building 45

The results from this sample were all non-detect.

Integrity Evaluation

There were numerous deficiencies observed in the ISS-8 Branch piping during the video camera inspection activities. These deficiencies included cracks, holes, and ruptures to the pipe. These deficiencies were all relatively minor in nature, and there were no significant structural deformation or collapses of any of the piping segments. The video camera inspection also revealed that an apparent repair to the crown of the piping had been completed at some time in the past.

Soil Sampling

Nine soil samples were collected along the ISS-8 section to demonstrate that in-place closure of the ISS had not left unacceptable soil impacts.

Samples SS-034-MHC2 (2-6'), SS-035-ISS8 (3-7'), and SS-036-ISS8 (3-7') are located along the east end of the ISS-line. There were no detections of organic compounds or mercury with increased concentrations in these samples.

Soil samples SS-033-ISS8 (3-7'), SS-037-ISS8 (3-7'), SS-038-ISS8 (4-8'), SS-039-ISS8 (4-8'), and SS-40-ISS8 (4-8'), contained elevated concentrations of PAHs and mercury.

Sample SS-042-ISS8 (3-7') had elevated concentrations of PAHs, mercury, dibenzofuran and phenol.

Closure

To complete the closure of the ISS-8 the line from MH-C2 to the grit chamber and all accessible service lines were backfilled with a cement/bentonite grout. The "3x3 sewer pit" located between Building 1 and Building 4 just east of Building 2 was excavated in an attempt to remove the structure. The presence of other utilities including storm sewer and gas lines prevented the removal of this structure. The vault was backfilled with grout and topped off with stone.

MH-C1 and MH-C2 were grouted to the top of the piping and then the remainder was backfilled with stone.

4.4.8 Line C (ISS-9)

Description

ISS-9 includes the piping for the force main between the Washington Avenue Tank Farm and MH-C2.

Cleaning/Performance Sampling

The ISS-9 line was replaced in 1999 with a cast iron line. The section transiting Fishkill Creek was replaced with Sch. 40 PVC. In accordance with the approved Work Plan, no cleaning or performance sampling of the ISS-9 was completed during the Phase II work

Integrity Evaluation

In accordance with the approved Work Plan, an integrity evaluation was not completed on the ISS-9 section.

Soil Sampling

In accordance with the approved Work Plan, no soil sampling was completed along the ISS-9 section.

Closure

The ISS-9 section was closed by disconnecting the 3-inch PVC line across the bridge. This line was cut and capped. The pump in the Tank Farm lift station is currently out of service. The ISS-9 line was sealed within the main facility during the grouting of MH-C2 and the ISS-8 line.

4.4.9 Line D (ISS-7)

Description

ISS-7 was replaced in 1997 and consists of one 6-inch PVC line and one 4-inch PVC line running together from Building 3 to Building 45 (grit chamber). During excavation of impacted soils to the northeast of Building 45, the two PVC pipes were exposed.

Cleaning/Performance Sampling

In accordance with the approved Work Plan, no cleaning or performance sampling of this section was completed.

Integrity Evaluation

In accordance with the approved Work Plan, the integrity of this line was not further evaluated.

Soil Sampling

During the removal of soils from the northeast corner of Building 45 as a result of elevated SVOCs in SS-042 (3-7'), the two pipes from ISS-7 were uncovered. These pipes were found to be overlying a concrete slab. Soil in the area was removed and disposed of in a secure landfill. Two soil samples (SS-B45slabNorth, SS-B45slabSouth) were collected from underneath the slab. The results from these samples show the presence of elevated PAH concentrations.

Closure

The 4-inch PVC and the 6-inch PVC pipes that were uncovered between Building 3 and the grit chamber were disconnected from the grit chamber and removed back to the concrete slab. The piping was capped and left in place.

SECTION 5

SUMMARY AND CONCLUSIONS

5.1 INTRODUCTION

The ISS at the Chevron Beacon, New York Facility was permanently closed.

The 2005 Work Plan included a discussion of the variety of procedures that would be used to close the ISS. Options included excavation of the pipelines or closure in place by sealing the piping ends with cement based grout. It was intended that the method of closure would be based upon the accessibility of the pipe and the results of the integrity evaluation.

A review of the available site plans and as-built photographic documentation found that the majority of the ISS lines had been installed underneath other utilities. In addition, the ISS lines tended to have been installed at depths that would have required significant excavation to access and remove them. As a result of the difficulty of access, Chevron elected to complete the integrity evaluation and soil sampling first and then determine, based on the evaluation results, whether the lines needed to be removed or if closure in place by backfilling with a cement/bentonite grout would constituent an acceptable closure practice.

5.2 SECTION SUMMARIES

ISS-1

Tank 200 and the associated controls and piping were excavated and removed. Excavated soil was transported to the High Acres Landfill for disposal. The tank was cleaned and staged for future disposal. A separate report documenting the removal of Tank 200 was submitted to the NYSDEC.

The remainder of ISS-1 was closed in place and grouted. There were no detectable concentrations of VOCs in the performance samples.

Soil sampling indicated the presence of elevated concentrations of PAHs and mercury. Additional work will be completed in the vicinity of ISS-1 as part of the Building 58/83 AOC.

ISS-2

All of the piping segments within the ISS-2 Section were closed in place and filled with a cement/bentonite grout. There were no detections of VOCs in the performance samples.

Two soil samples were collected along the ISS-2 line. Analytical results indicate the presence of slightly elevated concentrations of PAHs and mercury.

ISS-2 is considered to be closed and no additional work is planned in this section.

ISS-3

ISS-3 was closed in place by filling with a cement/bentonite grout. This line was disconnected from the aboveground storage tank secondary containment system at the Boiler House Tank Farm. There were no detections of VOCs in the performance samples.

Soil analytical results indicate the presence of slightly elevated concentrations of mercury.

ISS-3 is considered to be closed and no additional work is planned in this section.

ISS-4

ISS-4 was closed in place by grouting MH-A1 and the sub-grade piping between MH-A1 and Building 45.

There were no detections of VOCs in the performance samples or the soil samples. PAHs and mercury were detected with elevated concentrations.

The class and concentrations of contaminants identified in the soils are consistent with the historical use of the Site and do not indicate that the impacts are a results of the ISS operations. ISS-4 is considered to be closed and no additional work is planned in this section.

ISS-5

ISS-5 was closed in place by filling with a cement/bentonite grout.

There were no detections of VOCs in the performance samples or the soil samples. PAHs and mercury were detected with elevated concentrations in the soil samples. The presence of shallow bedrock and underground utilities prevented the removal of additional soils as recommended in the Phase I report.

With the exception of the above mentioned inaccessible section, the class and concentrations of contaminants identified in the soils do not indicate that the impacts are a results of the ISS operations. ISS-5 is considered to be closed and no additional work is planned in this section.

ISS-6

ISS-6 was closed in place by filling with a cement/bentonite grout.

The source of the water that was sampled from MH-B2 during the performance sampling was identified as coming from a failed piping connection in the ISS piping in the area of the clean-out in the Building 29/56 courtyard. Additional work in this are will be included in the Building 56 AOC work plan. There were no VOCs detected in the performance samples from other ISS-6 piping. In the soil samples, PAHs and mercury were detected at elevated concetrations.

With the exception of the area within the Building 56 AOC, the class and concentrations of contaminants identified in the soils are consistent with the prior use of the Site and do not

indicate that the impacts are a results of the ISS operations. ISS-6 is considered to be closed and no additional work is planned in this section.

ISS-7

ISS-7 was closed by disconnecting the existing piping from the WWTP. During the piping removal, soils were excavated and disposed of at the High Acres Landfill. The soil samples collected from underneath the concrete slab that was uncovered indicate that PAH and metals exist with elevated concentrations.

The class and concentrations of contaminants identified in the soils are consistent with the prior use of the Site and do not indicate that the impacts are a results of the ISS operations. ISS-7 is considered to be closed and no additional work is planned in this section.

ISS-8

ISS-8 was closed in place by filling with a cement/bentonite grout. There were elevated concentrations of SVOCs and mercury in soil samples.

The class and concentrations of contaminants identified in the soils are consistent with the historical use of the Site and do not indicate that the impacts are a results of the ISS operations. ISS-8 is considered to be closed.

ISS-9

ISS-9 was permanently closed by grouting MH-C2. The piping across the walk bridge from the Tank Farm was disconnected and plugged. The lift station and pump in the Tank Farm have been placed out of service. ISS-9 is considered to be closed and no additional work is planned in this section.

SECTION 6

REFERENCES

NYSDEC, 1998, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Division of Water Technical And Operational Guidance Series (1.1.1), June 1998

Parsons, 2005 Work Plan- Industrial Sewer System, Phase II RCRA Facility Assessment – Sampling Visit, Inactive Line Abandonment, Former Texaco Research Center, Beacon, New York., October 2005.

IT Corporation, 2002 Industrial Sewer System Closure Report, ISS 1-6, 8,10 and 11, Texaco Research Center, Beacon New York., IT Corporation., March 2002

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SEAL

CONSULTANT PROJ. NO.

SUBCONSULTANT PROJ. NO.

NO.	DATE	DESCRIPTION	CHKD
A	6/7/06	ISSUED FOR REVIEW	XXX

PROJECT TITLE

CHEVRON
BEACON, NY SITE
REMEDIATION
MANAGEMENT

45 OLD GLENHAM ROAD
BEACON, NEW YORK

DATE	6/27/06
DRAWN BY	MAB
CHECKED BY	XXX
APPROVED BY	XXX

NOT FOR CONSTRUCTION	☒
RELEASED FOR CONSTRUCTION	☐
AS-BUILT DRAWING	☐

PROJECT NO.

442043

DRAWING TITLE

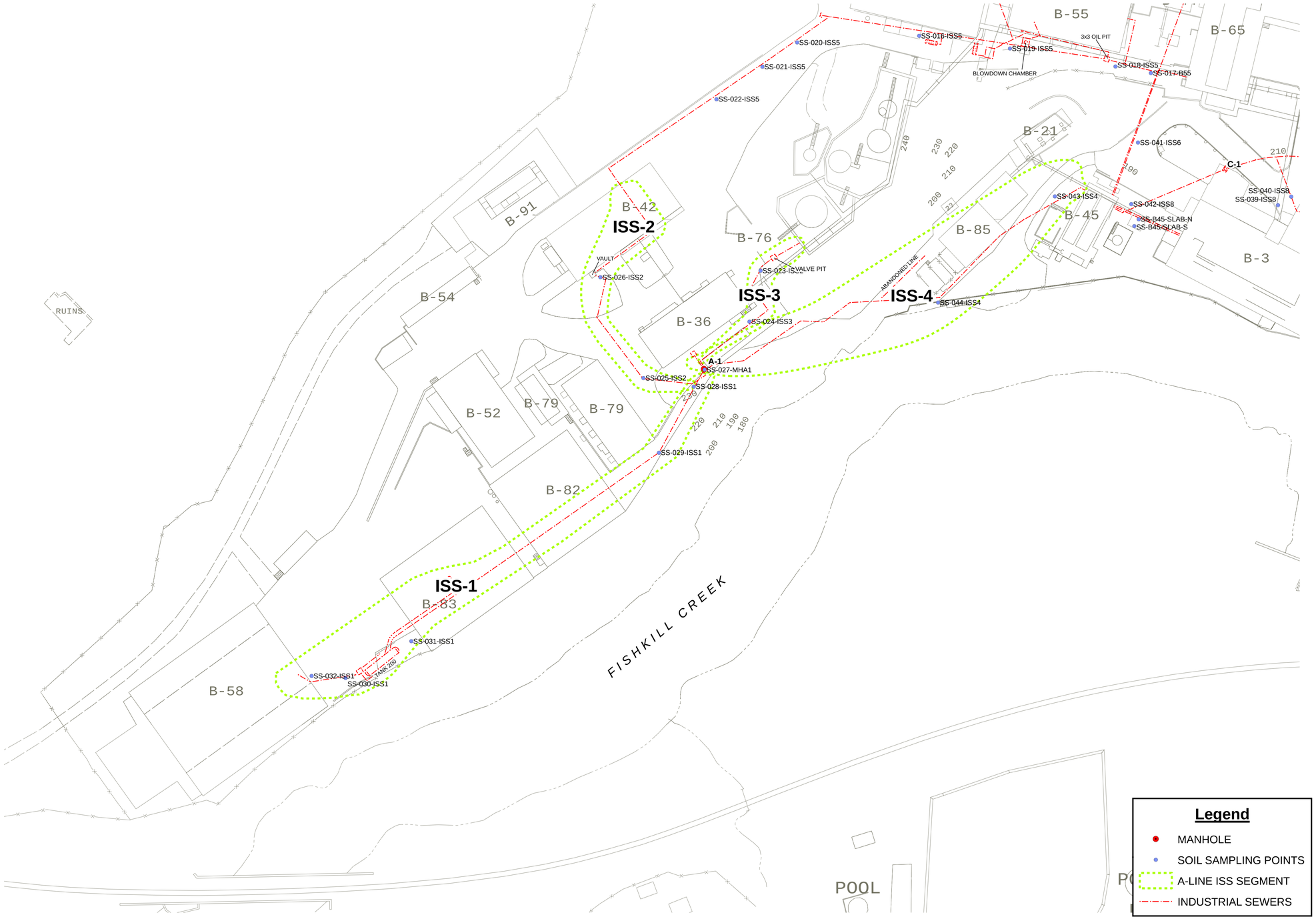
ISS SITE PLAN
B-LINE

SCALE:

AS SHOWN

DRAWING NO.

FIGURE 1-3



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442043

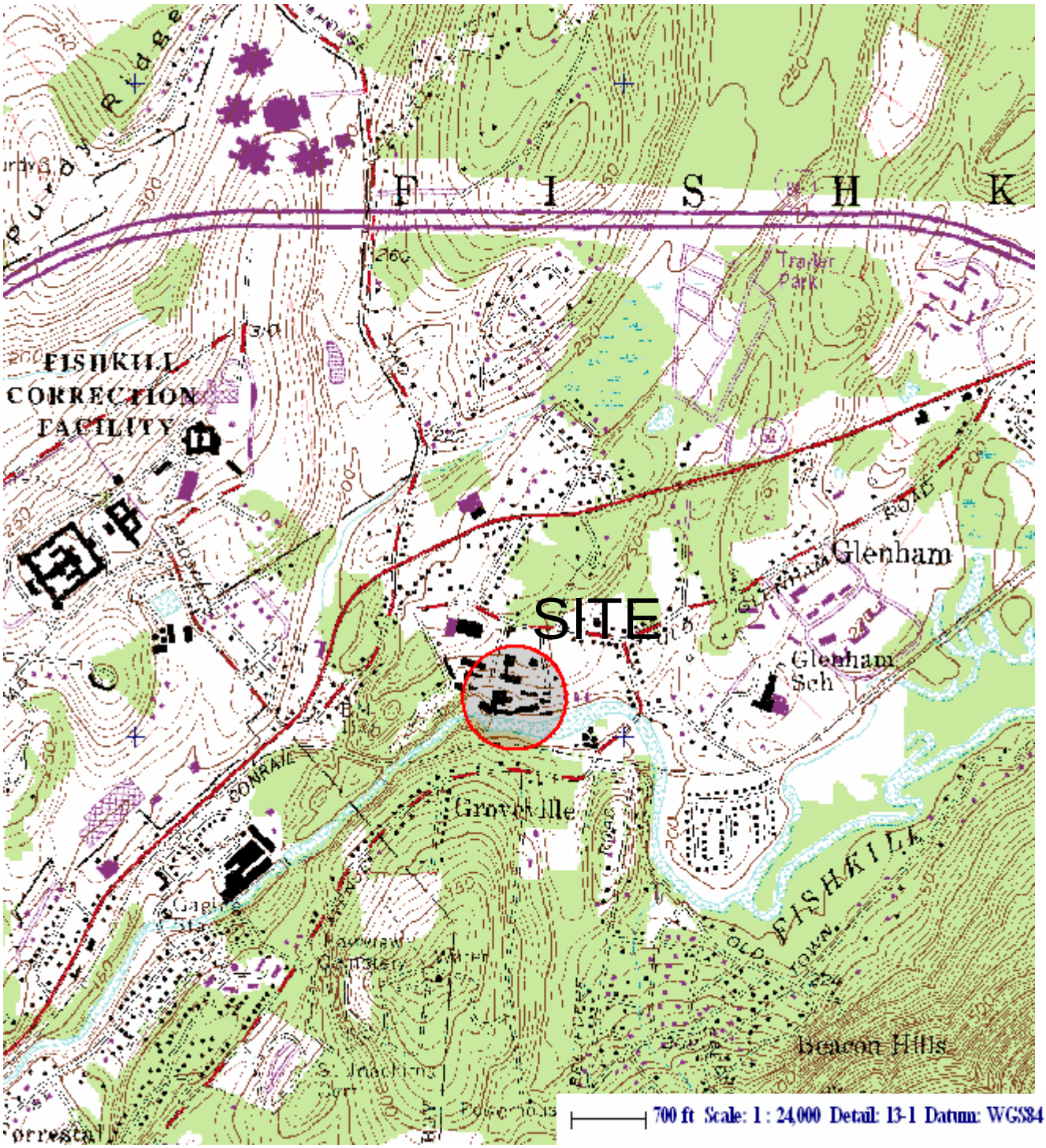
DRAWING TITLE

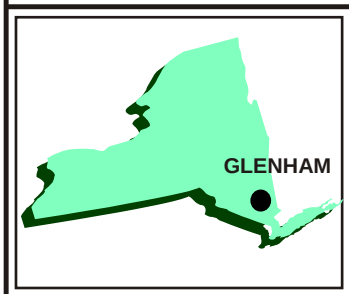
ISS SITE PLAN
A-LINE

SCALE:
AS SHOWN

DRAWING NO.

FIGURE 1-2





New York
Vicinity Map

LATITUDE: N41° 31' 04"
LONGITUDE: W73° 56' 14"

N

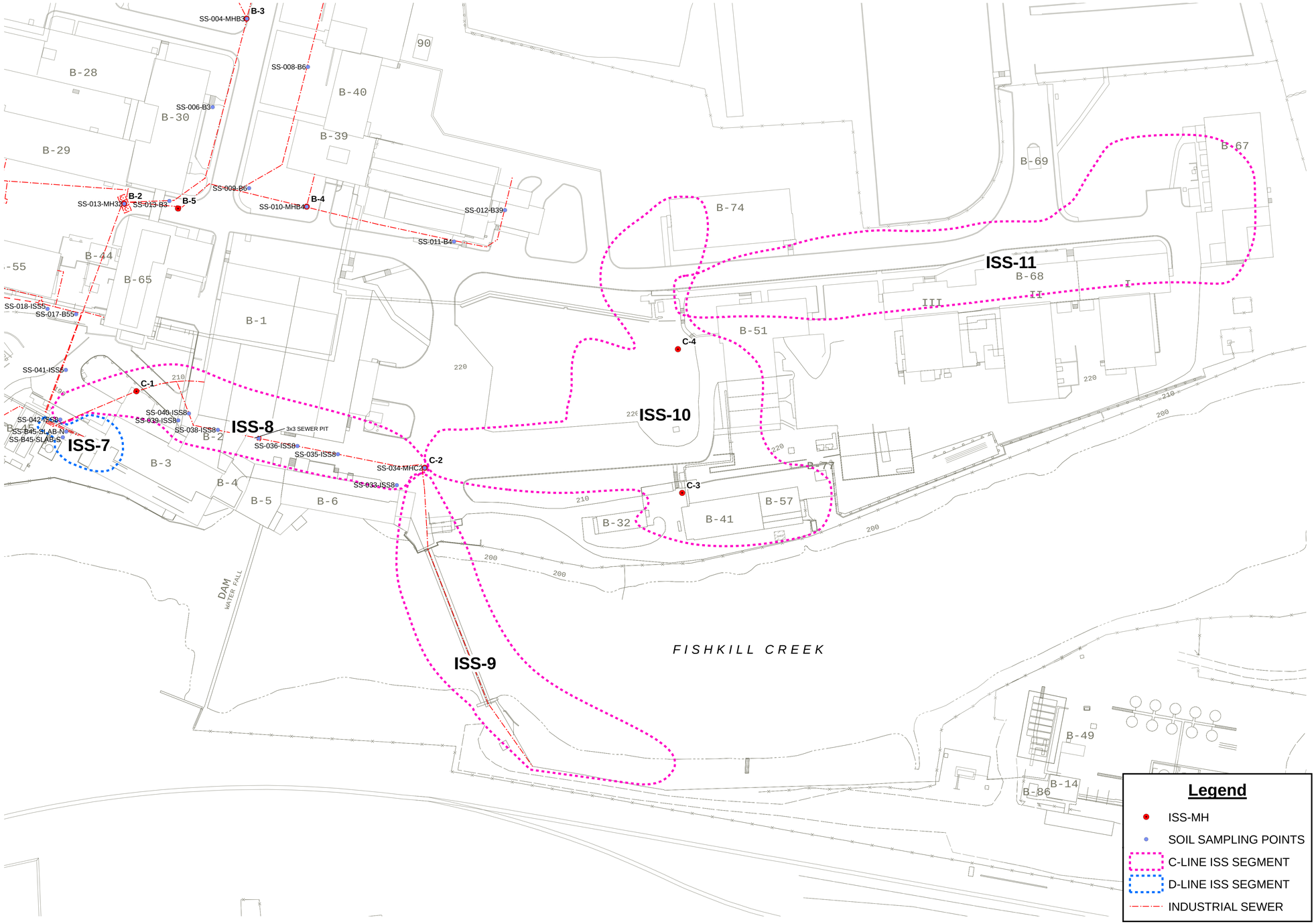
SOURCE: DeLORME 3-D
TOPOQUAD PROGRAM

Figure 1-1

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY (EMC)
FORMER TEXACO RESEARCH FACILITY
GLENHAM, NEW YORK

SITE LOCATION MAP

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088 PHONE: (315) 451-9560



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NO.	DATE	DESCRIPTION	CHKD
A	6/7/06	ISSUED FOR REVIEW	XXX

PROJECT TITLE
CHEVRON
BEACON, NY SITE
REMEDIATION
MANAGEMENT
45 OLD GLENHAM ROAD
BEACON, NEW YORK

DATE	6/27/06
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APPROVED BY	XXX

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PROJECT NO.
442043

DRAWING TITLE
ISS SITE PLAN
C & D-LINE

SCALE:
AS SHOWN

DRAWING NO.
FIGURE 1-4

TABLE 2-1

Performance Sampling Analytical Data Summary
Industrial Sewer System Closure

Former Texaco Research Center
Beacon, New York

Interim Corrective Measure Industiral Sewer System		Field Sample ID Location Sample Date Sample Purpose	RW-001-A1 MHA1 2/9/2006 Regular sample	RW-002-A1 MHA1 2/9/2006 Regular sample	RW-003-B2 MHB2 2/9/2006 Regular sample	RW-004-BG FIRE WATER 2/9/2006 Background	RW-005-BG B56 2/9/2006 Background	RW-006-B3 MHB3 2/14/2006 Regular sample	RW-007-B3 MHB3 2/14/2006 Regular sample	RW-008-B3 MHB3 2/14/2006 Regular sample
	Units	NYSDEC TOGS Class GA								
VOLATILE ORGANIC COMPOUNDS										
1,1,1-Trichloroethane	ug/l	5	0.8 U	0.8 UJ	0.8 U	0.8 UJ	0.8 UJ	0.8 U	0.8 U	0.8 UJ
1,1,2,2-Tetrachloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/l	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,2-Dichloroethane	ug/l	0.6	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ
1,2-Dichloropropane	ug/l	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	ug/l	50	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/l	50	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/l	1	0.5 U	0.5 U	0.5 U	0.5 U	**2 J**	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/l	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/l	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	60	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	ug/l	5	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ
Chlorobenzene	ug/l	5	2 J	0.8 U	**31**	0.8 U	**300**	5	1 J	0.8 U
Chloroethane	ug/l	5	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/l	7	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,2-Dichloroethylene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/l	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/l	5	0.8 U	0.8 U	1 J	0.8 U	1 J	0.8 U	0.8 U	0.8 U
Methylene chloride	ug/l	10	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	ug/l	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/l	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	ug/l	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/l	5	3 J	0.8 U	3 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U

Notes:
690 : Bold indicate concentration exceeding the NYSDEC Class GA Guidance
U : compound was not detected
J: estimated value (the resultsis greater than the MDL and less than the LOQ)
NYSDEC TOGS: Division of Water Technical Operation and Guidance Series (1.1.1)
NYSDEC: New York State Department of Environemtal Conservation
MDL: method detection limit
LOQ: limit of quantitation
ug/L: micrograms per Liter

TABLE 2-1

Performance Sampling Analytical Data Summary
Industrial Sewer System Closure

Former Texaco Research Center
Beacon, New York

Interim Corrective Measure Industiral Sewer System		Field Sample ID Location Sample Date Sample Purpose	RW-009-B2 MHB2 2/14/2006 Regular sample	RW-010-B6 MHB6 2/14/2006 Regular sample	RW-011-B5 MHB5 2/14/2006 Regular sample	RW-012-B4 MHB4 2/14/2006 Regular sample	RW-013-B2 MHB2 2/14/2006 Regular sample	RW-014-B2 MHB2 2/14/2006 Regular sample	RW-015-42 B42 2/14/2006 Regular sample	RW-016-A1 MHA1 2/15/2006 Regular sample
	Units	NYSDEC TOGS Class GA								
VOLATILE ORGANIC COMPOUNDS										
1,1,1-Trichloroethane	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/l	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,2-Dichloroethane	ug/l	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
1,2-Dichloropropane	ug/l	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	ug/l	50	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
Acetone	ug/l	50	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/l	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/l	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/l	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide	ug/l	60	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/l	5	**14**	0.8 U	0.8 U	0.8 U	3 J	4 J	0.8 U	0.8 U
Chloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/l	7	0.8 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,2-Dichloroethylene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/l	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Methylene chloride	ug/l	10	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	ug/l	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/l	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	ug/l	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U

Notes:
690 : Bold indicate concentration exceeding the NYSDEC Class GA Guidance
U : compound was not detected
J: estimated value (the resultsis greater than the MDL and less than the LOQ)
NYSDEC TOGS: Division of Water Technical Operation and Guidance Series (1.1.1)
NYSDEC: New York State Department of Environemtal Conservation
MDL: method detection limit
LOQ: limit of quantitation
ug/L: micrograms per Liter

TABLE 2-1

Performance Sampling Analytical Data Summary
Industrial Sewer System Closure

Former Texaco Research Center
Beacon, New York

Interim Corrective Measure Industiral Sewer System		Field Sample ID Location Sample Date Sample Purpose	RW-017-A1 MHA1 2/15/2006 Regular sample	RW-018-A1 MHA1 2/15/2006 Regular sample	RW-019-BG FIRE WATER 2/15/2006 Background	RW-020-58 B58 2/15/2006 Regular sample	RW-021-83 B83 2/15/2006 Regular sample	RW-024-GC B45 2/16/2006 Regular sample	RW-025-GC B45 2/16/2006 Regular sample	RW-027-BG BG 3/23/2006 Background
	Units	NYSDEC TOGS Class GA								
VOLATILE ORGANIC COMPOUNDS										
1,1,1-Trichloroethane	ug/l	5	0.8 U	0.8 U	0.8 U	2 J	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/l	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,2-Dichloroethane	ug/l	0.6	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
1,2-Dichloropropane	ug/l	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	ug/l	50	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U
Acetone	ug/l	50	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/l	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J
Bromodichloromethane	ug/l	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/l	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Carbon disulfide	ug/l	60	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Chlorobenzene	ug/l	5	0.8 U	0.8 U	0.8 U	1 J	0.8 U	0.8 U	0.8 U	**280**
Chloroethane	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/l	7	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,2-Dichloroethylene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/l	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 J
Methylene chloride	ug/l	10	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	ug/l	5	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/l	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	ug/l	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	ug/l	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/l	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U

Notes:
690 : Bold indicate concentration exceeding the NYSDEC Class GA Guidance
U : compound was not detected
J: estimated value (the resultsis greater than the MDL and less than the LOQ)
NYSDEC TOGS: Division of Water Technical Operation and Guidance Series (1.1.1)
NYSDEC: New York State Department of Environemtal Conservation
MDL: method detection limit
LOQ: limit of quantitation
ug/L: micrograms per Liter

Table 3-1

Soil Analytical Data Summary
Industrial Sewer System Closure

Former Texaco Research Center
Beacon, New York

Industrial Sewer System Phase II RFA	Field Sample ID Location Sample Date Sample Depth Sample Purpose	SS-001-B20 (2-6) B20-SS-001 2/20/2006 2-6 FT Regular sample	SS-002-B3 (3-7) B3-SS-002 2/21/2006 3-7 FT Regular sample	SS-003-B3 (3-4.5) B3-SS-003 2/21/2006 3-4.5 FT Regular sample	SS-004-B3 (3-7) B3-SS-004 2/21/2006 3-7 FT Regular sample	SS-005-B73 (2-6) B73-SS-005 2/21/2006 2-6 FT Regular sample	SS-006-B3 (3-7) B3-SS-006 2/21/2006 3-7 FT Regular sample	SS-007-MHB6 (4-7) MHB6-SS-007 2/21/2006 4-7 FT Regular sample	SS-008-B6 (3-7) B6-SS-008 2/21/2006 3-7 FT Regular sample	SS-009-B6 (3-7) B6-SS-009 2/21/2006 3-7 FT Regular sample	SS-010-MHB4 (3-7) MHB4-SS-010 2/22/2006 3-7 FT Regular sample	SS-011-B4 (4-7) B4-SS-011 2/22/2006 4-7 FT Regular sample	SS-012-B39 (3-7) B29-SS-012 2/22/2006 3-7 FT Regular sample	SS-013-B3 (3-7) B3-SS-013 2/22/2006 3-7 FT Regular sample
Parameter Name	Units													
Volatile Organic Compounds														
1,1,1-Trichloroethane	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	U
1,2-Dichloroethane	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	ug/kg	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	43	8 U	8 U
Benzene	ug/kg	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U
Carbon disulfide	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U
Carbon tetrachloride	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	ug/kg	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 J	1 J	1 J
Methylene chloride	ug/kg	2 U	5 J	2 U	2 U	3 J	2 U	2 U	4 J	5 J	2 U	2 U	2 U	2 U
Tetrachloroethylene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 J	1 J	2 J	9	5 J	4 J
trans-1,2-Dichloroethene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 J	10	6	6
Semivolatile Organic Compounds														
1,2,4-Trichlorobenzene	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
2,4,5-Trichlorophenol	ug/kg	77 U	81 U	74 U	72 U	72 U	74 U	72 U	78 U	76 U	74 U	78 U	74 U	73 U
2,4-Dichlorophenol	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
2,4-Dinitrophenol	ug/kg	770 U	810 U	740 U	720 U	720 U	740 U	720 U	780 U	760 U	740 U	780 U	740 U	730 U
2,6-Dinitrotoluene	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
2-Chlorophenol	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
2-Methylnaphthalene	ug/kg	39 U	120 J	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Acenaphthene[p]	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Acenaphthylene	ug/kg	62 J	48 J	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Anthracene[p]	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	56 J	38 U	37 U	39 U	37 U	37 U
Benzo(a)anthracene[p]	ug/kg	180 J	140 J	37 U	36 U	36 U	39 J	36 U	130 J	66 J	53 J	78 J	37 U	37 U
Benzo(a)pyrene[p]	ug/kg	340	130 J	37 U	36 U	36 U	41 J	36 U	130 J	68 J	37 U	79 J	37 U	37 U
Benzo(b)fluoranthene[p]	ug/kg	560 J	210	37 U	36 U	36 U	56 J	36 U	160 J	76 J	44 J	81 J	37 U	37 U
Benzo(ghi)perylene[p]	ug/kg	420	160 J	37 U	36 U	36 U	45 J	36 U	89 J	40 J	37 U	59 J	37 U	37 U
Benzo(k)fluoranthene[p]	ug/kg	220	110 J	37 U	36 U	36 U	37 U	36 U	83 J	40 J	37 U	61 J	37 U	37 U
Bis(2-ethylhexyl)phthalate (BEHP)	ug/kg	77 U	180 J	120 J	72 U	72 U	130 J	72 U	200 J	76 U	74 U	170 J	74 U	73 U
Butyl benzyl phthalate	ug/kg	77 U	81 U	74 U	72 U	72 U	74 U	72 U	78 U	76 U	74 U	78 U	74 U	73 U
Chrysene[p]	ug/kg	250	140 J	37 U	36 U	36 U	48 J	36 U	130 J	66 J	53 J	80 J	37 U	37 U
Di-n-butyl phthalate	ug/kg	77 U	81 U	74 U	72 U	72 U	74 U	72 U	78 U	76 U	74 U	78 U	74 U	73 U
Di-n-octyl phthalate	ug/kg	77 U	81 U	74 U	72 U	72 U	74 U	72 U	78 U	76 U	74 U	78 U	74 U	73 U
Dibenzo(a,h)anthracene[p]	ug/kg	140 J	47 J	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Dibenzofuran	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Diethyl phthalate	ug/kg	77 U	81 U	74 U	72 U	72 U	74 U	72 U	78 U	76 U	74 U	78 U	74 U	73 U
Dimethyl phthalate	ug/kg	77 U	81 U	74 U	72 U	72 U	74 U	72 U	78 U	76 U	74 U	78 U	74 U	73 U
Fluoranthene[p]	ug/kg	110 J	190 J	37 U	36 U	36 U	59 J	36 U	260	110 J	88 J	140 J	37 U	37 U
Fluorene	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Hexachlorobenzene	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Indeno(1,2,3-cd)pyrene	ug/kg	360	130 J	37 U	36 U	36 U	37 U	36 U	83 J	45 J	37 U	54 J	37 U	37 U
Isophorone	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Naphthalene[p]	ug/kg	39 U	52 J	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Nitrobenzene	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Phenanthrene[p]	ug/kg	39 U	99 J	37 U	36 U	36 U	37 U	36 U	230	91 J	72 J	66 J	37 U	37 U
Phenol	ug/kg	39 U	40 U	37 U	36 U	36 U	37 U	36 U	39 U	38 U	37 U	39 U	37 U	37 U
Pyrene[p]	ug/kg	150 J	200 J	37 U	36 U	36 U	54 J	36 U	240	120 J	88 J	140 J	37 U	37 U
Mercury	mg/kg	6.29 J	0.0755 J	0.0133 J	0.0366 J	0.024 J	0.0349 J	0.0758 J	0.162	0.216	0.116	0.206	0.168	0.0822 J

Notes:
U : compound was not detected
J: estimated value (the resultsis greater than the MDL and less than the LOQ)
ug/Kg : micrograms per Kilogram
p - PAH compounds

Table 3-1

Soil Analytical Data Summary
Industrial Sewer System Closure

Former Texaco Research Center
Beacon, New York

Industrial Sewer System Phase II RFA	Field Sample ID Location Sample Date Sample Depth Sample Purpose	SS-014-MHB2 (4-8) MHB2-SS-014 2/22/2006 4-8 FT Regular sample	SS-014-MHB2 (8-11) MHB2-SS-014 2/22/2006 8-11 FT Regular sample	SS-015-B26 (4-7) B26-SS-015 2/23/2006 4-7 FT Regular sample	SS-016-ISS5 (4-5) ISS5-SS-016 2/23/2006 4-5 FT Regular sample	SS-017-B55 (8-12) B55-SS-017 2/23/2006 8-12 FT Regular sample	SS-018-ISS5 (4-8) ISS5-SS-018 2/23/2006 4-8 FT Regular sample	SS-019-ISS5 (4-8) ISS5-SS-019 2/23/2006 4-8 FT Regular sample	SS-020-ISS5 (4-6) ISS5-SS-020 2/23/2006 4-6 FT Regular sample	SS-021-ISS5 (4-6) ISS5-SS-021 2/23/2006 4-6 FT Regular sample	SS-022-ISS5 (3-4) ISS5-SS-022 2/24/2006 3-4 FT Regular sample	SS-023-ISS3 (2-4) ISS3-SS-023 2/24/2006 2-4 FT Regular sample	SS-024-ISS3 (2-4.5) ISS3-SS-024 2/24/2006 2-4.5 FT Regular sample	SS-025-ISS2 (4-8) ISS2-SS-025 2/24/2006 4-8 FT Regular sample
Parameter Name	Units													
Volatile Organic Compounds														
1,1,1-Trichloroethane	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
1,1,2,2-Tetrachloroethane	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
1,1-Dichloroethane	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
1,1-Dichloroethylene	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
1,2-Dichloroethane	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Acetone	ug/kg	8 U	8 U	1000 U	8 U	16 J	8 U	8 U	8 U	1100 U	7 U	8 U	8 U	1000 U
Benzene	ug/kg	0.6 U	0.6 U	72 U	0.6 U	0.6 U	17	0.6 U	0.6 U	77 U	0.5 U	0.5 U	0.6 U	74 U
Carbon disulfide	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Carbon tetrachloride	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Chlorobenzene	ug/kg	1 U	1 U	1600	1 U	1 U	1 U	1 U	1 U	370 J	1 U	1 U	1 U	150 U
Chloroethane	ug/kg	2 U	2 U	290 U	2 U	2 U	2 U	2 U	2 U	310 U	2 U	2 U	2 U	300 U
Chloroform	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
cis-1,2-Dichloroethylene	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Ethylbenzene	ug/kg	1 U	2 J	270 J	1 U	1 U	3 J	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Methylene chloride	ug/kg	2 U	2 U	290 U	2 U	2 U	2 U	2 U	2 U	310 U	2 U	2 U	2 U	300 U
Tetrachloroethylene	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Toluene	ug/kg	4 J	5 J	140 U	3 J	1 U	20	4 J	3 J	150 U	1 U	1 U	1 U	150 U
trans-1,2-Dichloroethene	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Trichloroethylene	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 J	150 U	1 U	1 U	1 U	150 U
Vinyl chloride	ug/kg	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	150 U	1 U	1 U	1 U	150 U
Xylene (total)	ug/kg	3 J	15	270 J	3 J	1 J	30	2 J	4 J	150 U	5	1 U	1 U	150 U
Semivolatile Organic Compounds														
1,2,4-Trichlorobenzene	ug/kg	39 U	37 U	38 U	40 U	38 U	190 U	38 U	37 U	210 U	34 U	36 U	38 U	39 U
2,4,5-Trichlorophenol	ug/kg	77 U	74 U	77 U	80 U	76 U	380 U	76 U	75 U	410 U	68 U	72 U	77 U	79 U
2,4-Dichlorophenol	ug/kg	39 U	37 U	38 U	40 U	38 U	190 U	38 U	37 U	210 U	34 U	36 U	38 U	39 U
2,4-Dinitrophenol	ug/kg	770 U	740 U	770 U	800 U	760 U	3800 U	760 U	750 U	4100 UJ	680 UJ	720 UJ	770 UJ	790 UJ
2,6-Dinitrotoluene	ug/kg	39 U	37 U	38 U	40 U	38 U	190 U	38 U	37 U	210 U	34 U	36 U	38 U	39 U
2-Chlorophenol	ug/kg	39 U	37 U	38 U	40 U	38 U	190 U	38 U	37 U	210 U	34 U	36 U	38 U	39 U
2-Methylnaphthalene	ug/kg	39 U	37 U	2500	40 U	38 U	18000	38 U	150 J	5800	34 U	36 U	38 U	730
Acenaphthene[p]	ug/kg	39 U	37 U	280	40 U	38 U	22000	38 U	330	15000	67 J	36 U	38 U	39 U
Acenaphthylene	ug/kg	50 J	37 U	160 J	40 U	38 U	18000	150 J	110 J	6800	34 U	36 U	38 U	60 J
Anthracene[p]	ug/kg	52 J	37 U	740	40 U	67 J	54000	250	610	42000	130 J	36 U	38 U	60 J
Benzo(a)anthracene[p]	ug/kg	160 J	37 U	1600	40 U	140 J	71000	900	900	67000	250	36 U	38 U	190 J
Benzo(a)pyrene[p]	ug/kg	160 J	37 U	1400	40 U	130 J	64000	860	930	46000	210	36 U	38 U	170 J
Benzo(b)fluoranthene[p]	ug/kg	210	37 U	1600	40 U	140 J	78000	970	980	56000	260	36 U	38 U	210
Benzo(ghi)perylene[p]	ug/kg	150 J	37 U	810	40 U	95 J	36000	530	580	21000	150 J	36 UJ	38 UJ	110 J
Benzo(k)fluoranthene[p]	ug/kg	84 J	37 U	690	40 U	56 J	32000	590	560	20000	110 J	36 U	38 U	120 J
Bis(2-ethylhexyl)phthalate (BEHP)	ug/kg	330 J	74 U	77 U	130 J	110 J	380 U	76 U	75 U	4200	720	110 J	81 J	79 U
Butyl benzyl phthalate	ug/kg	77 U	74 U	77 U	80 U	76 U	380 U	76 U	75 U	410 U	68 U	72 U	77 U	79 U
Chrysene[p]	ug/kg	190 J	37 U	1600	40 U	130 J	69000	940	920	58000	230	36 U	38 U	180 J
Di-n-butyl phthalate	ug/kg	77 U	74 U	77 U	80 U	76 U	380 U	76 U	75 U	410 U	68 U	72 U	77 U	79 U
Di-n-octyl phthalate	ug/kg	77 U	74 U	77 U	80 U	76 U	380 U	76 U	75 U	970 J	160 J	72 U	77 U	79 U
Dibenzo(a,h)anthracene[p]	ug/kg	43 J	37 U	270	40 U	38 U	4100	170 J	140 J	11000	45 J	36 U	38 U	39 J
Dibenzofuran	ug/kg	39 U	37 U	280	40 U	38 U	25000	38 U	260	15000	46 J	36 U	38 U	62 J
Diethyl phthalate	ug/kg	77 U	74 U	77 U	80 U	76 U	380 U	76 U	75 U	410 U	68 U	72 U	77 U	79 U
Dimethyl phthalate	ug/kg	77 U	74 U	77 U	80 U	76 U	380 U	76 U	75 U	410 U	68 U	72 U	77 U	79 U
Fluoranthene[p]	ug/kg	270	37 U	3100	40 U	240	190000	1600	2000	140000	580	36 U	38 U	260
Fluorene	ug/kg	39 U	37 U	430	40 U	69 J	31000	56 J	350	22000	83 J	36 U	38 U	100 J
Hexachlorobenzene	ug/kg	39 U	37 U	38 U	40 U	38 U	190 U	38 U	37 U	210 U	34 U	36 U	38 U	39 U
Indeno(1,2,3-cd)pyrene	ug/kg	110 J	37 U	680	40 U	68 J	35000	510	540	22000	130 J	36 U	38 U	100 J
Isophorone	ug/kg	39 U	37 U	38 U	40 U	38 U	190 U	38 U	37 U	210 U	34 U	36 U	38 U	39 U
Naphthalene[p]	ug/kg	39 U	37 U	860	40 U	38 U	59000	38 U	430	8400	34 U	36 U	38 U	210
Nitrobenzene	ug/kg	39 U	37 U	38 U	40 U	38 U	190 U	38 U	37 U	210 U	34 U	36 U	38 U	39 U
Phenanthrene[p]	ug/kg	190	37 U	3600 JL	40 U	180 J	230000	1000	2500	170000	430	36 U	38 U	240
Phenol	ug/kg	39 U	37 U	38 U	40 U	38 U	1500	38 U	37 U	210 U	34 U	36 U	38 U	39 U
Pyrene[p]	ug/kg	290	37 U	3300 JL	40 J	300	150000	1700	2100	130000	590	36 U	38 U	270
Mercury	mg/kg	0.366	0.025 J	0.211	0.15	0.89	0.139	1.84	0.0508 J	0.364	0.0248 J	0.209	0.105 JH	0.404

Notes:
U : compound was not detected
J: estimated value (the resultsis greater than the MDL and less t
ug/Kg : micrograms per Kilogram
p - PAH compounds

Table 3-1

Soil Analytical Data Summary
Industrial Sewer System Closure

Former Texaco Research Center
Beacon, New York

Industrial Sewer System Phase II RFA	Field Sample ID Location Sample Date Sample Depth Sample Purpose	SS-026-ISS2 (4-8) ISS2-SS-026 2/24/2006 4-8 FT Regular sample	SS-026-ISS2 (8-10) ISS2-SS-026 2/24/2006 8-10 FT Regular sample	SS-027-MHA1 (3-7) MHA1-SS-027 2/27/2006 3-7 FT Regular sample	SS-028-ISS1 (3-7) ISS1-SS-028 2/27/2006 3-7 FT Regular sample	SS-029-ISS1 (3-7) ISS1-SS-029 2/27/2006 3-7 FT Regular sample	SS-030-ISS1 (3-7) ISS1-SS-030 2/27/2006 3-7 FT Regular sample	SS-031-ISS1 (2-6) ISS1-SS-031 2/28/2006 2-6 FT Regular sample	SS-032-ISS1 (2-6) ISS1-SS-032 2/28/2006 2-6 FT Regular sample	SS-033-ISS8 (3-7) ISS8-SS-033 2/28/2006 3-7 FT Regular sample	SS-034-MHC2 (2-6) MHC2-SS-034 2/28/2006 2-6 FT Regular sample	SS-035-ISS8 (3-7) ISS8-SS-035 2/28/2006 3-7 FT Regular sample	SS-036-ISS8 (3-7) ISS8-SS-036 2/28/2006 3-7 FT Regular sample	SS-037-ISS8 (3-7) ISS8-SS-037 2/28/2006 3-7 FT Regular sample
Parameter Name	Units													
Volatile Organic Compounds														
1,1,1-Trichloroethane	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	2 J	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	ug/kg	8 U	1100 U	8 U	8 U	8 U	1000 U	8 U	8 J	8 U	8 U	8 U	8 U	9 U
Benzene	ug/kg	0.6 U	76 U	0.5 U	0.6 U	0.6 U	72 U	0.6 U	0.5 U	0.7 J	0.6 U	0.6 U	0.6 U	0.6 U
Carbon disulfide	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	8	1 U	1 U	1 U	1 U	1 U
Chloroethane	ug/kg	2 U	300 U	2 U	2 U	2 U	290 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/kg	1 U	150 U	1 U	2 J	1 U	140 U	1 U	1 J	2 J	1 U	1 U	1 U	1 U
Methylene chloride	ug/kg	2 U	300 U	2 U	2 U	2 U	290 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Tetrachloroethylene	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	3 J	1 U	1 U	1 U	1 U
Toluene	ug/kg	2 J	150 U	1 U	4 J	4 J	140 U	3 J	1 U	9	2 J	2 J	2 J	2 J
trans-1,2-Dichloroethene	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	ug/kg	5 J	150 U	1 U	1 U	1 U	140 U	8	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	ug/kg	1 U	150 U	1 U	1 U	1 U	140 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/kg	2 J	150 U	1 U	3 J	5 J	140 U	1 U	4 J	11	1 U	1 U	1 J	1 U
Semivolatile Organic Compounds														
1,2,4-Trichlorobenzene	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
2,4,5-Trichlorophenol	ug/kg	78 U	80 U	72 U	78 U	73 U	77 U	74 U	72 U	77 U	75 U	75 U	76 U	84 U
2,4-Dichlorophenol	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
2,4-Dinitrophenol	ug/kg	780 UJ	800 UJ	720 UJ	780 UJ	730 U	770 U	740 UJ	720 UJ	770 UJ	750 UJ	750 UJ	760 UJ	840 UJ
2,6-Dinitrotoluene	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
2-Chlorophenol	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
2-Methylnaphthalene	ug/kg	39 U	150 J	36 U	39 U	36 U	3700	150 J	36 U	39 U	37 U	38 U	38 U	42 U
Acenaphthene[p]	ug/kg	39 U	40 U	36 U	39 U	100 J	480	220	160 J	74 J	37 U	38 U	38 U	120 J
Acenaphthylene	ug/kg	39 U	40 U	36 U	39 U	36 U	190 J	250	46 J	39 U	37 U	38 U	38 U	220
Anthracene[p]	ug/kg	39 U	40 U	79 J	39 U	110 J	300	740	250	140 J	37 U	38 U	38 U	550
Benzo(a)anthracene[p]	ug/kg	45 J	40 U	740	73 J	360	380	1200	740	250	37 U	38 U	52 J	2100
Benzo(a)pyrene[p]	ug/kg	39 U	40 U	720	62 J	280	260	1100	590	170 J	37 U	38 U	40 J	1500
Benzo(b)fluoranthene[p]	ug/kg	52 J	40 U	1000	93 J	410	400	1200	730	210	37 U	38 U	49 J	1800
Benzo(ghi)perylene[p]	ug/kg	39 UJ	40 UJ	500	47 J	190	170 J	620	350	89 J	37 U	38 U	38 U	730
Benzo(k)fluoranthene[p]	ug/kg	39 U	40 U	490	39 U	190	160 J	570	370	130 J	37 U	38 U	38 U	970
Bis(2-ethylhexyl)phthalate (BEHP)	ug/kg	78 U	630	72 U	78 U	73 U	760	130 J	77 J	77 U	75 U	75 U	76 U	84 U
Butyl benzyl phthalate	ug/kg	78 U	80 U	72 U	78 U	73 U	77 U	74 U	72 U	77 U	75 U	75 U	76 U	84 U
Chrysene[p]	ug/kg	45 J	40 U	820	75 J	370	470	1200	720	220	37 U	38 U	52 J	1800
Di-n-butyl phthalate	ug/kg	78 U	80 U	72 U	78 U	73 U	77 U	74 U	72 U	77 U	75 U	75 U	76 U	84 U
Di-n-octyl phthalate	ug/kg	78 U	140 J	72 U	78 U	73 U	77 U	74 U	72 U	77 U	75 U	75 U	76 U	84 U
Dibenzo(a,h)anthracene[p]	ug/kg	39 U	40 U	170 J	39 UJ	46 J	38 U	210 J	79 J	39 UJ	37 UJ	38 UJ	38 UJ	200 J
Dibenzofuran	ug/kg	39 U	40 U	36 U	39 U	44 J	430	270	77 J	45 J	37 U	38 U	38 U	58 J
Diethyl phthalate	ug/kg	78 U	80 U	72 U	78 U	73 U	77 U	74 U	72 U	77 U	75 U	75 U	76 U	84 U
Dimethyl phthalate	ug/kg	78 U	80 U	72 U	78 U	73 U	77 U	74 U	72 U	77 U	75 U	75 U	76 U	84 U
Fluoranthene[p]	ug/kg	71 J	47 J	740	140 J	830	1100	2600	1200	550	69 J	38 U	100 J	3800
Fluorene	ug/kg	39 U	40 U	36 U	39 U	58 J	890	410	190	60 J	37 U	38 U	38 U	99 J
Hexachlorobenzene	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
Indeno(1,2,3-cd)pyrene	ug/kg	39 U	40 U	490	39 J	170 J	180 J	580	330	96 J	37 U	38 U	38 U	770
Isophorone	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
Naphthalene[p]	ug/kg	39 U	40 U	36 U	39 U	37 J	680	180 J	36 U	39 J	37 U	38 U	38 U	42 U
Nitrobenzene	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
Phenanthrene[p]	ug/kg	39 U	53 J	130 J	100 J	720	2000	2900	710	650	60 JL	38 U	80 J	2000
Phenol	ug/kg	39 U	40 U	36 U	39 U	36 U	38 U	37 U	36 U	39 U	37 U	38 U	38 U	42 U
Pyrene[p]	ug/kg	73 J	50 J	810	130 J	760	1000	2300	1100	470	58 JL	38 U	95 J	3500
Mercury	mg/kg	0.931	0.0779 J	0.399	0.157	0.199	0.315	0.155	0.0149 J	0.0496 J	0.0161 J	0.0225 J	0.0317 J	0.717

Notes:
U : compound was not detected
J: estimated value (the resultsis greater than the MDL and less t
ug/Kg : micrograms per Kilogram
p - PAH compounds

Table 3-1

Soil Analytical Data Summary
Industrial Sewer System Closure

Former Texaco Research Center
Beacon, New York

Industrial Sewer System Phase II RFA	Field Sample ID Location Sample Date Sample Depth Sample Purpose	SS-038-ISS8 (4-8) ISS8-SS-038 2/28/2006 4-8 FT Regular sample	SS-039-ISS8 (4-8) ISS8-SS-039 3/1/2006 4-8 FT Regular sample	SS-040-ISS8 (4-8) ISS8-SS-040 3/1/2006 4-8 FT Regular sample	SS-041-ISS6 (4-8) ISS6-SS-041 3/1/2006 4-8 FT Regular sample	SS-042-ISS8 (3-7) ISS8-SS-042 3/1/2006 3-7 FT Regular sample	SS-043-ISS4 (3-7) ISS4-SS-043 3/1/2006 3-7 FT Regular sample	SS-044-ISS4 (3-7) ISS4-SS-044 3/1/2006 3-7 FT Regular sample	SS-045-ISS4 (3-7) ISS4-SS-045 3/1/2006 3-7 FT Regular sample	SS-B45SLAB-NORTH B45 5/10/2006 2-3 ft Regular sample	SS-B45SLAB-SOUTH B45 5/10/2006 2-3 ft Regular sample
Parameter Name	Units										
Volatile Organic Compounds											
1,1,1-Trichloroethane	ug/kg	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethylene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	ug/kg	8 U	8 U	9 U	8 U	9 J	8 U	8 U	8 U	8 UJ	8 UJ
Benzene	ug/kg	0.6 U	0.7 J	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Carbon disulfide	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	ug/kg	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	ug/kg	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chloroform	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethylene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/kg	1 U	2 J	1 U	1 U	2 J	2 J	1 U	1 U	1 U	1 U
Methylene chloride	ug/kg	2 U	2 U	2 U	2 U	15	2 U	2 U	2 U	2 U	2 U
Tetrachloroethylene	ug/kg	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	ug/kg	5 J	12	4 J	2 J	7	8	4 J	3 J	1 U	1 U
trans-1,2-Dichloroethene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	ug/kg	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/kg	4 J	11	3 J	1 J	11	11	5 J	2 J	1 U	1 U
Semivolatile Organic Compounds											
1,2,4-Trichlorobenzene	ug/kg	41 U	40 U	41 U	37 U	190 U	38 U	37 U	38 U	38 U	37 U
2,4,5-Trichlorophenol	ug/kg	81 U	81 U	82 U	73 U	390 U	76 U	74 U	77 U	77 U	75 U
2,4-Dichlorophenol	ug/kg	41 U	40 U	41 U	37 U	190 U	38 U	37 U	38 U	38 U	37 U
2,4-Dinitrophenol	ug/kg	810 UJ	810 UJ	820 U	730 U	3900 U	760 U	740 U	770 U	770 U	750 UJ
2,6-Dinitrotoluene	ug/kg	41 U	40 U	41 U	37 U	190 U	38 U	37 U	38 U	38 U	37 U
2-Chlorophenol	ug/kg	41 U	40 U	41 U	37 U	190 U	38 U	37 U	38 U	38 U	37 U
2-Methylnaphthalene	ug/kg	41 U	160 J	52 J	37 U	9900	360	230	73 J	62 J	540
Acenaphthene[p]	ug/kg	120 J	640	120 J	37 U	11000	1100	420	83 J	210	1400
Acenaphthylene	ug/kg	230	1000	390	75 J	6600	1300	370	120 J	390	500
Anthracene[p]	ug/kg	450	2600	570	110 J	22000	2800	1200	260	780	3200 J
Benzo(a)anthracene[p]	ug/kg	2100	8400	2200	350	34000	7300	2100	580	2200	4100 J
Benzo(a)pyrene[p]	ug/kg	1900	7000	2100	330	27000	6100	1700	500	2000	3700
Benzo(b)fluoranthene[p]	ug/kg	2600	9100	2800	410	31000	8200	2000	660	2400	4800
Benzo(ghi)perylene[p]	ug/kg	1300	4100	1400	190	15000	3800	910	320	1200	2700
Benzo(k)fluoranthene[p]	ug/kg	930	3400	1000	160 J	12000	2800	830	220	1200	2500
Bis(2-ethylhexyl)phthalate (BEHP)	ug/kg	81 U	81 U	82 U	130 J	390 U	76 U	74 U	77 U	77 U	75 U
Butyl benzyl phthalate	ug/kg	81 U	81 U	82 U	73 U	390 U	76 U	74 U	77 U	77 U	75 U
Chrysene[p]	ug/kg	2000	9000	2500	360	33000	7400	2200	630	2200	4100 J
Di-n-butyl phthalate	ug/kg	81 U	81 U	82 U	73 U	390 U	76 U	74 U	77 U	77 U	75 U
Di-n-octyl phthalate	ug/kg	81 U	81 U	82 U	73 U	390 U	76 U	74 U	77 U	77 U	75 U
Dibenzo(a,h)anthracene[p]	ug/kg	340 J	1300	410	61 J	4200	1000	290	100 J	410	860
Dibenzofuran	ug/kg	57 J	460	120 J	37 U	12000	890	370	90 J	150 J	1200
Diethyl phthalate	ug/kg	81 U	81 U	82 U	73 U	390 U	76 U	74 U	77 U	77 U	75 U
Dimethyl phthalate	ug/kg	81 U	81 U	82 U	73 U	390 U	76 U	74 U	77 U	77 U	75 U
Fluoranthene[p]	ug/kg	3700	17000 JL	4300	730	85000	17000	4900	1300	3900	9100 J
Fluorene	ug/kg	95 J	630	120 J	37 U	14000	1200	430	100 J	230	1200
Hexachlorobenzene	ug/kg	41 U	40 U	41 U	37 U	190 U	38 U	37 U	38 U	38 U	37 U
Indeno(1,2,3-cd)pyrene	ug/kg	1200	4700	1500	210	16000	4100	1000	320	1100	2500
Isophorone	ug/kg	41 U	40 U	41 U	37 U	190 U	38 U	37 U	38 U	38 U	37 U
Naphthalene[p]	ug/kg	45 J	280	120 J	37 U	29000	930	470	82 J	82 J	880
Nitrobenzene	ug/kg	41 U	40 U	41 U	37 U	190 U	38 U	37 U	38 U	38 U	37 U
Phenanthrene[p]	ug/kg	1800	10000 JL	2600	460	99000	14000	4100	1200	3100	10000 J
Phenol	ug/kg	41 U	40 U	41 U	37 U	830 J	38 U	37 U	38 U	38 U	37 U
Pyrene[p]	ug/kg	3700	15000	3800	650	65000	14000	3800	1200	4400	8900 J
Mercury	mg/kg	1.66	0.321	1.22	0.252	1.27	0.381	0.0678 J	0.154	0.494	1.17

Notes:
U : compound was not detected
J: estimated value (the resultsis greater than the MDL and less t
ug/Kg : micrograms per Kilogram
p - PAH compounds

APPENDIX A

DATA REVIEW SUMMARY REPORT

DATA REVIEW SUMMARY REPORT
for samples collected from
INDUSTRIAL SEWER SYSTEM
FORMER TEXACO RESEARCH CENTER
BEACON, NY

Data Review by: Richard Cheatham
Parsons – Denver, Colorado

1.0 INTRODUCTION

The following data review summary report covers soil samples, water samples, and the associated field quality control (QC) samples collected as part of the sampling associated with the Phase II RFA for the Industrial Sewer System at the Former Texaco Research Center in Beacon, NY (Site ID#314004) during the period of January 05 through May 08, 2006. Field program quality control samples included field duplicate samples for soils and waters, as well as aqueous trip blank samples. All samples were collected by Parsons and analyzed by Lancaster Laboratories, Lancaster, PA (Lancaster) following the procedures outlined in the Quality Assurance Project Plan for the Industrial Sewer System Phase II RCRA Facility Assessment – Sampling Visit, Interim Corrective Measure: Inactive Line Abandonment, dated October 2005 (i.e. project QAPP).

The data submitted by the laboratory has been reviewed and validated, as described below, following the guidelines outlined in the project QAPP to assess the precision, accuracy, representativeness, completeness, and comparability (PARCC) of the analytical data.

Analytical results were reported in the Lancaster Sample Delivery Groups (SDG)/Sample Groups identified on Table 1, with sample groups associated with an SDG# being reported in a NYSDEC ASP Category B deliverables package: Samples were analyzed, as identified on the chain-of-custody record (COC), for one or more of the following types of analyses: TCL VOCs, TCL SVOCs, Mercury, Metals, TCLP-VOCs, TCLP-SVOCs, TCLP-Metals, or TCLP Mercury.

Table 1 summarizes the sample data that has been reviewed. Table 2 summarizes the data validation qualifiers and qualification reasons. Field duplicate sample results are summarized on Table 3 of this report. Samples RW-006-B3, RW-016, RW-021-83, RW-024GC, SS-006-B3(3-7), SS-013-B3(3-7), SS-017-B55(8-12), SS-030-ISS1(3-7), and SS-041-ISS6(4-8) were collected as field duplicate pairs.

1.1 Sampling, Chain-of-Custody, and Sample Identification

The ISS samples were collected, properly preserved (with the exception of the samples for mercury analysis in sample group 980465), shipped under a COC record, and received at Lancaster within one or two days of sampling. All samples were received intact and in good condition at Lancaster. Sample documentation discrepancies, if any, were noted on the laboratory sample receipt log.

Sample SS-30-ISS1- (3-7) was incorrectly reported by Lancaster as being sample "SS-30-MHA1-(3-7)". Sample results were reported with the incorrect sample number in the analytical report for sample group 979838/SDG CBN11.

All samples in sample group 989015, SDG CBN20 were incorrectly reported by Lancaster as having sample identification numbers beginning with "1SS", rather then the correct "ISS" as shown on the COC records.

2.0 DATA REVIEW CRITERIA

Information reviewed and evaluated as part of the validation process included sample results; laboratory control sample results (LCS); matrix spike/matrix spike duplicate (MS/MSD) results; parent/field duplicate (FD) results; trip blank field QC samples results; method blanks; "laboratory comments"; and chain-of-custody (COC) forms.

In addition, the summarized sample analysis results for one soil sample (SS-001-B20(2-6) in sample group 97891/SDG CBN08 and for one water sample (RW-006-B3) in sample group 978129/CBN05, as well as the associated QC sample results and QA/QC data were verified from the "raw" analytical data as part of the raw data verification "spot check".

The data packages were evaluated for deliverables completeness with reference to the project QAPP requirements.

The analyses and findings presented in this report are based on the reviewed information, and whether requirements in the project QAPP were met.

2.1 Accuracy

Accuracy was evaluated using the percent recovery (%R) obtained from LCSs (blank spikes), MS, and MSD, as well as of surrogate compound recoveries for each project sample.

2.2 Precision

Analytical Precision was evaluated based on the relative percent difference (%RPD) of MS/MSD sample analysis results and of internal laboratory duplicate results.

Overall Precision (of the sampling and analysis process) was evaluated based on the relative percent difference (%RPD) of sample/field duplicate results.

2.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the project QAPP;
- Comparing actual analytical procedures to those described in the Addendum QAPP;
- Evaluating analytical holding times;

- Examining trip blanks for contamination of, or cross-contamination of, samples during sample handling and shipment;
- Examining laboratory blanks for cross contamination of samples during sample preparation and analysis; and,
- Evaluating field duplicate sample results.

2.4 Completeness (laboratory completeness)

Laboratory completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data, calculating a "percent completeness" value, and comparing the "percent completeness" with the project QAPP criterion of 90% for each type of analysis.

2.5 Comparability

Comparability has been evaluated by:

- Evaluating the sample analysis methods used; and,
- Confirming the use, by the laboratory, of standard reporting units and reporting formats, including for reporting of QC data.

3.0 DELIVERABLES (DATA PACKAGE) COMPLETENESS AND COMPLIANCE

Deliverables Completeness is considered acceptable. The data for the ISS soil samples were reported in NYSDEC ASP Category B (type) deliverables packages identified as SDGs CBN02, CBN03, CBN05, CBN06, CBN08, CBN10, CBN11, CBN12, CBN13, CBN15, and CBN18. These packages contained all sample COC forms, case narratives including sample/analysis summary forms, QA/QC summaries with supporting documentation, relevant calibration data, instrument and method performance data, documentation of the laboratories ability to attain the method detection limits for target analytes in required matrices, data report forms with examples of calculations, and raw data.

Deliverables Compliance is considered acceptable. The data was produced and reported consistent with the project QAPP and the requested data package deliverables, protocol-required QA/QC criteria were met, and problems encountered during the analytical process and actions taken to correct the problems were reported in the data packages. NYSDEC ASP Category B data deliverables packages were requested and provided for all ISS samples.

4.0 PARCC ASSESSMENT SUMMARY – ISS SAMPLES

4.1 Accuracy

Accuracy for ISS sample analyses is considered acceptable for all analyses, with the exception that the accuracy for TCLP SVOC results for phenol analytes in sample SS-BLDG29-TCLP was impacted by non-compliant surrogate recoveries. Evaluation results are as follows:

- Surrogate compound recoveries (%R) for all non-TCLP ISS samples were within applicable (laboratory) control limits (and also within Addendum QAPP control limits for Soil and Water samples), with exceptions discussed in Section 5.0.
- LCS recoveries (%R) were within applicable (laboratory) control limits (and also within Addendum QAPP control limits for Soil and Water samples), with exceptions discussed in Section 5.0.
- MS/MSD recoveries (%R) were within applicable (laboratory) control limits (and also within Addendum QAPP control limits for Soil and Water samples), with exceptions discussed in Section 5.0.

4.2 Precision

Analytical Precision is considered acceptable for all ISS sample analyses. Evaluation results are as follows:

- MS/MSD RPD values were within applicable (laboratory) control limits (and also within Addendum QAPP control limits for Soil and Water samples) , with exceptions discussed in Section 5.0.
- LCS/LCSD RPD value were within applicable (laboratory) control limits (and also within Addendum QAPP control limits for Soil and Water samples, with exceptions discussed in Section 5.0.
- Laboratory duplicate RPD values were within applicable (laboratory) control limits (and also within Addendum QAPP control limits for Soil and Water samples) for Mercury and metals analyses, with exceptions discussed in Section 5.0.

Overall Precision is considered acceptable for ISS sample analyses. Evaluation results are as follows:

- Sample results are not qualified based on field duplicate RPD results; they are advisory only. The project QAPP does not include a criterion for field duplicate RPD.
- Analysis results for the field duplicate pairs are summarized on Table 3.

4.3 Representativeness

Representativeness is considered acceptable for ISS sample analyses. Evaluation results are as follows:

- Analytical holding times, as specified in the Addendum QAPP were met for all sample analyses.

- The method blanks associated with each sample analysis were free of any target analyte at a reportable level.
- The trip blanks associated with the VOCs sample analysis were free of any target analyte at a reportable level.
- The samples were analyzed using the methods specified in the Addendum QAPP.

4.4 Completeness

Completeness is considered acceptable for all ISS sample analyses. Sample results are considered as usable for project purposes, with the exception of the results for five phenols from TCLP SVOC analysis of sample SS-BLDG29-TCLP that were qualified as rejected ("R") due to extremely low surrogate recovery.

4.5 Comparability

Comparability is considered acceptable for all ISS sample analyses. The samples were analyzed using the methods specified in the Addendum QAPP and data, including QC results, were reported using industry-standard reporting units and reporting formats. Sample results for soil samples are reported on a dry-weight basis.

5.0 DATA REVIEW RESULTS

5.1 SW8260B VOCs Analysis Data

The following items were reviewed for compliancy in the analysis by Lancaster using Method SW8260B and following NYSDEC Method 95-1 (10/95):

- Custody documentation;
- Sample preservation;
- Holding times;
- Initial calibration;
- GC/MS instrument performance (BFB ion abundance criteria);
- Initial calibration verification (ICV);
- Continuing calibration verification (CCV);
- Internal standard area counts and retention times;
- Surrogate recoveries;
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy;
- Laboratory control sample (LCS) recoveries;
- Laboratory control sample duplicate (LCSD), if required;
- Laboratory method blank contamination;
- Field duplicate precision;

- Field QC blank samples (trip blank) contamination;
- Sample result verification and identification;
- Analysis sequence;
- Quantitation limits;
- Sample quantitation; and,
- Data completeness.

For sample group 977407, SDG CBN02, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of MS/MSD RPD, and CCV %D. Sample SSBLDG56ISS-02-S was utilized for MS/MSD. A trip blank was not submitted with this sample group.

For sample group 977669, SDG CBN03, these items were considered compliant and acceptable in accordance with the validation protocols. Samples were prepared using TCLP extraction procedure. MS/MSD was performed on a sample from a different sample group. A trip blank was not submitted with this sample group.

For sample group 977672, SDG CBN05, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of matrix spike recovery, MS/MSD RPD, and CCV%D. Sample RW-003-B2 was utilized for MS/MSD.

For sample group 978129, SDG CBN05, these items were considered compliant and acceptable in accordance with the validation protocol, with the exception of surrogate recovery and CCV%D. MS/MSD was performed on a sample from a different sample group.

For sample group 978327, SDG CBN06, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D.

For sample group 978484, SDG CBN06, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. Sample RW-025-GC was utilized for MS/MSD.

For sample group 978917, SDG CBN08, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of LCS%R. Sample SS-001-B20-(2-6) was utilized for MS/MSD. A trip blank was not submitted with this sample group.

For sample group 979131, SDG CBN08, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. MS/MSD was performed on a sample from a different sample group.

For sample group 979319, SDG CBN10, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. Sample SS-117-B55-(8-12) was utilized for MS/MSD.

For sample group 979489, SDG CBN10, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. Sample SS-024-ISS3-(2-4.5) was utilized for MS/MSD.

For sample group 979838, SDG CBN11, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. Sample SS-034-MHC2-(2-6') was utilized for MS/MSD.

For sample group 980024, SDG CBN12, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of LCS%R, Sample SS-039-ISS8-(4-8') was utilized for MS/MSD.

For sample group 982922, SDG CBN15, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. A sample from a different sample group was utilized for MS/MSD. A trip blank was not submitted with the sample shipment for this SDG.

For sample group 987350, SDG CBN18, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. MS/MSD was performed on a sample from a different sample group.

For sample group 989015, SDG CBN20, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of surrogate recovery, MS/MSD, and CCV%D. Sample ISS-T-200B was utilized for MS/MSD.

For sample group 989415, SDG CBN21, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of surrogate recovery, MS/MSD, and CCV%D. A non-project sample was utilized for MS/MSD.

Surrogate Compound Recovery

Surrogate compound recoveries were compliant, with the exceptions shown below. In instances where surrogate recoveries were above the upper control limit and sample concentrations were non-detect, the sample result was not required to be qualified. For samples ISS-T-200B, SS-B45_Slab-South Grab Soil Sample, and SS-B45_SLAB-North Grab Soil Sample, three of four surrogate recoveries were compliant with the recovery of the fourth surrogate compound being only marginally non-compliant (i.e. slightly low); therefore, the sample results were not qualified. Samples were reanalyzed with similar surrogate compound recoveries, thus indicating a matrix effect.

Sample Group/SDG	Sample ID	Surrogate (%R)	Compound Affected	Result (ug/kg)	Data Qualifier
978129/CBN05	RW-008-B3	DBF (123)	ALL	ND	None
989015/CBN20	ISS-T-200B	4-BFB (68%)	ALL	ND	None
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	4-BFB (69%)	ALL	ND	None

989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	4-BFB (63%)	ALL	ND	None
989415/CBN21	SS-B45_SLAB-North Grab Soil Sample	4-BFB (62%)	ALL	ND	None
989415/CBN21	SS-B45_SLAB-North Grab Soil Sample	4-BFB (68%)	ALL	ND	None

LCS/LCSD Precision and Accuracy

LCS/LCSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements were within QC acceptance limits and considered acceptable, with the exceptions noted below. Sample result qualification was not required if non-compliant LCS recoveries indicate potential high bias of results and associated sample results were reported as undetected ("U").

Sample Group/ SDG	Analytical Parameter	LCS ID	LCS %R	QC Batch ID	Affected Samples	Data Qualifier
978917/CBN08	1,2-Dichloroethane	LCSA15	127	A060551AA	ALL	None, high recovery, sample "ND"
980024/CBN12	Bromoform	LCSA21	112	A060652AA	ALL, except TB	None, high recovery, sample "ND"

MS/MSD Precision and Accuracy

MS/MSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements were within QC acceptance limits and considered acceptable, with the exceptions noted below. Sample result qualification was not required if non-compliant MS/MSD recoveries indicate potential high bias of results and associated sample result was reported as undetected ("U").

Sample Group/ SDG	Sample ID	Analyte	MS/MSD %R	MS/MSD %RPD	Data Qualifier
977407/CBN02	SSBLDG56ISS-02-S	2-Hexanone	ok	37	UJ
977407/CBN02	SSBLDG56ISS-02-S	1,1,2-Trichloroethane	Ok/136		None
977407/CBN02	SSBLDG56ISS-02-S	Chlorobenzene	Ok/127		67J
977407/CBN02	SSBLDG56ISS-02-S	1,1,1,2-Tetrachloroethane	182/212		None
977672/CBN05	RW-003-B2	Chloroethane	Ok/159	31	J

Continuing Calibration Verifications

Continuing calibration verification compounds (all target analytes) were compliant with a maximum percent difference (%D) of ±20%, with the exceptions shown below.

Sample Group/SDG	Target Analyte	%D	Samples Affected	Data Qualifier
977405/CBN01	4-Methyl-2-pentanone	31	ALL	UJ
977405/CBN01	2-Hexanone	23	ALL	UJ
977497/CBN02	Bromomethane	-22	SSBLDG56ISS-02-S	UJ
978129/CBN05	Chloromethane	22	RW-008-B3	UJ
978129/CBN05	Bromomethane	21	RW-008-B3	UJ
978129/CBN05	1,1,1-Trichloroethane	26	RW-008-B3	UJ
978129/CBN05	Carbon Tetrachloride	30	RW-008-B3	UJ
978129/CBN05	1,2-Dichloroethane	30	RW-008-B3	UJ
977672/CBN05	Carbon tetrachloride	26	RW-001-A1	UJ
977672/CBN05	Carbon tetrachloride	26	RW-003-B2	UJ
977672/CBN05	1,1,1-Trichloroethane	23	RW-002-A1	UJ
977672/CBN05	1,1,1-Trichloroethane	23	RW-004-BG	UJ
977672/CBN05	1,1,1-Trichloroethane	23	RW-005-BG	UJ
977672/CBN05	1,1,1-Trichloroethane	23	RW-005-BG (DL)	UJ
977672/CBN05	Carbon tetrachloride	28	RW-002-A1	UJ
977672/CBN05	Carbon tetrachloride	28	RW-004-BG	UJ
977672/CBN05	Carbon tetrachloride	28	RW-005-BG	UJ
977672/CBN05	Carbon tetrachloride	28	RW-005-BG (DL)	UJ
977672/CBN05	1,2-Dichloroethane	23	RW-002-A1	UJ
977672/CBN05	1,2-Dichloroethane	23	RW-004-BG	UJ
977672/CBN05	1,2-Dichloroethane	23	RW-005-BG	UJ
977672/CBN05	1,2-Dichloroethane	23	RW-005-BG (DL)	UJ
978327CBN06	1,2-Dichloroethane	21	All in sample group	UJ
978327CBN06	2-Hexanone	-23	All in sample group	UJ
978484/CBN06	4-Methyl-2-pentanone	36	All in sample group	UJ
978484/CBN06	2-Hexanone	45	All in sample group	UJ
979489/CBN10	4-Methyl-2-pentatone	29	SS-022-ISS5(3-4), SS-023-ISS3(2-4), S-026-ISS2(4-8)	UJ
979489/CBN10	3-Hexanone	25	SS-022-ISS5(3-4), SS-023-ISS3(2-4), S-026-ISS2(4-8)	UJ
979489/CBN10	Dibromochloromethane	21	SS-022-ISS5(3-4), SS-023-ISS3(2-4), S-026-ISS2(4-8)	UJ
979489/CBN10	Bromoform	31	SS-022-ISS5(3-4), SS-023-ISS3(2-4), S-026-ISS2(4-8)	UJ
979489/CBN10	4-Methyl-2-pentanone	-22	Trip Blank	UJ
979489/CBN10	Tetrachloroethene	-25	Trip Blank	UJ
979489/CBN10	2-Hexanone	-27	Trip Blank	UJ
979838/CBN11	2-Hexanone	25	Trip Blank	UJ
979838/CBN11	4-Methyl-2-pentanone	21	Trip Blank	UJ
982922/CBN15	Carbon tetrachloride	23	RW-027-BG	UJ
982922/CBN15	Bromoform	22	RW-027-BG	UJ

987350/CBN18	2-Hexanone	-26	Tank 200 Sump, Tank 200 water, Trip blank	UJ
989015/CBN20	Acetone	32	ALL	UJ
989415/CBN21	Acetone	32	ALL	UJ

5.2 SW8270C SVOCs Analysis Data

The following items were reviewed for compliancy in the analysis by Lancaster using Method Sw8270C:

- Custody documentation;
- Sample preservation;
- Holding times;
- Initial calibration;
- GC/MS instrument performance (DFTPP ion abundance criteria);
- Initial calibration verification (ICV);
- Continuing calibration verifications (CCV);
- Internal standard area counts and retention times;
- Surrogate recoveries;
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy;
- Laboratory control sample (LCS) recoveries;
- Laboratory control sample duplicate (LCSD);
- Laboratory method blank contamination;
- Field duplicate precision;
- Field QC blank samples (trip blank) contamination;
- Sample result verification and identification;
- Analysis sequence;
- Quantitation limits;
- Sample quantitation; and,
- Data completeness.

For sample group 977407, SDG CBN02, these items were considered compliant and acceptable in accordance with the validation protocols. MS/MSD was performed on a sample from a different sample group.

For sample group 977669, SDG CBN03, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of surrogate recovery. Samples were prepared using TCLP extraction procedure. Sample SS-BLDG-29-TCLP was utilized for MS/MSD.

For sample group 978917, SDG CBN08, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of MS/MSD RPD. Sample SS-001-B20-(2-6) was utilized for MS/MSD.

For sample group 979131, SDG CBN08, these items were considered compliant and acceptable in accordance with the validation protocols. Sample SS-010-MHB4-(3-7) was utilized for MS/MSD.

For sample group 979319, SDG CBN10, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of MSD %R and MS/MSD RPD, CCV%D. Sample SS-015-B26-(4-7) was utilized for MS/MSD.

For sample group 979489, SDG CBN10, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. Sample SS-024-ISS3-(2-4.5) was utilized for MS/MSD.

For sample group 979838, SDG CBN11, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of surrogate recovery, CCV%D and MS/MSD RPD. Sample SS-034-MHC2-(2-6') was utilized for MS/MSD.

For sample group 980024, SDG CBN12, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of MS%R and MS/MSD RPD. Sample SS-039-ISS8-(4-8') was utilized for MS/MSD.

For sample group 987350, SDG CBN18, these items were considered compliant and acceptable in accordance with the validation protocols. MS/MSD was performed on a sample from a different sample group.

For sample group 989015, SDG CBN20, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of method blank, LCS %R, ICV%D, and CCV%D. Samples were analyzed in two QC batches. MS/MSD for QC batch 05136SLD026 was performed on sample ISS-T-200B. MS/MSD for QC batch 06139SLA026 was performed utilizing a non-project sample.

For sample group 989415, SDG CBN21, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of MS/MSD %R and RPD, ICV%D, and CCV%D. MS/MSD was performed on sample SS-B45_SLAB-South Grab Soil Sample. Sample SS-B-45_SLAB-South Grab Soil Sample was analyzed at both 1x and 10x dilutions; only one result for each analyte is reported.

Method Blank Contamination

For sample group 989015, SDG CBN20, a detectable amounts of bis(2-ethylhexyl)phthalate) (130J ug/L) was detected in the method blank. However, all this analyte was not detected in all associated samples. No data were qualified based on method blank contamination.

Surrogate Compound Recovery

Surrogate compound recoveries were compliant, with the exceptions shown below. In instances where surrogate recoveries were above the upper control limit and sample concentrations were non-detect, the sample result was not required to be qualified. Data was not qualified based on a single marginal exceedance of recovery.

Sample Group/SDG	Sample ID	Surrogate (%R)	Compound Affected	Result (ug/kg)	Data Qualifier
977669/CBN03	SS-BLDG-29-TCLP	2FP (2), PHL (1), TBP (10)	All Phenols	All ND	R
977669/CBN03	SS-BLDG-29-TCLP (MS)	2FP (6), PHL (4), TBP (30)	All Phenols	All ND	N/A
977669/CBN03	SS-BLDG-29-TCLP (MSD)	2FP (4), PHL (3), TBP (25)	All Phenols	All ND	N/A
979838/CBN11	SS-034-MHC2-(2-6')	NBZ (137)	Pyrene	58	J
979838/CBN11	SS-034-MHC2-(2-6')	NBZ (137)	Phenanthrene	60	J
979838/CBN11	SS-034-MHC2-(2-6')	NBZ (137)	Butylbenzylphthalate	69	J

LCS/LCSD Precision and Accuracy

LCS/LCSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements were within QC acceptance limits and considered acceptable, with the exceptions noted below. Sample result qualification was not required if non-compliant LCS recoveries indicate potential high bias of results and associated sample results were reported as undetected ("U").

Sample Group/ SDG	Analytical Parameter	LCS ID	LCS %R	QC Batch ID	Affected Samples	Data Qualifier
989015/CBN	Phenol		117	06136SLD026	All except ISS-T-200D	None
989015/CBN	2-Chlorophenol		106	06136SLD026	All except ISS-T-200D	None
989015/CBN	N-nitroso-di-n-propylamine		113	06136SLD026	All except ISS-T-200D	None
989015/CBN	4-Methylphenol		118	06136SLD026	All except ISS-T-200D	None

MS/MSD Precision and Accuracy

MS/MSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements were within QC acceptance limits and considered acceptable, with the exceptions noted below. Sample result qualification was not required if non-compliant MS/MSD recovery indicates potential high bias of results and associated sample result was reported as undetected ("U").

Sample Group/ SDG	Sample ID	Analyte	MS/MSD %R	MS/MSD %RPD	Data Qualifier
978917/CBN08	SS-001-B20-(2-6)	4-Chloroaniline	ok	49	UJ
978917/CBN08	SS-001-B20-(2-6)	Benzo(b)fluoranthene	ok	31	UJ
979319/CBN10	SS-015-B26-(4-7)	Phenanthrene	37/34		J/UJ
979319/CBN10	SS-015-B26-(4-7)	Pyrene	Ok/31	43	J/UJ
979838/CBN11	SS-034-MHC2-(2-6')	2,2'-oxybis(1-chloropropane)	ok	74	UJ
980024/CBN12	SS-039-ISS8-(4-8')	2,4-Dinitrophenol	ok	32	UJ
980024/CBN12	SS-039-ISS8-(4-8')	Phenanthrene	18/89	133	UJ
980024/CBN12	SS-039-ISS8-(4-8')	Fluoranthene	18/92	134	UJ
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	Pyrene	-21/-5		J
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	2,4-Dinitrophenol	Ok/ok	34	UJ
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	Phenanthrene	-112/-91		J
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	Anthracene	34/33		J
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	Fluoranthene	-64/-43		J
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	Benzo(a)anthracene	47/ok		J
989415/CBN21	SS-B45_SLAB-South Grab Soil Sample	Chrysene	44/ok		J

Initial Calibration Verification

Initial calibration verification compounds (all target analytes) were compliant with a maximum percent difference (%D) of ±20%, with the exceptions shown below.

Sample Group/SDG	Target Analyte	%D	Samples Affected	Data Qualifier
989015/CBN20	2,2'-oxybis(1-Chloropropane)	30	ISS-T-200D	UJ
989015/CBN20	Hexachlorocyclopentadiene	-29	ISS-T-200D	UJ
989015/CBN20	2-Chloronaphthalene	-21	ISS-T-200D	UJ
989015/CBN20	2,2'-oxybis(1-Chloropropane)	38	ISS-T-200B	UJ
989415/CBN21	2,2'-oxybis(1-Chloropropane)	30	ALL	UJ
989415/CBN21	Hexachlorocyclopentadiene	-29	ALL	UJ
989415/CBN21	2-Chloronaphthalene	-21	ALL	UJ

Continuing Calibration Verifications

Continuing calibration verification compounds (all target analytes) were compliant with a maximum percent difference (%D) of ±20%, with the exceptions shown below.

Sample Group/SDG	Target Analyte	%D	Samples Affected	Data Qualifier
978479/CBN07	4-Chloroaniline	-27	ALL	UJ
979489/CBN10	2,4-Dinitrophenol	23	4717530-4717539	J/UJ
979489/CBN10	2-Chloronaphthalene	-27	4717530-4717539	J/UJ
979489/CBN10	Benzo(g,h,i)perylene	21	4717530-4717539	J/UJ
979489/CBN10	2,4-Dinitrophenol	26	4717530DL	J/UJ
979838/CBN11	2,4-Dinitrophenol	22	4719325-4719334	UJ
979838/CBN11	Dibenz(a,h)anthracene	22	4719325-4719334	J/UJ
980840/CBN13	2,4-Dinitrophenol	-38	ALL	UJ
989015/CBN20	2-Chloronaphthalene	30	ISS-T-200D	UJ
989015/CBN20	4-Methylphenol	27	ISS-T-200B	UJ
989015/CBN20	4-Nitrophenol	31	ISS-T-200B	UJ
989015/CBN20	Fluorene	23	ISS-T-200B	UJ
989415/CBN21	2-Chloronaphthalene	30	ALL	UJ

5.3 SW7471A Mercury Analysis Data

The following items were reviewed for compliancy in the Mercury analysis by Lancaster using Method SW7471A:

- Custody documentation;
- Sample preservation;
- Holding times;
- Initial calibration;
- Continuing calibration verifications;
- Initial and continuing calibration blanks;
- Method blanks;
- Matrix spike/matrix spike duplicate recoveries;
- Duplicate sample analyses;
- Laboratory control sample (LCS);
- Sample result verification and identification;
- Analysis sequence;
- Quantitation limits; and,
- Data completeness.

For sample group 977669, SDG CBN03, these items were considered compliant and acceptable in accordance with the validation protocols. Sample was prepared using TCLP extraction procedure. Sample SS-BLDG-29-TCLP was utilized for MS/MSD analyses and for sample duplicate.

For sample group 978917, SDG CBN08, these items were considered compliant and acceptable in accordance with the validation protocols, with exception of MS/MSD RPD. Sample SS-001-B20-(2-6) was utilized for MS/MSD and for sample duplicate.

For sample group 979131, SDG CBN08, these items were considered compliant and acceptable in accordance with the validation protocols. Sample SS-010-MHB3-(3-7) was utilized for MS/MSD and for sample duplicate.

For sample group 979319, SDG CBN10, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of MSD %R and MS/MSD RPD. Sample SS-024-ISS3-(2-4.5) was utilized for MS/MSD and for sample duplicate.

For sample group 979489, SDG CBN10, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of CCV%D. Sample SS-024-ISS3-(2-4.5) was utilized for MS/MSD and for sample duplicate.

For sample group 979838, SDG CBN11, these items were considered compliant and acceptable in accordance with the validation protocols, with exception of duplicate RPD. Sample SS-034-MHC2-(2-6') was utilized for MS/MSD and for sample duplicate.

For sample group 980024, SDG CBN12, these items were considered compliant and acceptable in accordance with the validation protocols, with exception of duplicate RPD. Sample SS-045-ISS4-(3-7) was utilized for MS/MSD and for sample duplicate.

For sample group 980465, SDG CBN13, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of sample preservation. A sample from a different sample group was utilized for MS/MSD analyses and for sample duplicate.

For sample group 987350, CBN18 these items were considered compliant and acceptable in accordance with the validation protocols. A non-project sample was utilized for MS/MSD and for sample duplicate.

For sample group 989015, CBN20 these items were considered compliant and acceptable in accordance with the validation protocols. Sample ISS-T-200B was utilized for MS/MSD and for sample duplicate.

For sample group 989415, CBN21 these items were considered compliant and acceptable in accordance with the validation protocols. A non-project sample was utilized for MS/MSD and for sample duplicate.

Sample Preservation

For sample group 980465, SDG CBN13, all soil samples (SS-WS4, SS-WS5, SS-WS6) were received with sample temperature of 13.8ºC; sample results qualification is not required based on soil sample temperature.

MS/MSD Precision and Accuracy

MS/MSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements were within QC acceptance limits and considered

acceptable, with the exceptions noted below. Sample results were not qualified if MS/MSD %R or RPD was non-compliant but sample concentration was <4x spike amount.

Sample Group/ SDG	Sample ID	Analyte	MS/MSD %R	MS/MSD %RPD	Data Qualifier
978917/CBN08	SS-001-B20-(2-6)	Mercury	Ok	31	J
979838/CBN10	SS-024-ISS3(2-4.5')	Mercury	170/Ok	41	J

Duplicate Sample

Duplicate sample analysis precision (relative percent differences; RPDs) measurements were within QC acceptance limits and considered acceptable, with the exceptions noted below. Sample results were not qualified if results <reporting limit.

Sample Group/ SDG	Sample ID	Analyte	Dup RPD	Result >RL?	Data Qualifier
979838/CBN10	SS-024-ISS3(2-4.5')	Mercury	Ok	No	None
979489/CBN11	SS-034-MHC2-(2-6')	Mercury	Ok	No	None

5.4 SW6010B Metals Analysis

The following items were reviewed for compliancy in the metals analysis by Lancaster using Method SW6010A:

- Custody documentation;
- Sample preservation;
- Holding times;
- Initial calibration;
- Continuing calibration verifications;
- Initial and continuing calibration blanks;
- Method blanks;
- Matrix spike/matrix spike duplicate recoveries;
- Replicate analyses;
- Laboratory control sample (LCS);
- Interference check sample (ICS);
- Serial dilution results;
- Post-digestion spike results;
- Sample result verification and identification;
- Analysis sequence;
- Quantitation limits; and,
- Data completeness.

For sample group 977669, SDG CBN03, these items were considered compliant and acceptable in accordance with the validation protocols. Sample was prepared using TCLP extraction procedure. Sample SS-BLDG-29-TCLP was utilized for MS/MSD analyses.

For sample group 987350, SDG CBN18, these items were considered compliant and acceptable in accordance with the validation protocols. A sample from a different sample group was utilized for MS/MSD and for sample duplicate.

For sample group 989015, SDG CBN20, these items were considered compliant and acceptable in accordance with the validation protocols, with the exception of method blank and MS/MSD. Sample ISS-T-200B was utilized for MS/MSD and for sample duplicate.

For sample group 989415, CBN21 these items were considered compliant and acceptable in accordance with the validation protocols. The concentration of calcium (24.8 ug/L) exceeded the reporting limit; however sample results were greater than 20x blank amount so data qualification was not required. A non-project sample was utilized for MS/MSD and for sample duplicate.

Method Blank Contamination

For sample group 989015, SDG CBN20, detectable amounts of Aluminum (7.97J mg/kg) and Calcium (14.8J mg/kg) were detected in the method blank. However, all sample results were greater than 5x the blank amount so data qualification was not required.

For sample group 989415, SDG CBN21, detectable amounts of Calcium (24.8J mg/kg), Magnesium (5.37J mg/kg), Sodium (39.4J mg/kg), Barium (0.170J mg/kg), and Manganese (0.0880J mg/kg) were detected in the method blank. However, all sample results were greater than 5x the blank amount so data qualification was not required.

MS/MSD Precision and Accuracy

MS/MSD precision (relative percent differences; RPDs) and accuracy (percent recoveries; %Rs) measurements were within QC acceptance limits and considered acceptable, with the exceptions noted below. Sample results were not qualified if MS/MSD %R or RPD was non-compliant but sample concentration was <4x spike amount.

Sample Group/ SDG	Sample ID	Analyte	MS/MSD %R	MS/MSD %RPD	Data Qualifier
989015/CBN	ISS-T-200B	Potassium	390/395		J
989015/CBN	ISS-T-200B	Antimony	46/48		UJ
989015/CBN	ISS-T-200B	Copper	Ok/135		J
989015/CBN	ISS-T-200B	Lead	147/161		J
989015/CBN	ISS-T-200B	Zinc	51/73		J

TABLE 1 – VALIDATED SAMPLES AND ANALYSES PERFORMED

CVX-Beacon, NY

ISS Project

Lancaster Sample Group/ SDG	Lancaster Sample No.	Parsons Field Sample ID	Sample Date	Matrix	VOCs (SW8260B)	SVOCs (SW8270C)	Metals (SW6010B)	Mercury (SW7471A)
977407/CBN02	4705887	SSBLDG56ISS-01-B	02/07/06	Soil	X	X	-	-
977407/CBN02	4705888	SSBLDG56ISS-02-S	02/07/06	Soil	X	X	-	-
977669/CBN03	4707342	SS-BLDG29-TCLP	02/09/06	Soil	TCLP	TCLP	TCLP	TCLP
977672/CBN05	4707352	RW-001-A1	02/09/06	Water	X	-	-	-
977672/CBN05	4707353	RW-002-A1	02/09/06	Water	X	-	-	-
977672/CBN05	4707354	RW-003-B2	02/09/06	Water	X	-	-	-
977672/CBN05	4707357	RW-004-BG	02/09/06	Water	X	-	-	-
977672/CBN05	4707358	RW-005-BG	02/09/06	Water	X	-	-	-
977672/CBN05	4707359	TB-001	02/09/06	Water	X	-	-	-
978129/CBN05	4710001	RW-006-B3	02/14/06	Water	X	-	-	-
978129/CBN05	4710002	RW-1006-B3	02/14/06	Water	X	-	-	-
978129/CBN05	4710003	RW-007-B3	02/14/06	Water	X	-	-	-
978129/CBN05	4710004	RW-008-B3	02/14/06	Water	X	-	-	-
978129/CBN05	4710005	RW-009-B2	02/14/06	Water	X	-	-	-
978129/CBN05	4710006	RW-010-B6	02/14/06	Water	X	-	-	-
978129/CBN05	4710007	RW-011-B5	02/14/06	Water	X	-	-	-
978129/CBN05	4710008	RW-012-B4	02/14/06	Water	X	-	-	-
978129/CBN05	4710009	RW-013-B2	02/14/06	Water	X	-	-	-
978129/CBN05	4710010	RW-014-B2	02/14/06	Water	X	-	-	-
978129/CBN05	4710011	TB-002	02/14/06	Water	X	-	-	-
978129/CBN05	4710012	RW-015-42	02/14/06	Water	X	-	-	-
978327/CBN06	4710926	TB-003	02/15/06	Water	X	-	-	-
978327/CBN06	4710927	RW-016-A1	02/15/06	Water	X	-	-	-
978327/CBN06	4710928	RW-1016-A1	02/15/06	Water	X	-	-	-
978327/CBN06	4710929	RW-017-A1	02/15/06	Water	X	-	-	-
978327/CBN06	4710930	RW-018-A1	02/15/06	Water	X	-	-	-

978327/CBN06	4710931	RW-019-BG	02/15/06	Water	X	-	-	-
978327/CBN06	4710932	RW-020-58	02/15/06	Water	X	-	-	-
978327/CBN06	4710933	RW-021-83	02/15/06	Water	X	-	-	-
978327/CBN06	4710934	RW-1021-83	02/15/06	Water	X	-	-	-
978484/CBN06	4711802	TB-004	02/16/06	Water	X	-	-	-
978484/CBN06	4711803	RW-024-GC	02/16/06	Water	X	-	-	-
978484/CBN06	4711804	RW-1024-GC	02/16/06	Water	X	-	-	-
978484/CBN06	4711805	RW-025-GC	02/16/06	Water	X	-	-	-
978484/CBN06	4711808	RW-026-WB	02/16/06	Water	X	-	-	-
978917/CBN08	4714331	SS-001-B20 (2-6)	02/20/06	Soil	X	X	-	X
978917/CBN08	4714335	SS-002-B3 (3-7)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714336	SS-003-B3 (3-4.5)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714337	SS-004-B3 (3-7)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714338	SS-005-B73 (2-6)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714339	SS-006-B3 (3-7)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714340	SS-106-B3 (3-7)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714341	SS-007-MHB6 (4-7)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714342	SS-008-B6 (3-7)	02/21/06	Soil	X	X	-	X
978917/CBN08	4714343	SS-009-B6 (3-7)	02/21/06	Soil	X	X	-	X
979131/CBN08	4715535	SS-011-B4 (4-7)	02/22/06	Soil	X	X	-	X
979131/CBN08	4715538	SS-010-MHB4 (3-7)	02/22/06	Soil	X	X	-	X
979131/CBN08	4715540	SS-012-B39 (3-7)	02/22/06	Soil	X	X	-	X
979131/CBN08	4715541	SS-013-B3 (3-7)	02/22/06	Soil	X	X	-	X
979131/CBN08	4715542	SS-113-B3 (3-7)	02/22/06	Soil	X	X	-	X
979131/CBN08	4715543	SS-014-MHB2 (4-8)	02/22/06	Soil	X	X	-	X
979131/CBN08	4715544	SS-014-MHB2 (8-11)	02/22/06	Soil	X	X	-	X
979131/CBN08	4715545	TB-005	02/22/06	Water	X	-	-	-
979319/CBN10	4716641	SS-015-B26 (4-7)	02/23/06	Soil	X	X	-	X
979319/CBN10	4716642	SS-016-ISS5 (4-5)	02/23/06	Soil	X	X	-	X
979319/CBN10	4716643	SS-017-B55 (8-12)	02/23/06	Soil	X	X	-	X
979319/CBN10	4716644	SS-117-B55 (8-12)	02/23/06	Soil	X	X	-	X
979319/CBN10	4716645	SS-018-ISS5 (4-8)	02/23/06	Soil	X	X	-	X
979319/CBN10	4716646	SS-019-ISS5 (4-8)	02/23/06	Soil	X	X	-	X
979319/CBN10	4716647	SS-020-ISS5 (4-6)	02/23/06	Soil	X	X	-	X
979319/CBN10	4716648	TB-006	02/23/06	Water	X	-	-	-

979489/CBN10	4717529	TB-007	02/24/06	Water	X	-	-	-
979489/CBN10	4717530	SS-021-ISS5 (4-6)	02/23/06	Soil	X	X	-	X
979489/CBN10	4717531	SS-022-ISS5 (3-4)	02/24/06	Soil	X	X	-	X
979489/CBN10	4717532	SS-023-ISS3 (2-4)	02/24/06	Soil	X	X	-	X
979489/CBN10	4717533	SS-024-ISS3 (2-4.5)	02/24/06	Soil	X	X	-	X
979489/CBN10	4717537	SS-025-ISS2 (4-8)	02/24/06	Soil	X	X	-	X
979489/CBN10	4717538	SS-026-ISS2 (4-8)	02/24/06	Soil	X	X	-	X
979489/CBN10	4717539	SS-026-ISS2 (8-10)	02/24/06	Soil	X	X	-	X
979838/CBN11	4719325	SS-034-MHC2 (2-6)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719326	SS-033-ISS8 (3-7)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719327	SS-031-ISS1 (2-6)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719328	SS-032-ISS1 (2-6)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719329	SS-035-ISS8 (3-7)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719330	SS-036-ISS8 (3-7)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719331	SS-037-ISS8 (3-7)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719332	SS-038-ISS8 (4-8)	02/28/06	Soil	X	X	-	X
979838/CBN11	4719333	SS-027-MHA1 (3-7)	02/27/06	Soil	X	X	-	X
979838/CBN11	4719334	SS-028-ISS1 (3-7)	02/27/06	Soil	X	X	-	X
979838/CBN11	4719335	SS-029-ISS1 (3-7)	02/27/06	Soil	X	X	-	X
979838/CBN11	4719336	SS-030-ISS1 (3-7) [reported incorrectly by lab as “SS-30-MHA1-(3-7’)]	02/27/06	Soil	X	X	-	X
979838/CBN11	4719337	SS-130-ISS1 (3-7)	02/27/06	Soil	X	X	-	X
979838/CBN11	4719338	TB-008	02/27/06	Water	X	-	-	-
980024/CBN12	4720219	SS-039-ISS8 (4-8)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720220	SS-040-ISS8 (4-8)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720221	SS-041-ISS6 (4-8)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720222	SS-141-ISS6 (4-8)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720223	SS-042-ISS8 (3-7)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720224	SS-043-ISS4 (3-7)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720225	SS-044-ISS4 (3-7)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720226	SS-045-ISS4 (3-7)	03/01/06	Soil	X	X	-	X
980024/CBN12	4720227	TB-009	03/01/06	Water	X	-	-	-
980465/CBN13	4722308	SS-WS4	03/06/06	Soil	-	-	-	X
980465/CBN13	4722309	SS-WS5	03/06/06	Soil	-	-	-	X
980465/CBN13	4722310	SS-WS6	03/06/06	Soil	-	-	-	X

982922/CBN15	4735808	RW-027-BG	03/23/06	Water	X	-	-	-
987350/CBN18	4759614	TANK 200 SUMP GRAB	04/27/2006	Water	X	X	X	X
987350/CBN18	4759615	TANK 200 WATER GRAB	04/27/2006	Water	X	X	X	X
987350/CBN18	4759616	Trip Blank	04/27/2006	Water	X			
989015/CBN20	4768576	ISS-T-200A (reported by lab as “1SS-T-200A)	05/08/06	Soil	X	X	X	X
989015/CBN20	4768577	ISS-T-200B (reported by lab as “1SS-T-200B)	05/08/06	Soil	X	X	X	X
989015/CBN20	4768581	ISS-T-200C (reported by lab as “1SS-T-200C)	05/08/06	Soil	X	X	X	X
989015/CBN20	4768582	ISS-T-200D (reported by lab as “1SS-T-200D)	05/08/06	Soil	X	X	X	X
989015/CBN20	4768583	ISS-T-200E (reported by lab as “1SS-T-200E)	05/08/06	Soil	X	X	X	X
989015/CBN20	4768584	ISS-T-200F (reported by lab as “1SS-T-200F)	05/08/06	Soil	X	X	X	X
989415/CBN21	4770845	SS-B45_SLAB_South Grab Soil Sample	05/10/06	Soil	X	X	X	X
989415/CBN21	4770846	SS-B45_SLAB-North Grab Soil Sample	05/10/06	Soil	X	X	X	X

TABLE 2

DATA VALIDATION DATA QUALIFIERS AND DATA FLAG CHANGES

CVX-Beacon, NY

ISS Project

Sample Group/SDG	Lab ID	Sample ID	ANALYTE	Reported Concentration (ug/kg)	Old Flag (lab flag)	New Flag (Data Qualifier)	Final Q (summary)	Reason
977407/CBN02	4705887	SSBLDG56ISS-02-S	2-Hexanone	ND		J	UJ	MS RPD
977407/CBN02	4705888	SSBLDG56ISS-02-S	Bromomethane	ND		J	UJ	CCV %D
977407/CBN02	4705888	SSBLDG56ISS-02-S	Chlorobenzene	490		J	JH	MS %R
977669/CBN03	4707342	SS-BLDG29-TCLP	2,4,5-Trichlorophenol	ND		R	R	Surrogate %R
977669/CBN03	4707342	SS-BLDG29-TCLP	2,4,6-Trichlorophenol	ND		R	R	Surrogate %R
977669/CBN03	4707342	SS-BLDG29-TCLP	2-Methylphenol	ND		R	R	Surrogate %R
977669/CBN03	4707342	SS-BLDG29-TCLP	4-Methylphenol	ND		R	R	Surrogate %R
977669/CBN03	4707342	SS-BLDG29-TCLP	Pentachlorophenol	ND		R	R	Surrogate %R
977672/CBN05	4707352	RW-001-A1	Carbon tetrachloride	ND		J	UJ	CCV %D
977672/CBN05	4707353	RW-002-A1	1,1,1-Trichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707353	RW-002-A1	1,2-Dichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707353	RW-002-A1	Carbon tetrachloride	ND		J	UJ	CCV %D
977672/CBN05	4707354	RW-003-B2	Carbon tetrachloride	ND		J	UJ	CCV %D
977672/CBN05	4707354	RW-003-B2	Chloroethane	ND		J	UJ	MSD RPD
977672/CBN05	4707357	RW-004-BG	1,1,1-Trichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707357	RW-004-BG	1,2-Dichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707357	RW-004-BG	Carbon tetrachloride	ND		J	UJ	CCV %D
977672/CBN05	4707358	RW-005-BG	1,1,1-Trichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707358	RW-005-BG (DL)	1,1,1-Trichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707358	RW-005-BG	1,2-Dichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707358	RW-005-BG (DL)	1,2-Dichloroethane	ND		J	UJ	CCV %D
977672/CBN05	4707358	RW-005-BG	Carbon tetrachloride	ND		J	UJ	CCV %D
977672/CBN05	4707358	RW-005-BG (DL)	Carbon tetrachloride	ND		J	UJ	CCV %D
978129/CBN05	4710004	RW-008-B3	1,1,1-Trichloroethane	ND		J	UJ	CCV %D

978129/CBN05	4710004	RW-008-B3	1,2-Dichloroethane	ND		J	UJ	CCV %D
978129/CBN05	4710004	RW-008-B3	Bromomethane	ND		J	UJ	CCV %D
978129/CBN05	4710004	RW-008-B3	Carbon Tetrachloride	ND		J	UJ	CCV %D
978129/CBN05	4710004	RW-008-B3	Chloromethane	ND		J	UJ	CCV %D
978327CBN06	4710926	TB-003	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710926	TB-003	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710927	RW-016-A1	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710927	RW-016-A1	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710928	RW-1016-A1	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710928	RW-1016-A1	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710929	RW-017-A1	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710929	RW-017-A1	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710930	RW-018-A1	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710930	RW-018-A1	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710931	RW-019-BG	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710931	RW-019-BG	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710932	RW-020-58	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710932	RW-020-58	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710933	RW-021-83	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710933	RW-021-83	2-Hexanone	ND		J	UJ	CCV %D
978327CBN06	4710934	RW-1021-83	1,2-Dichloroethane	ND		J	UJ	CCV %D
978327CBN06	4710934	RW-1021-83	2-Hexanone	ND		J	UJ	CCV %D
978484/CBN06	4711802	TB-004	2-Hexanone	ND		J	UJ	CCV %D
978484/CBN06	4711802	TB-004	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
978484/CBN06	4711803	RW-024-GC	2-Hexanone	ND		J	UJ	CCV %D
978484/CBN06	4711803	RW-024-GC	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
978484/CBN06	4711804	RW-1024-GC	2-Hexanone	ND		J	UJ	CCV %D
978484/CBN06	4711804	RW-1024-GC	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
978484/CBN06	4711805	RW-025-GC	2-Hexanone	ND		J	UJ	CCV %D
978484/CBN06	4711805	RW-025-GC	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
978484/CBN06	4711808	RW-026	2-Hexanone	ND		J	UJ	CCV %D
978484/CBN06	4711808	RW-026	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
978917/CBN08	4714331	SS-001-B20-(2-6)	4-Chloroaniline	ND		J	UJ	MSRPD
978917/CBN08	4714331	SS-001-B20-(2-6)	Benzo(b)fluoranthene	560		J	J	MSRPD
978917/CBN08	4714331	SS-001-B20-(2-6)	Mercury	6290		J	J	MSRPD

979319/CBN10	4716641	SS-015-B26 (4-7)	Phenanthrene	3600		J	JL	MSD %R, RPD
979319/CBN10	4716641	SS-015-B26 (4-7)	Pyrene	3300		J	JL	MSD%R, RPD
979489/CBN10	4717529	TB-007	2-Hexanone	ND		J	UJ	CCV %D
979489/CBN10	4717529	TB-007	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
979489/CBN10	4717529	TB-007	Tetrachloroethene	ND		J	UJ	CCV %D
979489/CBN10	4717530	SS-021-ISS5 (4-6)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979489/CBN10	4717530	SS-021-ISS5 (4-6)	2-Chloronaphthalene	ND		J	UJ	CCV %D
979489/CBN10	4717530	SS-021-ISS5 (4-6)	Benzo(g,h,i)perylene	21000		J	J	CCV %D
979489/CBN10	4717531	SS-022-ISS5 (3-4)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979489/CBN10	4717531	SS-022-ISS5 (3-4)	2-Chloronaphthalene	ND		J	UJ	CCV %D
979489/CBN10	4717531	SS-022-ISS5 (3-4)	2-Hexanone	ND		J	UJ	CCV %D
979489/CBN10	4717531	SS-022-ISS5 (3-4)	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
979489/CBN10	4717531	SS-022-ISS5 (3-4)	Benzo(g,h,i)perylene	150	J	J	J	CCV %D
979489/CBN10	4717531	SS-022-ISS5 (3-4)	Bromoform	ND		J	UJ	CCV %D
979489/CBN10	4717531	SS-022-ISS5 (3-4)	Dibromochloromethane	ND		J	UJ	CCV %D
979489/CBN10	4717532	SS-023-ISS3 (2-4)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979489/CBN10	4717532	SS-023-ISS3 (2-4)	2-Chloronaphthalene	ND		J	UJ	CCV %D
979489/CBN10	4717532	SS-023-ISS3 (2-4)	2-Hexanone	ND		J	UJ	CCV %D
979489/CBN10	4717532	SS-023-ISS3 (2-4)	4-Methyl-2-pentnone	ND		J	UJ	CCV %D
979489/CBN10	4717532	SS-023-ISS3 (2-4)	Benzo(g,h,i)perylene	ND		J	UJ	CCV %D
979489/CBN10	4717532	SS-023-ISS3 (2-4)	Bromoform	ND		J	UJ	CCV %D
979489/CBN10	4717532	SS-023-ISS3 (2-4)	Dibromochloromethane	ND		J	UJ	CCV %D
979489/CBN10	4717533	SS-024-ISS3 (2-4.5)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979489/CBN10	4717533	SS-024-ISS3 (2-4.5)	2-Chloronaphthalene	ND		J	UJ	CCV %D
979489/CBN10	4717533	SS-024-ISS3 (2-4.5)	Benzo(g,h,i)perylene	ND		J	UJ	CCV %D
979489/CBN10	4717533	SS-024-ISS3-(2-4.5)	Mercury	105	J	J	JH	MS%R, RPD
979489/CBN10	4717537	SS-025-ISS2 (4-8)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979489/CBN10	4717537	SS-025-ISS2 (4-8)	2-Chloronaphthalene	ND		J	UJ	CCV %D
979489/CBN10	4717537	SS-025-ISS2 (4-8)	Benzo(g,h,i)perylene	110	J	J	J	CCV %D
979489/CBN10	4717538	SS-026-ISS2 (4-8)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979489/CBN10	4717538	SS-026-ISS2 (4-8)	2-Chloronaphthalene	ND		J	UJ	CCV %D
979489/CBN10	4717538	SS-026-ISS2 (4-8)	2-Hexanone	ND		J	UJ	CCV %D
979489/CBN10	4717538	SS-026-ISS2 (4-8)	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
979489/CBN10	4717538	SS-026-ISS2 (4-8)	Benzo(g,h,i)perylene	ND		J	UJ	CCV %D

979489/CBN10	4717538	SS-026-ISS2 (4-8)	Bromoform	ND		J	UJ	CCV %D
979489/CBN10	4717538	SS-026-ISS2 (4-8)	Dibromochloromethane	ND		J	UJ	CCV %D
979489/CBN10	4717539	SS-026-ISS2 (8-10)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979489/CBN10	4717539	SS-026-ISS2 (8-10)	2-Chloronaphthalene	ND		J	UJ	CCV %D
979489/CBN10	4717539	SS-026-ISS2 (8-10)	Benzo(g,h,i)perylene	ND		J	UJ	CCV %D
979838/CBN11	4719325	SS-034-MHC2-(2-6')	2,2'-oxybis(1-chloropropane)	ND		J	UJ	MSRPD
979838/CBN11	4719325	SS-034-MHC2 (2-6)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719325	SS-034-MHC2 (2-6)	Butylbenzylphthalate	ND		J	UJL	Surrogate %R
979838/CBN11	4719325	SS-034-MHC2 (2-6)	Dibenz(a,h)anthracene	ND		J	UJ	CCV %D
979838/CBN11	4719325	SS-034-MHC2 (2-6)	Phenanthrene	60	J	J	JL	Surrogate %R
979838/CBN11	4719325	SS-034-MHC2 (2-6)	Pyrene	58	J	J	JL	Surrogate %R
979838/CBN11	4719326	SS-033-ISS8 (3-7)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719326	SS-033-ISS8 (3-7)	Dibenz(a,h)anthracene	ND		J	UJ	CCV %D
979838/CBN11	4719327	SS-031-ISS1 (2-6)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719327	SS-031-ISS1 (2-6)	Dibenz(a,h)anthracene	210		J	J	CCV %D
979838/CBN11	4719328	SS-032-ISS1 (2-6)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719328	SS-032-ISS1 (2-6)	Dibenz(a,h)anthracene	79	J	J	J	CCV %D
979838/CBN11	4719329	SS-035-ISS8 (3-7)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719329	SS-035-ISS8 (3-7)	Dibenz(a,h)anthracene	ND		J	UJ	CCV %D
979838/CBN11	4719330	SS-036-ISS8 (3-7)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719330	SS-036-ISS8 (3-7)	Dibenz(a,h)anthracene	ND		J	UJ	CCV %D
979838/CBN11	4719331	SS-037-ISS8 (3-7)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719331	SS-037-ISS8 (3-7)	Dibenz(a,h)anthracene	200	J	J	J	CCV %D
979838/CBN11	4719332	SS-038-ISS8 (4-8)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719332	SS-038-ISS8 (4-8)	Dibenz(a,h)anthracene	340		J	J	CCV %D
979838/CBN11	4719333	SS-027-MHA1 (3-7)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719333	SS-027-MHA1 (3-7)	Dibenz(a,h)anthracene	170	J	J	J	CCV %D
979838/CBN11	4719334	SS-028-ISS1 (3-7)	2,4-Dinitrophenol	ND		J	UJ	CCV %D
979838/CBN11	4719334	SS-028-ISS1 (3-7)	Dibenz(a,h)anthracene	ND		J	UJ	CCV %D
979838/CBN11	4719338	TB-008	2-Hexanone	ND		J	UJ	CCV %D
979838/CBN11	4719338	TB-008	4-Methyl-2-pentanone	ND		J	UJ	CCV %D
980024/CBN12	4720219	SS-039-ISS8-(4-8')	2,4-Dinitrophenol	ND		J	UJ	MSRPD
980024/CBN12	4720219	SS-039-ISS8 (4-8)	Fluoranthene	10000		J	JL	MS%R, RPD

980024/CBN12	4720219	SS-039-ISS8 (4-8)	Phenanthrene	17000		J	JL	MS%R, RPD
982922/CBN15	4735808	RW-027-BG	Bromoform	ND		J	UJ	CCV %D
982922/CBN15	4735808	RW-027-BG	Carbon tetrachloride	ND		J	UJ	CCV %D
987350/CBN18	4759614	Tank 200 Sump	2-Hexanone	ND		J	UJ	CCV %D
987350/CBN18	4759615	Tank 200 Water	2-Hexanone	ND		J	UJ	CCV %D
987350/CBN18	4759616	Trip blank	2-Hexanone	ND		J	UJ	CCV %D
989015/CBN20	4768577	ISS-T-200B	Potassium	1250		J	J	MS %R
989015/CBN20	4768577	ISS-T-200B	Antimony	ND		J	UJ	MS %R
989015/CBN20	4768577	ISS-T-200B	Copper	22300		J	J	MS %R
989015/CBN20	4768577	ISS-T-200B	Lead	20400		J	J	MS %R
989015/CBN20	4768577	ISS-T-200B	Zinc	109000		J	J	MS %R
989015/CBN20	4768576	ISS-T-200A	Acetone	ND		J	UJ	CCV%D
989015/CBN20	4768577	ISS-T-200B	Acetone	ND		J	UJ	CCV%D
989015/CBN20	4768581	ISS-T-200C	Acetone	ND		J	UJ	CCV%D
989015/CBN20	4768582	ISS-T-200D	Acetone	ND		J	UJ	CCV%D
989015/CBN20	4768583	ISS-T-200E	Acetone	ND		J	UJ	CCV%D
989015/CBN20	4768584	ISS-T-200F	Acetone	ND		J	UJ	CCV%D
989015/CBN20	4768582	ISS-T-200D	2,2’-oxybis(1-Chloropropane)	ND		J	UJ	ICV%D
989015/CBN20	4768582	ISS-T-200D	Hexachlorocyclopentadiene	ND		J	UJ	ICV%D
989015/CBN20	4768582	ISS-T-200D	2-Chloronaphthalene	ND		J	UJ	ICV%D
989015/CBN20	4768582	ISS-T-200D	2-Chloronaphthalene	ND		J	UJ	CCV%D
989015/CBN20	4768577	ISS-T-200B	2,2’-oxybis(1-Chloropropane)	ND		J	UJ	ICV%D
989015/CBN20	4768577	ISS-T-200B	4-Methylphenol	ND		J	UJ	CCV%D
989015/CBN20	4768577	ISS-T-200B	4-Nitrophenol	ND		J	UJ	CCV%D
989015/CBN20	4768577	ISS-T-200B	Fluorene	ND		J	UJ	CCV%D
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Acetone	ND		J	UJ	CCV%D
989415/CBN21	4770846	SS-B45_SLAB-North Grab Soil Sample	Acetone	ND		J	UJ	CCV%D
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Pyrene	8900		J	J	MS%R

989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	2,4-Dinitrophenol	ND		J	UJ	MS/MSD RPD
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Phenanthrene	10000		J	J	MS%R
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Anthracene	3200		J	J	MS%R
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Fluoranthene	9100		J	J	MS%R
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Benzo(a)anthracene	4100		J	J	MS%R
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Chrysene	4100		J	J	MS%R
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	2,2’-oxybis(1-Chloropropane)	ND		J	UJ	ICV%D
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	Hexachlorocyclopentadiene	ND		J	UJ	ICV%D
989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	2-Chloronaphthalene	ND		J	UJ	ICV%D
989415/CBN21	4770846	SS-B45_SLAB-North Grab Soil Sample	2,2’-oxybis(1-Chloropropane)	ND		J	UJ	ICV%D
989415/CBN21	4770846	SS-B45_SLAB-North Grab Soil Sample	Hexachlorocyclopentadiene	ND		J	UJ	ICV%D
989415/CBN21	4770846	SS-B45_SLAB-North Grab Soil Sample	2-Chloronaphthalene	ND		J	UJ	ICV%D

989415/CBN21	4770845	SS-B45_SLAB-South Grab Soil Sample	2-Chloronaphthalene	ND		J	UJ	CCV%D
989415/CBN21	4770846	SS-B45_SLAB-North Grab Soil Sample	2-Chloronaphthalene	ND		J	UJ	CCV%D

TABLE 3 – FIELD DUPLICATE SAMPLE RESULTS

CVX-Beacon, NY

ISS Project

Sample Matrix	Analyte	Collection Date	Field Sample ID	Field Sample Value (ug/kg)	RL*	Replicate Sample ID	Replicate Sample Value	RL	RPD**
Water	Chlorobenzene	02/14/06	RW-006-B3	5 ug/L	0.8	RW-1006-B3	6 ug/L	0.8	18
Water	ALL ND	02/15/06	RW-021-83			RW-1021-83			N/A
Water	All ND	02/16/06	RW-016			RW-1016			N/A
Water	All ND	02/16/06	RW-024			RW-1024			N/A
Soil	Mercury	02/21/06	SS-006-B3 (3-7)	34.9J	2.8	SS-106-B3 (3-7)	33.6J	0.0028	N/A
Soil	Pyrene	02/21/06	SS-006-B3 (3-7)	54J	37	SS-106-B3 (3-7)	70J	37	N/A
Soil	Fluoranthene	02/21/06	SS-006-B3 (3-7)	59J	37	SS-106-B3 (3-7)	63J	37	N/A
Soil	Benzo(a)anthracene	02/21/06	SS-006-B3 (3-7)	39J	37	SS-106-B3 (3-7)	56J	37	N/A
Soil	Chrysene	02/21/06	SS-006-B3 (3-7)	48J	37	SS-106-B3 (3-7)	69J	37	N/A
Soil	Bis(2-ethylhexyl)phthalate	02/21/06	SS-006-B3 (3-7)	130J	74	SS-106-B3 (3-7)	ND	37	N/A
Soil	Benzo(b)fluoranthene	02/21/06	SS-006-B3 (3-7)	56J	37	SS-106-B3 (3-7)	79J	37	N/A
Soil	Benzo(a)pyrene	02/21/06	SS-006-B3 (3-7)	41J	37	SS-106-B3 (3-7)	110J	37	N/A
Soil	Indeno(1,2,3-cd)pyrene	02/21/06	SS-006-B3 (3-7)	ND	37	SS-106-B3 (3-7)	39J	37	N/A
Soil	Benzo(g,h,i)perylene	02/21/06	SS-006-B3 (3-7)	45J	37	SS-106-B3 (3-7)	56J	37	N/A
Soil	Methylene chloride	02/21/06	SS-006-B3 (3-7)	ND	2	SS-106-B3 (3-7)	4J	2	N/A
Soil	Benzene	02/21/06	SS-006-B3 (3-7)	ND	1	SS-106-B3 (3-7)	2J	1	N/A
Soil	Xylenes	02/21/06	SS-006-B3 (3-7)	ND	1	SS-106-B3 (3-7)	2J	1	N/A
Soil	Mercury	02/22/06	SS-013-B3 (3-7)	82.2J	2.8	SS-113-B3 (3-7)	80.4J	0.0028	1
Soil	Toluene	02/22/06	SS-013-B3 (3-7)	4J	1	SS-113-B3 (3-7)	3J	1	1

Soil	Ethylbenzene	02/22/06	SS-013-B3 (3-7)	2J	1	SS-113-B3 (3-7)	1J	1	1
Soil	Xylenes	02/22/06	SS-013-B3 (3-7)	6	1	SS-113-B3 (3-7)	5J	1	18
Soil	Mercury	02/23/06	SS-017-B55 (8-12)	8.90	2.9	SS-117-B55 (8-12)	77.4	0.0029	14
Soil	Pyrene	02/23/06	SS-017-B55 (8-12)	300	38	SS-117-B55 (8-12)	100J	37	N/A
Soil	Fluorene	02/23/06	SS-017-B55 (8-12)	69J	38	SS-117-B55 (8-12)	58J	37	N/A
Soil	Phenanthrene	02/23/06	SS-017-B55 (8-12)	180J	38	SS-117-B55 (8-12)	52J	37	N/A
Soil	Anthracene	02/23/06	SS-017-B55 (8-12)	67J	38	SS-117-B55 (8-12)	ND	37	N/A
Soil	Fluoranthene	02/23/06	SS-017-B55 (8-12)	240	38	SS-117-B55 (8-12)	50J	37	N/A
Soil	Benzo(a)anthracene	02/23/06	SS-017-B55 (8-12)	140J	38	SS-117-B55 (8-12)	38J	37	N/A
Soil	Chrysene	02/23/06	SS-017-B55 (8-12)	130J	38	SS-117-B55 (8-12)	44J	37	N/A
Soil	Bis(2-ethylhexyl)phthalate	02/23/06	SS-017-B55 (8-12)	110J	76	SS-117-B55 (8-12)	ND	75	N/A
Soil	Benzo(b)fluoranthene	02/23/06	SS-017-B55 (8-12)	140J	38	SS-117-B55 (8-12)	ND	37	N/A
Soil	Benzo(k)fluoranthene	02/23/06	SS-017-B55 (8-12)	56J	38	SS-117-B55 (8-12)	ND	37	N/A
Soil	Benzo(a)pyrnene	02/23/06	SS-017-B55 (8-12)	130J	38	SS-117-B55 (8-12)	ND	37	N/A
Soil	Indeno(1,2,3-cd)pyrene	02/23/06	SS-017-B55 (8-12)	68J	38	SS-117-B55 (8-12)	ND	37	N/A
Soil	Benzo(g,h,i)perylene	02/23/06	SS-017-B55 (8-12)	95J	38	SS-117-B55 (8-12)	ND	37	N/A
Soil	Acetone	02/23/06	SS-017-B55 (8-12)	16J	8	SS-117-B55 (8-12)	ND	37	N/A
Soil	Xylenes	02/23/06	SS-017-B55 (8-12)	1J	1	SS-117-B55 (8-12)	ND	37	N/A
Soil	Mercury	02/27/06	SS-030-ISS1 (3-7)	315	3.0	SS-130-ISS1 (3-7)	504	0.0031	46
Soil	1,4-Dichlorobernzene	02/27/06	SS-030-ISS1 (3-7)	210	38	SS-130-ISS1 (3-7)	ND	41	N/A
Soil	Acenaphthene	02/27/06	SS-030-ISS1 (3-7)	480	38	SS-130-ISS1 (3-7)	490	41	2.1
Soil	2,4-Dinitrotoluene	02/27/06	SS-030-ISS1 (3-7)	ND	38	SS-130-ISS1 (3-7)	570	81	N/A
Soil	Pyrene	02/27/06	SS-030-ISS1 (3-7)	1000	38	SS-130-ISS1 (3-7)	2400	41	82
Soil	Naphthalene	02/27/06	SS-030-ISS1 (3-7)	680	38	SS-130-ISS1 (3-7)	540	41	23
Soil	Acenaphthylene	02/27/06	SS-030-ISS1 (3-7)	190J	38	SS-130-ISS1 (3-7)	280	41	38
Soil	Fluorene	02/27/06	SS-030-ISS1 (3-7)	890	38	SS-130-ISS1 (3-7)	820	41	84
Soil	N-nitrodiphenylamine	02/27/06	SS-030-ISS1 (3-7)	ND	38	SS-130-ISS1 (3-7)	1000	41	N/A
Soil	Phenanthrene	02/27/06	SS-030-ISS1 (3-7)	2000	38	SS-130-ISS1 (3-7)	3300	41	50
Soil	Anthracene	02/27/06	SS-030-ISS1 (3-7)	300	38	SS-130-ISS1 (3-7)	760	41	87
Soil	Fluoranthene	02/27/06	SS-030-ISS1 (3-7)	1100	38	SS-130-ISS1 (3-7)	2300	41	71
Soil	Benzo(a)anthracene	02/27/06	SS-030-ISS1 (3-7)	380	38	SS-130-ISS1 (3-7)	990	41	88
Soil	Chrysene	02/27/06	SS-030-ISS1 (3-7)	470	38	SS-130-ISS1 (3-7)	1000	41	64
Soil	Bis(2-ethylhexyl)phthalate	02/27/06	SS-030-ISS1 (3-7)	760	77	SS-130-ISS1 (3-7)	ND	81	N/A

Soil	Benzo(b)fluoranthene	02/27/06	SS-030-ISS1 (3-7)	400	38	SS-130-ISS1 (3-7)	920	41	79
Soil	Benzo(k)fluoranthene	02/27/06	SS-030-ISS1 (3-7)	160	38	SS-130-ISS1 (3-7)	440	41	93
Soil	Benzo(a0pyrene	02/27/06	SS-030-ISS1 (3-7)	260	38	SS-130-ISS1 (3-7)	720	41	94
Soil	Indeno(1,2,3-cd)pyrene	02/27/06	SS-030-ISS1 (3-7)	180	38	SS-130-ISS1 (3-7)	370	41	68
Soil	Dibenz(a,h)anthracene	02/27/06	SS-030-ISS1 (3-7)	ND	38	SS-130-ISS1 (3-7)	140	41	N/A
Soil	Benzo(g,h,i)perylene	02/27/06	SS-030-ISS1 (3-7)	170	38	SS-130-ISS1 (3-7)	470	41	94
Soil	2-Methylnaphthalene	02/27/06	SS-030-ISS1 (3-7)	3700	38	SS-130-ISS1 (3-7)	4800	41	26
Soil	Dibenzofuran	02/27/06	SS-030-ISS1 (3-7)	430	38	SS-130-ISS1 (3-7)	480	41	11
Soil	Carbazole	02/27/06	SS-030-ISS1 (3-7)	ND	38	SS-130-ISS1 (3-7)	270	41	N/A
Soil	Mercury	03/01/06	SS-041-ISS6 (4-8)	252	2.9	SS-141-ISS6 (4-8)	93.6J	2.9	173
Soil	Pyrene	03/01/06	SS-041-ISS6 (4-8)	650	37	SS-141-ISS6 (4-8)	410	37	23
Soil	Acenaphthylene	03/01/06	SS-041-ISS6 (4-8)	75	37	SS-141-ISS6 (4-8)	47J	37	46
Soil	Phenanthrene	03/01/06	SS-041-ISS6 (4-8)	460	37	SS-141-ISS6 (4-8)	260	37	56
Soil	Anthracene	03/01/06	SS-041-ISS6 (4-8)	110J	37	SS-141-ISS6 (4-8)	59J	37	N/A
Soil	Fluoranthene	03/01/06	SS-041-ISS6 (4-8)	730	37	SS-141-ISS6 (4-8)	460	37	45
Soil	Benzo(a)anthracene	03/01/06	SS-041-ISS6 (4-8)	350	37	SS-141-ISS6 (4-8)	220	37	46
Soil	Chrysene	03/01/06	SS-041-ISS6 (4-8)	360	37	SS-141-ISS6 (4-8)	240	37	40
Soil	Bis(2-ethylhexyl)phthalate	03/01/06	SS-041-ISS6 (4-8)	130J	73	SS-141-ISS6 (4-8)	120J	75	N/A
Soil	Benzo(b)fluoranthene	03/01/06	SS-041-ISS6 (4-8)	410	37	SS-141-ISS6 (4-8)	260	37	45
Soil	Benzo(k)fluoranthene	03/01/06	SS-041-ISS6 (4-8)	160J	37	SS-141-ISS6 (4-8)	110J	37	N/A
Soil	Benzo(a)pyrene	03/01/06	SS-041-ISS6 (4-8)	330	37	SS-141-ISS6 (4-8)	200	37	50
Soil	Indeno(1,2,3-cd)pyrene	03/01/06	SS-041-ISS6 (4-8)	210	37	SS-141-ISS6 (4-8)	130J	37	47
Soil	Dibenz(a,h)anthracene	03/01/06	SS-041-ISS6 (4-8)	61J	37	SS-141-ISS6 (4-8)	ND	37	N/A
Soil	Benzo(g,h,i)perylene	03/01/06	SS-041-ISS6 (4-8)	190	37	SS-141-ISS6 (4-8)	120J	37	45
Soil	Carbazole	03/01/06	SS-041-ISS6 (4-8)	44J	37	SS-141-ISS6 (4-8)	ND	37	N/A
Soil	Toluene	03/01/06	SS-041-ISS6 (4-8)	2J	1	SS-141-ISS6 (4-8)	3J	1	N/A
Soil	Ethylbenzene	03/01/06	SS-041-ISS6 (4-8)	ND	1	SS-141-ISS6 (4-8)	1	1	N/A
Soil	Xylenes	03/01/06	SS-041-ISS6 (4-8)	1J	1	SS-141-ISS6 (4-8)	5J	1	N/A

*RL = MDL (reported on dry-weight basis)

**RPD calculated only if both results are detected and one is >RL.

N/A = not applicable.

APPENDIX B

ISS CLEANING/EVALUATION REPORT

APPENDIX C

COMPLETE LABORATORY ANALYTICAL DATA REPORT

A complete copy of the laboratory analytical data has been included on the attached disk

APPENDIX D

SOIL DISPOSAL MANIFESTS

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
[illegible]		

WMNH 010001

GENERATOR

3. Generator's Name and Mailing Address
CHEVRON RESEARCH CENTER
45 OLD GLENHAM ROAD
BEACON NY 12527

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
H SMALL TRUCKING INC	PAD.1.4.6.7.1.4.8.3.7	610-261-2221
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
WM of NEW YORK at HIGH ACRES LANDFILL 425 PERINTON PARKWAY FAIRPORT NY 14450		(585)223-6132

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	001	CY	1	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a VB4020 - Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WEIGHT IS ESTIMATED

Final 19.27T

16. GENERATOR'S CERTIFICATION: Per DOT regulation 49CFR 172.204, I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
In addition, I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
		05	10	06

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JEREY L ANDREWS		05	10	06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

5852236132

CWMI

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MAD 111 [illegible] | Manifest Doc. No. | 2. Page 1 of 1

WMNH 010002

3. Generator's Name and Mailing Address
CHEVRON RESEARCH CENTER
45 OLD GLENHAM ROAD
BEACON NY 12527

4. Generator's Phone ( ) 452-2052

5. Transporter 1 Company Name: KENWITH | 6. US EPA ID Number: PAD111C114878 | A. Transporter's Phone: 610-268-2210

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address
WM of NEW YORK at HIGH ACRES LANDFILL
425 PERINTON PARKWAY
FAIRPORT NY 14450

10. US EPA ID Number | C. Facility's Phone: (585)223-0132

GENERATOR

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL	#21	CM	11	T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a #34020 - Soil

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WEIGHT IS ESTIMATED

Final 21.26T

16. GENERATOR'S CERTIFICATION: Per DOT regulation 49CFR 172.204, I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
In addition, I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
		05	11	06

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JERRY L. ANDREWS		05	11	06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

[illegible]6.32

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of
NHD [illegible]		

WMNH 010003

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone

7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
[illegible] at HIGH ACRES LANDFILL		

GENERATOR

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. [illegible] SOLID WASTE MATERIAL				T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above
[illegible] coal	

15. Special Handling Instructions and Additional Information

[illegible] ESTIMATED

Final 13.01T

16. GENERATOR'S CERTIFICATION: Per DOT regulation 49CFR 172.204, I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
In addition, I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]		05	12	20

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
TERRY L. ANDREWS		05	12	20

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

T/S/D/F COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: [illegible]
Manifest Doc. No.: [illegible]
2. Page 1 of 1

WMNH 010004

3. Generator's Name and Mailing Address
CHEVRON RESEARCH CENTER
45 OLD GLENHAM ROAD
BEACON NY 12508

4. Generator's Phone ( ) [illegible] 7605

5. Transporter 1 Company Name

6. US EPA ID Number: PAD 146 714 378

A. Transporter's Phone: [illegible]

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
WM of NEW YORK at HIGH ACRES LANDFILL
425 PERINTON PARKWAY
FAIRPORT NY 14450

10. US EPA ID Number

C. Facility's Phone: [illegible]

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL [illegible]	1	[illegible]	[illegible]	T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a. [illegible]

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
WEIGHT IS ESTIMATED

Final 14.78 Ton

16. GENERATOR'S CERTIFICATION: Per DOT regulation 49CFR 172.204, I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
In addition, I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	[illegible]	[illegible]	[illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible] L ANDREWS	[signature]	05	[illegible]	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

T/S/D/F COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of 1
NYD[illegible]	[illegible]	

WMNH 010005

GENERATOR

3. Generator's Name and Mailing Address
CHEVRON RESEARCH CENTER
45 OLD GLENHAM ROAD
BEACON NY 12527

4. Generator's Phone ( ) [illegible]

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
[illegible] Inc.	[illegible]	[illegible]
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
WM of NEW YORK at HIGH ACRES LANDFILL 425 PERINTON PARKWAY FAIRPORT NY 14450		(585)223-6132

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-REGULATED MATERIAL [illegible]	1		12	T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
a. [illegible]

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
XR89611(PH)
WEIGHT IS ESTIMATED
Final 215 Ton.

16. GENERATOR'S CERTIFICATION: Per DOT regulation 49CFR 172.204, I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
In addition, I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
[illegible] Utter	Craig J Butler		[illegible]	[illegible]

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ronald Fritz	Ronald Fritz	05	17	06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

APPENDIX E

ANALYTICAL REPORT
BACKFILL MATERIALS

PARSONS

(2)

Letter of Transmittal

TO: Entact, Inc..
3129 Bass Pro Drive
Grapevine, Texas 76051

Date: 11/29/2005	Job No.: 442044
RE: CVX Recreation Area	
Transmittal No. 2	
Backfill Material Analytical Data	

WE ARE SENDING YOU THE FOLLOWING ITEMS:

☐ Shop drawings ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Copy of Letter ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

Dated: _____ ☐ Change Order ✓ Submittal #2

COPIES	DATE	NO.	DESCRIPTION
1	11/21/2005	2	Analytical results from proposed borrow area

THESE ARE TRANSMITED as checked below:

☐ For approval ☐ For checking ☐ Resubmit ____ copies for approval

☐ For your use ☑ Approved as submitted ☐ Design only, not for construction

☐ For review and comment ☐ Approved as noted ☐ Return _____ corrected prints

☐ For your action ☐ Returned for corrections ☐ Resubmit items noted

REMARKS: the 4" Thalle Backfill is approved based on analytical results, please note that one more set of analytical results will be required during backfilling operations.

COPY TO: file 442044, distribution

SIGNED: Jeffrey Parker

If enclosures are not as noted, please notify us at once.

C:\Documents and Settings\p0040069\Desktop\Chevron\Submittals\Submittal No. 2.doc

SUBMITTAL FORM

Submittal No. 2

Date: 11-21-05	Job No.: 442044
RE: Chevron Recreation Area	

TO:

PARSONS

180 Lawrence Bell Dr.

Williamsville NY 14221

Attn Jeff Poulsen

WE ARE SENDING YOU THE FOLLOWING ITEMS:

☐ Shop drawings ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Copy of Letter ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

Dated: _____ ☐ Change Order ☑ Analytical Data, UNOFFICIAL

COPIES	DATE	NO.	DESCRIPTION
1	11-21-05	1	Analytical results from Proposed Borrow Area

THESE ARE TRANSMITED as checked below:

☑ For approval ☐ For checking ☐ Resubmit ____ copies for approval

☐ For your use ☐ Approved as submitted ☐ Design only, not for construction

☐ For review and comment ☐ Approved as noted ☐ Return _____ corrected prints

☐ For your action ☐ Returned for corrections ☐ _____

REMARKS:

COPY TO: Neal Cope, ENTACT

SIGNED: Paul McCarthy

Paul McCarthy, ENTACT SERVICES

If enclosures are not as noted, please notify us at once.

ANALYTICAL REPORT

JOB NUMBER: 253514

Prepared For:

Entact, Inc.
3129 Bass Pro Drive
Grapevine, Texas 76051

Attention: Paul McCorvey

Date: 11/18/2005

Signature

18 Nov 2005
Date

Name: Richard E. Bayer

Title: Project Manager

E-Mail: rickbayer@stl-inc.com

315 Fullerton Avenue
Newburgh, NY 12550

PHONE: (845) 562-0890
FAX..: (845) 562-0841

SEVERN TRENT **STL**

STL Newburgh

CHAIN OF CUSTODY

2080 1655

315 Fullerton Avenue
Newburgh, NY 12550
TEL (845) 562-0890
FAX (845) 562-0841

CUSTOMER NAME	ENTACT SERVICES
ADDRESS	3129 BASS PRO DRIVE
CITY, STATE, ZIP	GRAPEVINE, TX 76051
NAME OF CONTACT	Paul McConvey / MIKE SHREVE
PHONE NO.	(630) 935-9543
PROJECT LOCATION	591 WASHINGTON AVE, BEACON, N.Y.
PROJECT NUMBER / PO NO.	CUX-47

REPORT TYPE

STANDARD ☐ ISRA ☐
NJ REG ☐
NYASP A ☐ B ☐ CLP ☐
OTHER ______

TURNAROUND

☐ NORMAL ______
☑ QUICK ______
☐ VERBAL ______

REPORT # (Lab Use Only)

253614
SAMPLE TEMP 1.0 °C
SAMPLE REC'D ON ICE Y N
pH CHECK Y N
CHLORINE RESIDUAL Y N
REVIEWED BY [illegible]

NY PUBLIC WATER SUPPLIES

SOURCE ID ___ ___ ___
ELRP TYPE ___ ___ ___
FEDERAL ID ___ ___ ___

Matrix
DW = DRINKING WATER S = SOIL O = OIL
WW = WASTE WATER SL = SLUDGE GW = GROUND WATER

NOTE: SAMPLE TEMPERATURE UPON RECEIPT MUST BE 4° ± 2°C.

STL #	SAMPLING DATE	TIME AM PM	COMP	GRAB	MATRIX	CLIENT I.D.	Total Number of Containers	40ml Glass HCL	Liter Amber HCL	250ml Amber Sulfuric	Liter Amber Organic Washed	250ml Plastic Nitric Acid	250ml Plastic Sodium Hydroxide	Liter Plastic	Liter Plastic Sulfuric Acid	250ml Plastic	125ml Plastic Sterile	8 oz. Soil	2 oz. Corpak	250ml Plastic NAOH / ZN ACC	ANALYSIS REQUESTED
	11/9/05	1000		X	S	4" – THALE BACKFILL															VOCs by 8260B
																					SVOCs by 8270C
																					PCBs by 8082
																					Pesticides by 8081A
																					Herbicides by 8151A
																					METALS by 6010B/7471A.

mshreve@entact.com

SAMPLES SUBMITTED FOR ANALYSIS WILL BE SUBJECTED TO THE STL TERMS AND CONDITIONS OF SALE (SHORT FORM) UNLESS ALTERNATE TERMS ARE AGREED IN WRITING.

	COMPANY	DATE	TIME		COMPANY	DATE	TIME
RELINQUISHED BY: M. Shreve	ENTACT ASSOC.	11/9/05	1050	RECEIVED BY: AMP	STL	11/9/05	10:50
SAMPLED BY: M. Shreve	ENTACT ASSOC.	11/9/05	~~1030~~ 1000	RECEIVED BY			
RELINQUISHED BY				RECEIVED BY			

COMMENTS ______

SAMPLE INFORMATION
Date: 11/18/2005

Job Number.: 253514
Customer...: Entact, Inc.
Attn.....: Paul McCorvey

Project Number.....: 20001655
Customer Project ID....: CVX-47
Project Description....:

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
253514-1	4" Thalle Backfill	Soil	11/09/2005	10:00	11/09/2005	10:50

STL Newburgh
315 Fullerton Avenue
Newburgh, NY 12550
Tel (845) 562-0890
Fax (845) 562-0841

LABORATORY TEST RESULTS

Job Number: 253514

Date: 11/18/2005

CUSTOMER: Entact, Inc. PROJECT: CVX-47 ATTN: Paul McCorvey

Customer Sample ID: 4" Thaile Backfill
Date Sampled.....: 11/09/2005
Time Sampled.....: 10:00
Sample Matrix.....: Soil

Laboratory Sample ID: 253514-1
Date Received.....: 11/09/2005
Time Received.....: 10:50

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	REPORTING LIMIT	UNITS	ANALYZED	TECH
SW846 7471A	Mercury (Hg)	0.045	U		0.045	mg/Kg	11/13/05	lms
SW846 3550B	Ultrasonic Extraction	Complete						amg
SW846 3550B	Ultrasonic Extraction	Complete						amg
SW846 9010B	Cyanide, Total	1.0	U		1.0	mg/Kg	11/10/05	bg
SW846 8081A	Organochlorine Pesticide Analysis							
	alpha-BHC	1.6	U		1.6	ug/Kg	11/15/05	mab
	beta-BHC	1.6	U		1.6	ug/Kg	11/15/05	mab
	delta-BHC	1.6	U		1.6	ug/Kg	11/15/05	mab
	gamma-BHC (Lindane)	1.6	U		1.6	ug/Kg	11/15/05	mab
	Heptachlor	1.6	U		1.6	ug/Kg	11/15/05	mab
	Aldrin	1.6	U		1.6	ug/Kg	11/15/05	mab
	Heptachlor epoxide	1.6	U		1.6	ug/Kg	11/15/05	mab
	Endosulfan I	3.3	U		3.3	ug/Kg	11/15/05	mab
	Dieldrin	3.3	U		3.3	ug/Kg	11/15/05	mab
	4,4'-DDE	3.3	U		3.3	ug/Kg	11/15/05	mab
	Endrin	3.3	U		3.3	ug/Kg	11/15/05	mab
	Endosulfan II	3.3	U		3.3	ug/Kg	11/15/05	mab
	4,4'-DDD	3.3	U		3.3	ug/Kg	11/15/05	mab
	Endosulfan sulfate	3.3	U		3.3	ug/Kg	11/15/05	mab
	4,4'-DDT	3.3	U		3.3	ug/Kg	11/15/05	mab
	Methoxychlor	16	U		16	ug/Kg	11/15/05	mab
	Toxaphene	33	U		33	ug/Kg	11/15/05	mab
	Endrin aldehyde	3.3	U		3.3	ug/Kg	11/15/05	mab
	Technical Chlordane	16	U		16	ug/Kg	11/15/05	mab
SW846 8082	PCB Analysis							
	Aroclor 1016	16	U		16	ug/Kg	11/15/05	mab
	Aroclor 1221	16	U		16	ug/Kg	11/15/05	mab
	Aroclor 1232	16	U		16	ug/Kg	11/15/05	mab
	Aroclor 1242	16	U		16	ug/Kg	11/15/05	mab
	Aroclor 1248	16	U		16	ug/Kg	11/15/05	mab
	Aroclor 1254	33	U		33	ug/Kg	11/15/05	mab
	Aroclor 1260	33	U		33	ug/Kg	11/15/05	mab
SW846 6010B	Metals Analysis (ICAP)							
	Aluminum (Al)	6470			40.0	mg/Kg	11/16/05	mad
	Antimony (Sb)	12.0	U		12.0	mg/Kg	11/16/05	mad
	Arsenic (As)	2.3			2.0	mg/Kg	11/16/05	mad
	Barium (Ba)	40.0	U		40.0	mg/Kg	11/16/05	mad
	Beryllium (Be)	1.0	U		1.0	mg/Kg	11/16/05	mad
	Cadmium (Cd)	1.0	U		1.0	mg/Kg	11/16/05	mad
	Calcium (Ca)	24300			100	mg/Kg	11/16/05	mad
	Chromium (Cr)	12.8			2.0	mg/Kg	11/16/05	mad
	Cobalt (Co)	10.0	U		10.0	mg/Kg	11/16/05	mad

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 253514 Date: 11/18/2005

CUSTOMER: Entact, Inc. PROJECT: CVX-47 ATTN: Paul McCorvey

Customer Sample ID: 4" Thalle Backfill
Date Sampled.....: 11/09/2005
Time Sampled.....: 10:00
Sample Matrix.....: Soil

Laboratory Sample ID: 253514-1
Date Received.....: 11/09/2005
Time Received.....: 10:50

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	REPORTING LIMIT	UNITS	ANALYZED	TECH
	Copper (Cu) - 25/SB	22.4			5.0	mg/Kg	11/16/05	mad
	Iron (Fe) - 20000/SB	16300			20.0	mg/Kg	11/16/05	mad
	Lead (Pb) - SB	8.3			1.0	mg/Kg	11/16/05	mad
	Magnesium (Mg) - SB	13100			100	mg/Kg	11/16/05	mad
	Manganese (Mn) - SB	413			2.0	mg/Kg	11/16/05	mad
	Nickel (Ni) - 13/SB	11.9			8.0	mg/Kg	11/16/05	mad
	Potassium (K) - SB	732			100	mg/Kg	11/16/05	mad
	Selenium (Se)	2.0	U		2.0	mg/Kg	11/16/05	mad
	Sodium (Na) - SB	653			100	mg/Kg	11/16/05	mad
	Silver (Ag)	2.0	U		2.0	mg/Kg	11/16/05	mad
	Thallium (Tl)	2.0	U		2.0	mg/Kg	11/16/05	mad
	Vanadium (V) - 150/SB	16.3			10.0	mg/Kg	11/16/05	mad
	Zinc (Zn) - 20/SB	47.3			4.0	mg/Kg	11/16/05	mad
SW846 8270C	Semivolatile Organics							
	n-Nitrosodimethylamine	330	U		330	ug/Kg	11/15/05	caw
	Phenol	330	U		330	ug/Kg	11/15/05	caw
	Bis(2-chloroethyl)ether	330	U		330	ug/Kg	11/15/05	caw
	1,3-Dichlorobenzene	330	U		330	ug/Kg	11/15/05	caw
	1,4-Dichlorobenzene	330	U		330	ug/Kg	11/15/05	caw
	1,2-Dichlorobenzene	330	U		330	ug/Kg	11/15/05	caw
	Benzyl alcohol	330	U		330	ug/Kg	11/15/05	caw
	2-Methylphenol (o-cresol)	330	U		330	ug/Kg	11/15/05	caw
	2,2-oxybis (1-chloropropane)	330	U		330	ug/Kg	11/15/05	caw
	n-Nitroso-di-n-propylamine	330	U		330	ug/Kg	11/15/05	caw
	Hexachloroethane	330	U		330	ug/Kg	11/15/05	caw
	4-Methylphenol (m/p-cresol)	330	U		330	ug/Kg	11/15/05	caw
	2-Chlorophenol	330	U		330	ug/Kg	11/15/05	caw
	Nitrobenzene	330	U		330	ug/Kg	11/15/05	caw
	Bis(2-chloroethoxy)methane	330	U		330	ug/Kg	11/15/05	caw
	1,2,4-Trichlorobenzene	330	U		330	ug/Kg	11/15/05	caw
	Benzoic acid	810	U		810	ug/Kg	11/15/05	caw
	Isophorone	330	U		330	ug/Kg	11/15/05	caw
	2,4-Dimethylphenol	330	U		330	ug/Kg	11/15/05	caw
	Hexachlorobutadiene	330	U		330	ug/Kg	11/15/05	caw
	Naphthalene	330	U		330	ug/Kg	11/15/05	caw
	2,4-Dichlorophenol	330	U		330	ug/Kg	11/15/05	caw
	4-Chloroaniline	330	U		330	ug/Kg	11/15/05	caw
	2,4,6-Trichlorophenol	330	U		330	ug/Kg	11/15/05	caw
	2,4,5-Trichlorophenol	810	U		810	ug/Kg	11/15/05	caw
	Hexachlorocyclopentadiene	330	U		330	ug/Kg	11/15/05	caw
	2-Methylnaphthalene	330	U		330	ug/Kg	11/15/05	caw
	2-Nitroaniline	810	U		810	ug/Kg	11/15/05	caw
	2-Chloronaphthalene	330	U		330	ug/Kg	11/15/05	caw
	4-Chloro-3-methylphenol	330	U		330	ug/Kg	11/15/05	caw
	2,6-Dinitrotoluene	330	U		330	ug/Kg	11/15/05	caw
	2-Nitrophenol	330	U		330	ug/Kg	11/15/05	caw
	3-Nitroaniline	810	U		810	ug/Kg	11/15/05	caw
	Dimethyl phthalate	330	U		330	ug/Kg	11/15/05	caw

* In Description = Dry Wgt.

STL Newburgh
315 Fullerton Avenue
Newburgh, NY 12550
Tel (845) 562-0890
Fax (845) 562-0841

LABORATORY TEST RESULTS

Job Number: 253514

Date: 11/18/2005

CUSTOMER: Entact, Inc. PROJECT: CVX-47 ATTN: Paul McCorvey

Customer Sample ID: 4" Thalle Backfill
Date Sampled.....: 11/09/2005
Time Sampled.....: 10:00
Sample Matrix.....: Soil

Laboratory Sample ID: 253514-1
Date Received.....: 11/09/2005
Time Received.....: 10:50

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	REPORTING LIMIT	UNITS	ANALYZED	TECH
	2,4-Dinitrophenol	810	U		810	ug/Kg	11/15/05	caw
	Acenaphthylene	330	U		330	ug/Kg	11/15/05	caw
	2,4-Dinitrotoluene	330	U		330	ug/Kg	11/15/05	caw
	Acenaphthene	330	U		330	ug/Kg	11/15/05	caw
	Dibenzofuran	330	U		330	ug/Kg	11/15/05	caw
	4-Nitrophenol	810	U		810	ug/Kg	11/15/05	caw
	Fluorene	330	U		330	ug/Kg	11/15/05	caw
	4-Nitroaniline	810	U		810	ug/Kg	11/15/05	caw
	4-Bromophenyl phenyl ether	330	U		330	ug/Kg	11/15/05	caw
	Hexachlorobenzene	330	U		330	ug/Kg	11/15/05	caw
	Diethyl phthalate	330	U		330	ug/Kg	11/15/05	caw
	4-Chlorophenyl phenyl ether	330	U		330	ug/Kg	11/15/05	caw
	Pentachlorophenol	810	U		810	ug/Kg	11/15/05	caw
	n-Nitrosodiphenylamine	330	U		330	ug/Kg	11/15/05	caw
	4,6-Dinitro-2-methylphenol	810	U		810	ug/Kg	11/15/05	caw
	Phenanthrene 5000	57	J		330	ug/Kg	11/15/05	caw
	Anthracene	330	U		330	ug/Kg	11/15/05	caw
	Di-n-butyl phthalate	330	U		330	ug/Kg	11/15/05	caw
	Fluoranthene	330	U		330	ug/Kg	11/15/05	caw
	Pyrene 5000	210	J		330	ug/Kg	11/15/05	caw
	Butyl benzyl phthalate	330	U		330	ug/Kg	11/15/05	caw
	Benzo(a)anthracene 224	35	J		330	ug/Kg	11/15/05	caw
	Chrysene 400	58	J		330	ug/Kg	11/15/05	caw
	3,3-Dichlorobenzidine	330	U		330	ug/Kg	11/15/05	caw
	Bis(2-ethylhexyl)phthalate	330	U		330	ug/Kg	11/15/05	caw
	Di-n-octyl phthalate	330	U		330	ug/Kg	11/15/05	caw
	Benzo(b)fluoranthene 400	67	J		330	ug/Kg	11/15/05	caw
	Benzo(k)fluoranthene	330	U		330	ug/Kg	11/15/05	caw
	Benzo(a)pyrene	330	U		330	ug/Kg	11/15/05	caw
	Indeno(1,2,3-cd)pyrene	330	U		330	ug/Kg	11/15/05	caw
	Dibenzo(a,h)anthracene	330	U		330	ug/Kg	11/15/05	caw
	Benzo(ghi)perylene	330	U		330	ug/Kg	11/15/05	caw
SW846 8260B	Volatile Organics							
	Dichlorodifluoromethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Chloromethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Vinyl chloride	1.0	U		1.0	ug/Kg	11/15/05	eca
	Bromomethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Chloroethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Trichlorofluoromethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,1-Dichloroethene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Methylene chloride	1.4			1.0	ug/Kg	11/15/05	eca
	trans-1,2-Dichloroethene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,1-Dichloroethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	2,2-Dichloropropane	1.0	U		1.0	ug/Kg	11/15/05	eca
	cis-1,2-Dichloroethene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Bromochloromethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Chloroform	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,1,1-Trichloroethane	1.0	U		1.0	ug/Kg	11/15/05	eca

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 253514 Date: 11/18/2005

CUSTOMER: Entact, Inc. PROJECT: CVX-47 ATTN: Paul McCorvey

Customer Sample ID: 4" Thalle Backfill
Date Sampled.....: 11/09/2005
Time Sampled.....: 10:00
Sample Matrix.....: Soil

Laboratory Sample ID: 253514-1
Date Received.....: 11/09/2005
Time Received.....: 10:50

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	REPORTING LIMIT	UNITS	ANALYZED	TECH
	1,1-Dichloropropene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Carbon tetrachloride	1.0	U		1.0	ug/Kg	11/15/05	eca
	Benzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2-Dichloroethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Trichloroethene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2-Dichloropropane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Dibromomethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Bromodichloromethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	cis-1,3-Dichloropropene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Toluene	1.0	U		1.0	ug/Kg	11/15/05	eca
	trans-1,3-Dichloropropene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,1,2-Trichloroethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Tetrachloroethene /40	1.2			1.0	ug/Kg	11/15/05	eca
	1,3-Dichloropropane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Dibromochloromethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2-Dibromoethane (EDB)	1.0	U		1.0	ug/Kg	11/15/05	eca
	Chlorobenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,1,1,2-Tetrachloroethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	Ethylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	m&p-Xylenes	1.0	U		1.0	ug/Kg	11/15/05	eca
	o-Xylene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Styrene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Bromoform	1.0	U		1.0	ug/Kg	11/15/05	eca
	Isopropylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Bromobenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,1,2,2-Tetrachloroethane	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2,3-Trichloropropane	1.0	U		1.0	ug/Kg	11/15/05	eca
	n-Propylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	2-Chlorotoluene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,3,5-Trimethylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	4-Chlorotoluene	1.0	U		1.0	ug/Kg	11/15/05	eca
	tert-Butylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2,4-Trimethylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	sec-Butylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,3-Dichlorobenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	p-Isopropyltoluene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,4-Dichlorobenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	n-Butylbenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2-Dichlorobenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2-Dibromo-3-chloropropane	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2,4-Trichlorobenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Hexachlorobutadiene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Naphthalene	1.0	U		1.0	ug/Kg	11/15/05	eca
	1,2,3-Trichlorobenzene	1.0	U		1.0	ug/Kg	11/15/05	eca
	Freon 113	1.0	U		1.0	ug/Kg	11/15/05	eca

* In Description = Dry Wgt.

SDG: 253514	Client Sample ID: 4 Job Number & Lab Sample ID: A05-C898 A5C89801 Sample Date: 11/09/2005				
	TCLP Date/HT Met: - - Extraction Date/HT Met: 11/14/2005 07:00 YES Analysis Date/Ht Met: 11/16/2005 01:19 YES Dilution Factor: 1.0				
Analyte (UG/KG)	RL	Result			
METHOD 8151 - HERBICIDES					
2,4-D	240	250	U		
2,4,5-TP (Silvex)	34	36	U		
2,4,5-T	30	32	U		
SURROGATES					
Dichlorophenyl Acetic Acid	29-124	79			

* Indicates Result is Outside QC Limits
NA = Not Applicable

SDG: 253514	Client Sample ID:	Matrix Spike Blank	Matrix Spike Blk Dup	Method Blank		
	Job Number & Lab Sample ID:	A05-C898 A5B1770801	A05-C898 A5B1770802	A05-C898 A5B1770803		
	Sample Date:					
	TCLP Date/NT Met:	- -	- -	- -		
	Extraction Date/NT Met:	11/14/2005 07:00 YES	11/14/2005 07:00 YES	11/14/2005 07:00 YES		
	Analysis Date/Nt Met:	11/15/2005 21:58 YES	11/15/2005 22:49 YES	11/15/2005 23:39 YES		
	Dilution Factor:	1.0	1.0	1.0		
Analyte (UG/KG)	RL	Result	Result	Result		
METHOD 8151 - HERBICIDES						
2,4-D	240	59 J	60 J	240 U		
2,4,5-TP (Silvex)	34	54	52	34 U		
2,4,5-T	30	35	33	30 U		
----SURROGATES----						
Dichlorophenyl Acetic Acid	29-124	87	87	86		

* Indicates Result is Outside QC Limits
NA = Not Applicable

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 11/18/2005

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements will be noted in a case narrative.
Report Comments

1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

2) Soil, sediment and sludge sample results are reported on a "dry weight" basis.

3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

Glossary of flags and qualifiers.

Inorganic Qualifiers (Q-Column)

U	Indicates that the compound was analyzed for but not detected.
1	Result fails applicable drinking water standards.
*	Duplicate analysis not within control limits.
N	Spiked sample recovery not within control limits.
E	Indicates an estimated value because of the presence of interferences.
W	Post digestion spike for furnace AA analysis is out of the control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
+	Correlation coefficient for the MSA is less than 0.995
B	The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit (IDL).

Organic Qualifiers (Q-Column)

U	Indicates that the compound was analyzed for but not detected.
J	Indicates an estimated value. This compound meets the identification criteria, but the result is less than the specified detection limit.
B	Indicates that the analyte was found in both the sample and its associated laboratory blank.
D	Indicates all compounds identified in an analysis at a secondary dilution factor.
E	Indicates that the analyte in an analysis has exceeded the linear calibration range.
RE	Indicates a re-analyzed sample

Glossary of Terms

Surrogates (Surrogate Standards) - an organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process. For semi-volatiles, volatiles and pesticides/Arochlors, surrogate compounds are added to every blank, sample, matrix sample, matrix spike, matrix sample duplicate, matrix spike blank, and standard. These are used to evaluate analytical efficiency by measuring recovery. Poor surrogate recovery may indicate a problem with the sample composition.

Matrix Spike - an aliquot of a sample (water or soil) fortified (spiked) with known quantities of specific compounds (target analytes) and subjected to the entire analytical procedure in order to indicate the appropriateness of the method for the matrix by measuring recovery. The spiking occurs prior to sample preparation and analysis. Poor spike recovery may indicate a problem with the sample composition.

Internal Standards - an organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process. For GC/MS semi-volatiles and volatiles, internal standards are added to every blank, sample, matrix spike, matrix spike duplicate, matrix spike blank, and standard. Internal standard responses outside of established limits will adversely affect the quantitation and final concentration of target compounds.

STL Newburgh
315 Fullerton Avenue
Newburgh, NY 12550
Tel (845) 562-0890
Fax (845) 562-0841

LABORATORY CHRONICLE

Job Number: 253514 Date: 11/18/2005

CUSTOMER: Entact, Inc. PROJECT: CVX-47 ATTN: Paul McCorvey

Lab ID: 253514-1 Client ID: 4" Thalle Backfill Date Recvd: 11/09/2005 Sample Date: 11/09/2005

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW846 5030 (5g	5030 Soil(5g)Prep	1	101115			
SW846 3050B	Acid Digestion (ICP) Solids	1	100873		11/14/2005 1200	
SW846 9010B	Cyanide, Total	1	100962		11/10/2005 0730	
SW846 3550B	Extraction Ultrasonic (Chlor.Pest.)	1	100789			
SW846 3550B	Extraction Ultrasonic (PCBs)	1	100790			
SW846 3550B	Extraction Ultrasonic (SVOC)	1	100788			
8151A Subcon	Herbicides	1				
SW846 7471A	Mercury (CVAA) Solids	1	100926	100921	11/13/2005 1213	
SW846-7471	Mercury Soil Digestion	1	100921		11/11/2005 0800	
SW846 6010B	Metals Analysis (ICAP)	1	101017	100873	11/16/2005 1208	
SW846 8081A	Organochlorine Pesticide Analysis	1	100977		11/15/2005 0000	
SW846 8082	PCB Analysis	1	100976		11/15/2005 0000	
SW846 8270C	Semivolatile Organics	1	101142		11/15/2005 0000	0.978
SW846 8260B	Volatile Organics	1	101085		11/15/2005 0000	

PARSONS

Letter of Transmittal

TO: Entact, Inc..
3129 Bass Pro Drive
Grapevine, Texas 76051

Date: 3/23//2006	Job No.: 442044
RE: CVX Recreation Area	
Submittal No. 7	

WE ARE SENDING YOU THE FOLLOWING ITEMS:

❑ Shop drawings ❑ Attached ❑ Under separate cover via _____ the following items:

❑ Copy of Letter ❑ Prints ❑ Plans ❑ Samples ❑ Specifications

Dated: _____ ❑ Change Order ✓ Submittal #7

COPIES	DATE	NO.	DESCRIPTION
1	3/23/2006	7	Analytical results for topsoil source

THESE ARE TRANSMITED as checked below:

❑ For approval ❑ For checking ❑ Resubmit ____ copies for approval

❑ For your use ☑ Approved as submitted ❑ Design only, not for construction

❑ For review and comment ❑ Approved as noted ❑ Return _____ corrected prints

❑ For your action ❑ Returned for corrections ❑ Resubmit items noted

REMARKS:

COPY TO: file 442044, distribution

SIGNED: Jeffrey Poulsen

If enclosures are not as noted, please notify us at once.

C:\Documents and Settings\p0040069\Desktop\Chevron\Submittals\Submittal No. 7.doc

SUBMITTAL FORM

Submittal No. 7

TO: Parsons
180 Lawrence Bell Dr
Williamsville, NY 14221

Date: 3/23/2006	Job No.: 442044
RE: CVX Recreation Area	
Topsoil	

WE ARE SENDING YOU THE FOLLOWING ITEMS:

❑ Shop drawings ❑ Attached ❑ Under separate cover via _____ the following items:

❑ Copy of Letter ❑ Prints ❑ Plans ❑ Samples ❑ Specifications

Dated: _____ ❑ Change Order ✓ Submittal #7

COPIES	DATE	NO.	DESCRIPTION
1	3/23/2006	7	Analytical results from topsoil source

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❑ For approval ❑ For checking ❑ Resubmit ____ copies for approval

❑ For your use ❑ Approved as submitted ❑ Design only, not for construction

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REMARKS:

COPY TO:

SIGNED: Paul McCorvey

If enclosures are not as noted, please notify us at once.

SEVERN TRENT STL

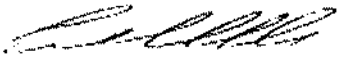
ANALYTICAL REPORT

Job Number: 420-2515-1

Job Description: Entact Beacon CVX-47

For:
Entact Environmental Services, LLC
3129 Bass Pro Drive
Grapevine, TX 76051

Attention: Mr. Paul McCorvey



Eric C Andersen
Project Manager I
eandersen@stl-inc.com
03/23/2006

Project Manager: Eric C Andersen

Severn Trent Laboratories, Inc.
STL Newburgh 315 Fullerton Avenue, Newburgh, NY 12550
Tel (845) 562-0890 Fax (845) 562-0841 www.stl-inc.com

ACCREDITED IN ACCORDANCE nelac

METHOD SUMMARY

Client: Entact Environmental Services, LLC Job Number: 420-2515-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds by GC/MS	STL-NEW	SW846 8260B	
Purge-and-Trap	STL-NEW		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	STL-NEW	SW846 8270C	
Ultrasonic Extraction	STL-NEW		SW846 3550B
Organochlorine Pesticides by Gas Chromatography	STL-NEW	SW846 8081A	
Ultrasonic Extraction	STL-NEW		SW846 3550B
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	STL-NEW	SW846 8082	
Ultrasonic Extraction	STL-NEW		SW846 3550B
Inductively Coupled Plasma - Atomic Emission Spectrometry	STL-NEW	SW846 6010B	
Acid Digestion of Sediments, Sludges, and Soils	STL-NEW		SW846 3050B
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	STL-NEW	SW846 7471A	
Mercury in Solid or Semi-Solid Waste (Manual	STL-NEW		SW846 7471A
Percent Moisture	STL-NEW	EPA 160.3	
Herbicide by 8151	STL-NEW	8151	

LAB REFERENCES:

STL-NEW = STL-Newburgh

METHOD REFERENCES:

EPA - US Environmental Protection Agency

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Entact Environmental Services, LLC

Job Number: 420-2515-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
420-2515-1	Beacon-CVX-47 Top Soil	Solid	03/08/2006 0920	03/08/2006 0920

STL Newburgh
315 Fullerton Avenue
Newburgh, NY 12550
Phone (845) 562-0890 Fax (845) 562-0841

Chain of Custody Record

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

Client Contact	Project Manager: Andersen, Eric C	Site Contact:	Date:	COC No: 420-240
Shipping/Receiving@ Severn Trent Laborat	Tel/Fax:	Lab Contact:	Carrier No:	Job Number: 420-2515-1
10 Hazelwood Drive,	Analysis Due Date			
Amherst, NY 14228-2298	3/20/2006			
Phone: 716-691-2600	Shipped with Order No: 420-514			
Fax: 716-691-7991				
Project Name: Entact Beacon CVX-47				
Site:				
PO #:				
WO #:				

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	SUBCONTRACT/ 8151A herbicide	Special Instructions/Note:
420-2515-1	3/8/06	9:20		Solid	1		X	
							X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Relinquished by:	Company:	Date/Time:	Received by:	Company:
	STL NBG	3/8/06 1630		STL 03/09/06 1100
Relinquished by:	Company:	Date/Time:	Received by:	Company:
Relinquished by:	Company:	Date/Time:	Received by:	Company:

Comments:

4.0°C

SDG: 420240	Client Sample ID: 420-2515-1 Job Number & Lab Sample ID: A06-2535 A6253501 Sample Date: 03/08/2006				
	TCLP Date/HT Met: - - Extraction Date/HT Met: 03/13/2006 07:00 YES Analysis Date/Ht Met: 03/15/2006 19:02 YES Dilution Factor: 1.0				
Analyte (UG/KG)	RL	Result			
METHOD 8151 - HERBICIDES					
2,4-D	240	280 U			
2,4,5-TP (Silvex)	34	40 U			
2,4,5-T	30	36 U			
SURROGATES					
Dichlorophenyl Acetic Acid	10-147	86			

* Indicates Result is Outside QC Limits
NA = Not Applicable

SDG: 420240	Client Sample ID:	Matrix Spike Blank	Matrix Spike Blk Dup	Method Blank		
	Job Number & Lab Sample ID:	A06-2535 A6B1510901	A06-2535 A6B1510902	A06-2535 A6B1510903		
	Sample Date:					
	TCLP Date/HT Met:	- -	- -	- -		
	Extraction Date/HT Met:	03/13/2006 07:00 YES	03/13/2006 07:00 YES	03/13/2006 07:00 YES		
	Analysis Date/Ht Met:	03/15/2006 16:32 YES	03/15/2006 17:22 YES	03/15/2006 18:12 YES		
	Dilution Factor:	1.0	1.0	1.0		
Analyte (UG/KG)	RL	Result	Result	Result		
METHOD 8151 - HERBICIDES						
2,4-D	240	68 J	72 J	240 U		
2,4,5-TP (Silvex)	34	52	67	34 U		
2,4,5-T	30	51	68	30 U		
SURROGATES						
Dichlorophenyl Acetic Acid	10-147	76	98	97		

* Indicates Result is Outside QC Limits
NA = Not Applicable

Analytical Data

Client: Entact Environmental Services, LLC

Job Number: 420-2515-1

Client Sample ID: **Beacon-CVX-47 Top Soil**

Lab Sample ID: 420-2515-1
Client Matrix: Solid % Moisture: 11.7

Date Sampled: 03/08/2006 0920
Date Received: 03/08/2006 0920

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/21/2006 1734
Date Prepared: 03/21/2006 1734

Analysis Batch: 420-3898

Instrument ID: HP
Lab File ID: Y032111.D
Initial Weight/Volume: 5.1 g
Final Weight/Volume: 5 g

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL	RL
1,1,1,2-Tetrachloroethane		1.1	U	1.1	1.1
1,1,1-Trichloroethane		1.1	U	1.1	1.1
1,1,2,2-Tetrachloroethane		1.1	U	1.1	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane		1.1	U	1.1	1.1
1,1,2-Trichloroethane		1.1	U	1.1	1.1
1,1-Dichloroethane		1.1	U	1.1	1.1
1,1-Dichloroethene		1.1	U	1.1	1.1
1,1-Dichloropropene		1.1	U	1.1	1.1
1,2,3-Trichlorobenzene		1.1	U	1.1	1.1
1,2,3-Trichloropropane		1.1	U	1.1	1.1
1,2,4-Trichlorobenzene		1.1	U	1.1	1.1
1,2,4-Trimethylbenzene		1.1	U	1.1	1.1
1,2-Dibromo-3-Chloropropane		1.1	U	1.1	1.1
1,2-Dichlorobenzene		1.1	U	1.1	1.1
1,2-Dichloroethane		1.1	U	1.1	1.1
1,2-Dichloroethene, Total		1.1	U	1.1	1.1
1,2-Dichloropropane		1.1	U	1.1	1.1
1,3,5-Trimethylbenzene		1.1	U	1.1	1.1
1,3-Dichlorobenzene		1.1	U	1.1	1.1
1,3-Dichloropropane		1.1	U	1.1	1.1
1,4-Dichlorobenzene		1.1	U	1.1	1.1
2,2-Dichloropropane		1.1	U	1.1	1.1
2-Chloroethyl vinyl ether		1.1	U	1.1	1.1
2-Chlorotoluene		1.1	U	1.1	1.1
4-Chlorotoluene		1.1	U	1.1	1.1
4-Isopropyltoluene		1.1	U	1.1	1.1
Benzene		1.1	U	1.1	1.1
Benzyl chloride		1.1	U	1.1	1.1
Bromobenzene		1.1	U	1.1	1.1
Bromoform		1.1	U	1.1	1.1
Bromomethane		1.1	U	1.1	1.1
Carbon disulfide		1.1	U	1.1	1.1
Carbon tetrachloride		1.1	U	1.1	1.1
Chlorobenzene		1.1	U	1.1	1.1
Chlorobromomethane		1.1	U	1.1	1.1
Chlorodibromomethane		1.1	U	1.1	1.1
Chloroethane		1.1	U	1.1	1.1
Chloroform		1.1	U	1.1	1.1
Chloromethane		1.1	U	1.1	1.1
cis-1,2-Dichloroethene		1.1	U	1.1	1.1
cis-1,3-Dichloropropene		1.1	U	1.1	1.1
Dibromomethane		1.1	U	1.1	1.1
Dichlorobromomethane		1.1	U	1.1	1.1

Analytical Data

Client: Entact Environmental Services, LLC

Job Number: 420-2515-1

Client Sample ID: **Beacon-CVX-47 Top Soil**

Lab Sample ID: 420-2515-1
Client Matrix: Solid % Moisture: 11.7

Date Sampled: 03/08/2006 0920
Date Received: 03/08/2006 0920

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/21/2006 1734
Date Prepared: 03/21/2006 1734

Analysis Batch: 420-3898

Instrument ID: HP
Lab File ID: Y032111.D
Initial Weight/Volume: 5.1 g
Final Weight/Volume: 5 g

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL	RL
Dichlorodifluoromethane		1.1	U	1.1	1.1
Ethylbenzene		1.1	U	1.1	1.1
Hexachlorobutadiene		1.1	U	1.1	1.1
Isopropylbenzene		1.1	U	1.1	1.1
m-Xylene & p-Xylene		1.1	U	1.1	1.1
Methylene Chloride		1.1	U	1.1	1.1
n-Butylbenzene		1.1	U	1.1	1.1
N-Propylbenzene		1.1	U	1.1	1.1
Naphthalene		1.1	U	1.1	1.1
o-Xylene		1.1	U	1.1	1.1
sec-Butylbenzene		1.1	U	1.1	1.1
Styrene		1.1	U	1.1	1.1
tert-Butylbenzene		1.1	U	1.1	1.1
Xylenes, Total		1.1	U	1.1	1.1
Vinyl chloride		1.1	U	1.1	1.1
Vinyl acetate		1.1	U	1.1	1.1
Trichlorofluoromethane		1.1	U	1.1	1.1
Trichloroethene		1.1	U	1.1	1.1
trans-1,4-Dichloro-2-butene		1.1	U	1.1	1.1
trans-1,3-Dichloropropene		1.1	U	1.1	1.1
trans-1,2-Dichloroethene		1.1	U	1.1	1.1
Toluene		1.1	U	1.1	1.1
Tetrachloroethene		1.1	U	1.1	1.1
1,2,4,5-Tetramethylbenzene		1.1	U	1.1	1.1
n-Heptane		1.1	U	1.1	1.1
4-Ethyltoluene		1.1	U	1.1	1.1
1,2-Dibromoethane		1.1	U	1.1	1.1

Client: Entact Environmental Services, LLC

Job Number: 420-2515-1

Client Sample ID: **Beacon-CVX-47 Top Soil**

Lab Sample ID: 420-2515-1
Client Matrix: Solid % Moisture: 11.7

Date Sampled: 03/08/2006 0920
Date Received: 03/08/2006 0920

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 03/16/2006 0546
Date Prepared: 03/13/2006 1620

Analysis Batch: 420-3753
Prep Batch: 420-3661

Instrument ID: Hewlett Packard 5890
Lab File ID: S35935.D
Initial Weight/Volume: 30.81 g
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL	RL
1,2,4-Trichlorobenzene		360	U	360	360
1,2-Dichlorobenzene		360	U	360	360
1,2-Diphenylhydrazine		3600	U	3600	3600
1,3-Dichlorobenzene		360	U	360	360
1,4-Dichlorobenzene		360	U	360	360
2,4-Dichlorophenol		360	U	360	360
2,4,6-Trichlorophenol		360	U	360	360
2,4,5-Trichlorophenol		360	U	360	360
2,4-Dimethylphenol		360	U	360	360
2,4-Dinitrotoluene		360	U	360	360
2-Chloronaphthalene		360	U	360	360
2-Chlorophenol		360	U	360	360
2-Methylnaphthalene		360	U	360	360
2-Methylphenol		360	U	360	360
2-Nitroaniline		920	U	920	920
2-Nitrophenol		360	U	360	360
3,3'-Dichlorobenzidine		360	U	360	360
3-Nitroaniline		920	U	920	920
4,6-Dinitro-2-methylphenol		920	U	920	920
4-Bromophenyl phenyl ether		360	U	360	360
4-Chloro-3-methylphenol		360	U	360	360
4-Chloroaniline		360	U	360	360
4-Chlorophenyl phenyl ether		360	U	360	360
4-Nitrophenol		920	U	920	920
Acenaphthene		360	U	360	360
Acenaphthylene		360	U	360	360
Anthracene		360	U	360	360
Benzidine		360	U	360	360
Benzo[a]anthracene		360	U	360	360
Benzo[a]pyrene		360	U	360	360
Benzo[b]fluoranthene		360	U	360	360
Benzo[g,h,i]perylene		360	U	360	360
Benzo[k]fluoranthene		360	U	360	360
Benzyl alcohol		360	U	360	360
Bis(2-chloroethoxy)methane		360	U	360	360
Bis(2-chloroethyl)ether		360	U	360	360
Bis(2-ethylhexyl) phthalate		360	U	360	360
Butyl benzyl phthalate		360	U	360	360
Carbazole		360	U	360	360
Chrysene		360	U	360	360
Di-n-octyl phthalate		360	U	360	360
Di-n-butyl phthalate		360	U	360	360
Dibenz(a,h)anthracene		360	U	360	360

Analytical Data

Client: Entact Environmental Services, LLC

Job Number: 420-2515-1

Client Sample ID: **Beacon-CVX-47 Top Soil**

Lab Sample ID: 420-2515-1
Client Matrix: Solid % Moisture: 11.7

Date Sampled: 03/08/2006 0920
Date Received: 03/08/2006 0920

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method: 8270C
Preparation: 3550B
Dilution: 1.0
Date Analyzed: 03/16/2006 0546
Date Prepared: 03/13/2006 1620

Analysis Batch: 420-3753
Prep Batch: 420-3661

Instrument ID: Hewlett Packard 5890
Lab File ID: S35935.D
Initial Weight/Volume: 30.81 g
Final Weight/Volume: 1 mL
Injection Volume:

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL	RL
Dibenzofuran		360	U	360	360
Dimethyl phthalate		360	U	360	360
Fluoranthene		360	U	360	360
Fluorene		360	U	360	360
Hexachlorobenzene		360	U	360	360
Hexachlorobutadiene		360	U	360	360
Hexachlorocyclopentadiene		360	U	360	360
Hexachloroethane		360	U	360	360
Indeno[1,2,3-cd]pyrene		360	U	360	360
Isophorone		360	U	360	360
N-Nitrosodi-n-propylamine		360	U	360	360
N-Nitrosodimethylamine		360	U	360	360
N-Nitrosodiphenylamine		360	U	360	360
Naphthalene		360	U	360	360
Nitrobenzene		360	U	360	360
Pentachlorophenol		920	U	920	920
Phenol		360	U	360	360
Pyridine		360	U	360	360
2,4-Dinitrophenol		920	U	920	920
2,6-Dinitrotoluene		360	U	360	360
Pyrene		360	U	360	360
4-Nitroaniline		920	U	920	920
4-Methylphenol		360	U	360	360
Diethyl phthalate		360	U	360	360
Phenanthrene		360	U	360	360
2,2'-oxybis[1-chloropropane]		360	U	360	360

Analytical Data

Client: Entact Environmental Services, LLC Job Number: 420-2515-1

Client Sample ID: Beacon-CVX-47 Top Soil

Lab Sample ID:	420-2515-1	Date Sampled:	03/08/2006 0920
Client Matrix:	Solid % Moisture: 11.7	Date Received:	03/08/2006 0920

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method:	6010B	Analysis Batch: 420-3706	Instrument ID:	Perkin Elmer Optima
Preparation:	3050B	Prep Batch: 420-3669	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	0.51 g
Date Analyzed:	03/15/2006 2009		Final Weight/Volume:	100 mL
Date Prepared:	03/13/2006 1130			

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
Ag		2.2	U	2.2	2.2
Al		12000		44	44
As		7.0		2.2	2.2
Ba		45		44	44
Be		1.1	U	1.1	1.1
Ca		20000		110	110
Cd		1.1	U	1.1	1.1
Co		13		11	11
Cr		13		2.2	2.2
Cu		38		5.5	5.5
Fe		27000		22	22
K		1200		110	110
Mg		14000		110	110
Mn		940		2.2	2.2
Na		110	U	110	110
Ni		24		8.9	8.9
Pb		17		2.2	2.2
Sb		13	U	13	13
Se		2.2	U	2.2	2.2
Tl		2.2	U	2.2	2.2
V		15		11	11
Zn		74		4.4	4.4

7471A Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Method:	7471A	Analysis Batch: 420-3587	Instrument ID:	Leeman Hydra AA
Preparation:	7471A	Prep Batch: 420-3593	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	0.20 g
Date Analyzed:	03/10/2006 0913		Final Weight/Volume:	25 mL
Date Prepared:	03/09/2006 1115			

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL	RL
Hg		0.11	U	0.11	0.11

Analytical Data

Client: Entact Environmental Services, LLC Job Number: 420-2515-1

Client Sample ID: **Beacon-CVX-47 Top Soil**

Lab Sample ID: 420-2515-1 Date Sampled: 03/08/2006 0920
Client Matrix: Solid % Moisture: 11.7 Date Received: 03/08/2006 0920

8081A Organochlorine Pesticides by Gas Chromatography

Method: 8081A Analysis Batch: 420-3752 Instrument ID: Hewlett Packard 5890 Dual
Preparation: N/A Lab File ID: 2HP6094.D
Dilution: 1.0 Initial Weight/Volume:
Date Analyzed: 03/17/2006 1621 Final Weight/Volume:
Date Prepared: N/A Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL	RL
alpha-BHC		5.6	U H	5.6	5.6
gamma-BHC (Lindane)		5.6	U H	5.6	5.6
beta-BHC		5.6	U H	5.6	5.6
Heptachlor		5.6	U H	5.6	5.6
delta-BHC		5.6	U H	5.6	5.6
Aldrin		5.6	U H	5.6	5.6
Heptachlor epoxide		5.6	U H	5.6	5.6
gamma-Chlordane		57	U H	57	57
alpha-Chlordane		57	U H	57	57
4,4'-DDE		11	U H	11	11
Endosulfan I		11	U H	11	11
Dieldrin		11	U H	11	11
Endrin		11	U H	11	11
4,4'-DDD		11	U H	11	11
Endosulfan II		11	U H	11	11
4,4'-DDT		11	U H	11	11
Endrin aldehyde		23	U H	23	23
Endosulfan sulfate		11	U H	11	11
Methoxychlor		5.6	U H	5.6	5.6
Endrin ketone		11	U H	11	11
Toxaphene		110	U H	110	110
Chlordane (technical)		57	U H	57	57

Analytical Data

Client: Entact Environmental Services, LLC

Job Number: 420-2515-1

Client Sample ID: **Beacon-CVX-47 Top Soil**

Lab Sample ID: 420-2515-1
Client Matrix: Solid % Moisture: 11.7

Date Sampled: 03/08/2006 0920
Date Received: 03/08/2006 0920

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method: 8082
Preparation: N/A
Dilution: 1.0
Date Analyzed: 03/17/2006 1621
Date Prepared: N/A

Analysis Batch: 420-3752

Instrument ID: Hewlett Packard 5890 Dual
Lab File ID: 2HP6094.D
Initial Weight/Volume:
Final Weight/Volume:
Injection Volume:
Column ID: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	RL	RL
PCB-1016		56	U H	56	56
PCB-1221		56	U H	56	56
PCB-1232		56	U H	56	56
PCB-1242		56	U H	56	56
PCB-1248		56	U H	56	56
PCB-1254		110	U H	110	110
PCB-1260		110	U H	110	110

Client: Entact Environmental Services, LLC

Job Number: 420-2515-1

General Chemistry

Client Sample ID: **Beacon-CVX-47 Top Soil**

Lab Sample ID: 420-2515-1
Client Matrix: Solid

Date Sampled: 03/08/2006 0920
Date Received: 03/08/2006 0920

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	12		%	0.10	0.10	1.0	160.3
	Anly Batch: 420-3646		Date Analyzed	03/11/2006 1125			
Percent Solids	88		%	0.10	0.10	1.0	160.3
	Anly Batch: 420-3646		Date Analyzed	03/11/2006 1125			

DATA REPORTING QUALIFIERS

Client: Entact Environmental Services, LLC Job Number: 420-2515-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyte was not detected at or above the reporting limit.
GC/MS Semi VOA		
	U	Analyte was not detected at or above the reporting limit.
GC Semi VOA		
	H	Sample was prepped or analyzed beyond the specified holding time
	U	Analyte was not detected at or above the reporting limit.
Metals		
	U	Analyte was not detected at or above the reporting limit.

APPENDIX F

PHOTOGRAPHIC LOG

Industrial Sewer System Closure
Photographic Log

PICT0646: Completing geoprobe borings near Building 31

DSCN0310: Mixing Grout.

DSCN0084: Manhole A-1.

DSCN0321: Vault north of Manhole A-1.

DSCN0318: Excavating vault north of Manhole A-1.

DSNC0356: Vault at southwest corner of Building 42 (A-line)

DSCN0359: Backfilling Building 42 vault (A-line).

DSCN0370: Grouting valve pit from ASTs to ISS-3.

DSCN0299: Location of excavation of ISS-5 line

DSCN0371: ISS-5 attempted soil excavation.

DSCN0378: ISS-5 excavation grouted.

DSCN0366: Grouting spill containment basin for boiler house ASTs. (ISS-5)

DSNC353: Grouting the 3x3 vault south of Building 55. (ISS-5, B-line)

DSCN0078: Manhole B-2.

DSCN0303: Plugged outlets to the grit chamber. ISS-5, ISS-6, ISS-8.

DSCN0304: Plugged outlet tothe grit chamber. A-line.

DSCN0346: Excavation of area northeast of the grit chamber.

DSCN0349: Plugged PVC lines from ISS-7.

DSCN0380: 3x3 sewer pit on ISS-8 line.

DSCN0364: 3x3 sewer pit on ISS-8 line (looking downstream). (C-line)

DSCN0384: Manhole C-2 (north to top).

DSCN0386: Disconnected and plugged ISS-9 across the walk bridge.

DSCN0117: Excavation of Building 56 cleanout

DSCN0281: Failed connection from Building 56 wash rack area.

DSCN0293: Failed joint in ISS line from Building 56 area.

DSCN0309: Building 56 excavation with groundwater.

DSCN0122: Building 56 cleanout assembly

DSCN0218: Grouting manho-Line