GW - 109R

WORK PLANS

2004

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

September 30, 2004

Mr. Larry Campbell
Transwestern Pipeline Company
6381 North Main
Roswell, New Mexico 88201

RE: ENGINE ROOM DRAIN PIT AREA
WT-1 COMPRESSOR STATION
CASE # GW109R

Dear Mr. Campbell:

The New Mexico Oil Conservation Division (OCD) has reviewed Transwestern Pipeline Company's (TPC) January 24, 2004 "REPORT OF GROUNDWATER REMEDIATION ACTIVITIES, TRANSWESTERN PIPELINE COMPANY - WT-1 STATION ENGINE ROOM DRAIN PIT AREA, LEA COUNTY, NEW MEXICO". This document contains the results of TPC's remediation and monitoring of ground water contamination related to the former engine room drain pit area at the TPC WT-1 Compressor Station.

A review of the above-referenced report shows that ground water in the downgradient monitoring well MW-14 continues to be contaminated in excess of New Mexico Water Quality Control Commission (WQCC) ground water standards. There are no ground water monitoring wells downgradient of this point. Therefore, the OCD requires that TPC submit a work plan to define the downgradient extent of ground water contamination at the site. The work plan shall be submitted to the OCD Santa Fe Office by November 28, 2004 with a copy provided to the OCD Hobbs District Office.

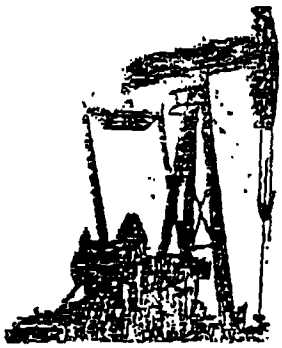
If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
George Robinson, Cypress Engineering Services, Inc.

64 109R



BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE
620 EAST GREENE STREET
CARLSBAD, NM 88220
505-234-~~5972~~ 5704
FAX: 505-234-5927

FLUID MINERALS DIVISION
INSPECTION & ENFORCEMENT

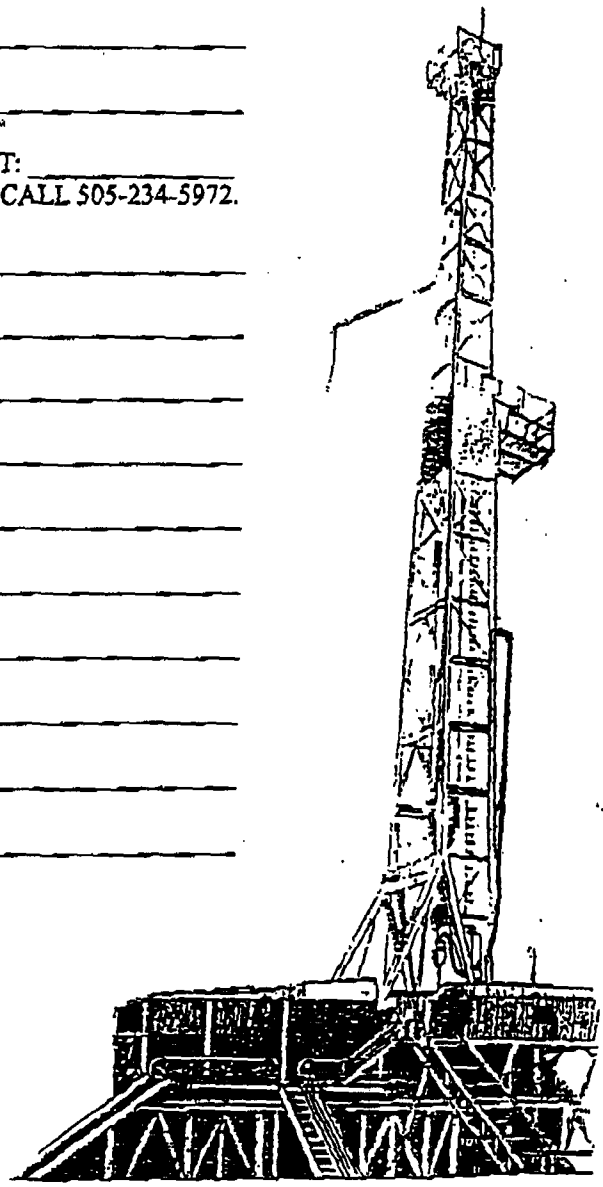
DATE: 5/24/4

TO: Bill Olson

FROM: Kirk Hassell

RE: Transmittal Sh

NUMBER OF PAGES INCLUDING THIS COVER SHEET: _____
IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL 505-234-5972.



OFFICIAL FILE COPY

United States Department of the Interior

Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street
Carlsbad, NM 88220
www.nm.blm.gov

FEB 26 2004

R. Sorensen 2/25/2004

L Lane 2/25/04

IN REPLY REFER TO:

2800
NM108433

Roger Westbrook
Transwestern Pipeline Company
1400 Smith Street
P.O. Box 1188
Houston, TX 77251-1188

Dear Mr. Westbrook:

We are in receipt of your letter proposing an exchange of land whereby Transwestern would acquire BLM land adjacent to its compressor site (privately owned) in the SENW of Section 31, T20S, R32E. In exchange, Transwestern would offer other private lands, as designated by BLM, with high resource values.

Land exchanges require a significant amount of time to complete irregardless of the amount of acreage involved. We feel that the land exchange proposed cannot be justified due to the amount of work required to complete it and the small amount of acreage involved.

We are aware of a BLM right-of-way issued to Transwestern in 2003 to authorize existing facilities which are being used to monitor the plume of pollution in a perched water table in that area. This plume originates at a compressor site on Transwestern's adjacent private land and is slowly moving in a northerly and westerly direction. Transwestern has stated that the adjacent BLM land needs to be acquired to facilitate ongoing remediation activities. However, remediation can be done on the right-of-way already authorized and, if necessary, this right-of-way grant can be amended to include additional facilities or BLM land for remediation purposes. The conveyance of more land to Transwerstern will not in itself cure the pollution problem nor do we see how it would improve or facilitate remediation efforts beyond what can be done through a right-of-way authorization.

If you have any questions, please call Russ Sorensen at (505)234-5963 or Link Lacewell at (505)234-5904.

Sincerely,

Leslie A. Theiss

Leslie Theiss
Field Manager

Transwestern Pipeline Company
1400 Smith Street
Houston, TX.77002
P.O. Box 1188
Houston, TX 77210-1188
Phone: 800-97-ENRON

February 12, 2004

United States Bureau of Land Management
Carlsbad Resource Area – Realty Division
Attn: Mr. Russ Sorenson
620 East Greene Street
Carlsbad, NM 88220

Re: Transwestern WT-1 Compressor Station Proposed Land Exchange in the SE/4 NW/4 of Sec. 31, T20S, R32E, Lea County, NM.

Dear Mr. Sorenson:

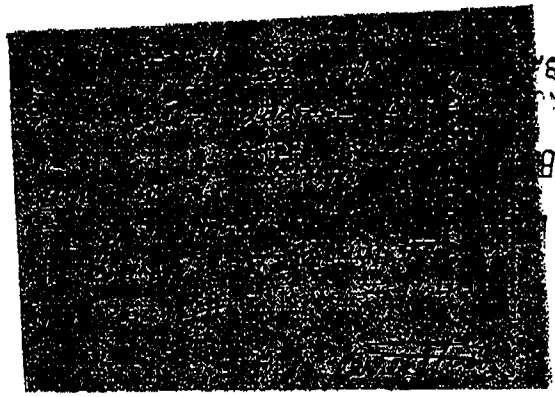
Transwestern Pipeline Company (Transwestern) is the fee owner of a 35.83-acre tract of land in Lea County, NM, described above. Soil and groundwater in the site has been impacted with condensate and solvent compounds, and off-site groundwater has been impacted with these same compounds. The groundwater affected is in a perched aquifer at a depth of about 50 feet, and the aquifer is not used in the area. Groundwater remediation at this site has been limited due to unfavorable characteristics of the impacted aquifer. The off-site property is owned by the United States and managed by the BLM.

Transwestern proposes to purchase a suitable tract of land to exchange for a 38-acre tract adjacent to the Transwestern 35.83 acre tract. The 38-acre tract measures 800 feet north and 300 feet west of the Transwestern tract. Purchase of the proposed 38 acres will facilitate ongoing remediation activities. All environmental reporting at this site is under the jurisdiction of the New Mexico Oil Conservation division.

Please let me know if you have questions or need further information regarding this proposal. I will look forward to discussing this issue with you. My direct phone number is (713) 345-3067.

Yours truly,

Roger Westbrook
Right of Way Dept



P. 01

TRANSACTION REPORT

MAY-24-2004 MON 12:05 PM

FOR:

RECEIVE

DATE	START	SENDER	RX TIME	PAGES	TYPE	NOTE	M#	DP
MAY-24	12:00 PM	5052345927	4'44"	3	RECEIVE	OK		

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☑ Telephone ☐ Personal | Time 0830 | Date 2/25/04

Originating Party	Other Parties
Bill Olson - OCD	Link Lacewell - BLM

Subject

WT-1 Compressor Station

Discussion

Informed him of GW remediation actions ongoing at the stations under the facility discharge plan.

Conclusions or Agreements

Distribution

Signed Bill Olson

Olson, William

From: Billy_Lacewell@nm.blm.gov
Sent: Tuesday, February 24, 2004 3:05 PM
To: Olson, William
Subject: Transwestern Compressor Site

Greetings Bill,

Carlsbad BLM has received a request from this company to acquire 38 acres in T20S, R32E, senw sec 31. This land is adjacent to 35 acres acquired from us in 1962 which is now occupied by a Transwestern compressor station. Their letter stated the land they currently own has soil and groundwater (perched aquifer at 50') impacted by condensate and solvent. The land they would like to acquire is needed to 'facilitate ongoing remediation activities', but they give no specifics on the release or planned cleanup. Their letter also states the environmental reporting is under the jurisdiction of NMOCD.

I am writing for three things:

1. to make sure OCD was fully aware of this situation, the release properly reported and a cleanup plan approved
2. to inquire what the extent of contamination was and plans for cleanup, including potential need for additional land
3. to discuss potential for this situation to exist at other compressor sites on BLM land.

This office receives requests for sale or exchange of lands on a regular basis. Our normal position when requests are received for acquisition of small isolated parcels of public land is not to accept such proposals unless there is over-riding resource value or some other factor that makes it of an elevated priority. Even then, we receive so many such requests, and they are so time consuming, it may take years to complete such action. It would seem to me the remediation activities could be accomplished with a right-of-way to Transwestern, which is much less costly and time consuming. I would like to get your input before we reply to the company, and would appreciate a call or e-mail at your earliest convenience.

thanks,

Link Lacewell
Hazmat Coordinator
(505) 234-5904

Olson, William

From: Robinson, George [George.Robinson@ENRON.com]
Sent: Thursday, April 10, 2003 2:20 PM
To: Bill Olson (E-mail); LWJohnson@state.nm.us
Cc: Campbell, Larry; george.friend@cypressinc.us
Subject: Transwestern Pipeline WT-1 Station - Soil Remediation (Case #GW109R)

We are tentatively scheduled to start excavation and removal activities at the WT-1 Station on Tuesday, April 22nd. George Friend with Cypress Engineering will be the on-site inspector. He can be reached on his cell phone at 915-940-2013. I will send an additional notification should there be a change in schedule.
-George

George C. Robinson, PE
Contract Environmental Engineer
Cypress Engineering
ENRON Office: (713) 345-1537
ENRON email: george.robinson@enron.com

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

March 10, 2003

Mr. Bill Kendrick
Transwestern Pipeline Company
P.O. Box 1188
Houston, Texas 77251-1188

RE: SOIL REMEDIATION WORK PLAN
WT-1 COMPRESSOR STATION
CASE # GW109R

Dear Mr. Kendrick:

The New Mexico Oil Conservation Division (OCD) has reviewed Transwestern Pipeline Company's (TPC) December 9, 2002 "WORK PLAN FOR EXCAVATION OF AFFECTED SOIL, WT-1 COMPRESSOR STATION, TRANSWESTERN PIPELINE COMPANY". This document contains the results of TPC's characterization of soils in the former pit areas at the TPC WT-1 Compressor Station. The document also contains a work plan for excavation and remediation of contaminated soils from the pits.

The above-referenced work plan is approved with the following conditions:

1. All soil samples shall be obtained and analyzed using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

2. The pit excavation and remediation report shall be submitted to the OCD Santa Fe Office by May 12, 2003 with a copy provided to the OCD Hobbs District Office. The report shall contain:

   a. A description of the remediation activities which occurred including conclusions and recommendations.

   b. Site maps showing the excavations, former pits, tanks, sample locations and any other pertinent site features.

   c. Summary tables of all soil sampling results and copies of all laboratory analytical data sheets and associated QA/QC data.

3. TPC shall notify the OCD at least 1 week in advance of the scheduled activities such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not limit TPC to the above-referenced work plan if the activities fail to adequately remediate contamination related to TPC's activities, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve TPC of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
George Robinson, Cypress Engineering Services, Inc.

Olson, William

From: Robinson, George [George.Robinson@ENRON.com]
Sent: Monday, December 09, 2002 4:25 PM
To: Bill Olson (E-mail)
Cc: Kendrick, William; Campbell, Larry; Robinson, George
Subject: TW WT-1 Station - Pit Area Excavation Plan


WT-1 exc work plan transmittal...


Excavation Work Plan 120902.pd...

Bill-

Attached is the work plan for excavation of the former pit areas. Attached separately is a transmittal letter. I will attempt to send the associated analytical report in a separate message but it may not transmit due to the size of the file (about 2 MB). We are tentatively scheduled to initiate excavation activities on Monday, December 16, 2002, assuming we can get OCD approvals of the work plan and for waste disposal at CRI. I'll give you a call either this afternoon or tomorrow to discuss.
Thanks,
George

<<WT-1 exc work plan transmittal to OCD 120902.pdf>>

<<Excavation Work Plan 120902.pdf>>

George C. Robinson, PE
Contract Environmental Engineer
Cypress Engineering
ENRON Office: (713) 345-1537
ENRON email: george.robinson@enron.com

Transwestern Pipeline Company
1400 Smith Street
Houston, TX 77002
713-853-6161

December 9, 2002

Mr. William C. Olson
Environmental Bureau
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Work Plan for Excavation of Affected Soil
WT-1 Compressor Station
Transwestern Pipeline Company

The enclosed work plan is submitted for your review and approval. Transwestern is ready to proceed with implementing the work plan upon approval from the NMOCD. Please call George Robinson at (713) 345-1537 if you have any questions or comments regarding the work plan.

Sincerely,

Bill Kendrick
Director, Environmental Affairs

xc: (with attachments)

Larry Campbell	Transwestern Pipeline Co.
George Robinson	Cypress Engineering
Randy Johnson	OCD Hobbs Office

Work Plan for Excavation and Removal of Affected Soil in the Former Surface Impoundment Areas

Transwestern Pipeline Company
WT-1 Compressor Station
Lea County, New Mexico

RECEIVED

DEC 10 2002

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Submitted to:
New Mexico Oil Conservation Division

December 6, 2002

Prepared For:
Transwestern Pipeline Company
6381 North Main Street
Roswell, NM 88201

Prepared by:
Cypress Engineering Services, Inc.
10235 West Little York Road, Suite 256
Houston, Texas 77040

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2 Monitor Well and Soil Boring Locations

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1 Summary of Analytical Results for RCRA Waste Characterization of the Engine Room Drain Pit and Filter Pit Areas

LIST OF ATTACHMENTS

1 Photos of Waste Characterization Activities

2 Laboratory Reports for Trench Soil Samples

Work Plan for Excavation and Removal of Affected Soil in the Former Surface Impoundment Areas

1. Work Plan Objectives

The subject of this work plan are two former surface impoundments located at the Transwestern Pipeline Company (Transwestern), WT-1 Compressor Station. This work plan is designed to remediate near surface soil affected by a release from the former impoundments.

The objectives of the proposed excavation activities are: 1) To reduce the health risk from potential future contact with affected soil to an acceptable level; and 2) To remove the potential for continued groundwater contamination from a residual source of petroleum hydrocarbons contained in affected soil. These objectives will be met by the excavation and removal of near-surface soil located in the immediate vicinity of the former impoundments.

This work plan will be implemented upon approval by the New Mexico Oil Conservation Division (OCD).

2. Site Background

A description of the facility and operation of the former engine room drain pit and filter pit was provided in a previous report submitted to the OCD. This report was titled "Phase II Assessment - Former Engine Room Drain and Filter Pit Area WT-1 Compressor Station", dated November 8, 1995. The location of the former engine room drain pit and filter pit areas is indicated in Figure 1.

A brief physical description of the two former pits are presented as follows:

Impoundment	Approximate Dimensions	Date Backfilled
Engine Room Drain Pit	30' x 30' (square)	~ 1989
Filter Pit	30' x 30' (square)	~ 1989

The original depth of the pits is unknown.

3. Waste Characterization Activities

3.1 Waste Characterization Objective

Waste characterization samples were collected on November 22, 2002, for the purpose of confirming that affected soil from within two former pit areas could be managed as non-exempt non-hazardous oil and gas field waste. This was accomplished by collecting 8 soil samples from trenches excavated in the former pit areas. The soil samples were delivered to a laboratory for analysis for RCRA hazardous waste characteristics. Laboratory results indicate that affected soil may be managed as non-hazardous waste.

3.2 Pit Area Delineation

On November 22, 2002, pit area locations were determined by locating the edges of woven plastic liners which had been placed over each of the pits when they were backfilled. The liners were located approximately one foot below the surface and were covered with a caliche cover. The dimensions of the liners are outlined below:

Impoundment	Liner and Caliche Cover Approximate Dimensions	Date Backfilled
Engine Room Drain Pit	52' x 47' (square)	~ 1989
Filter Pit	43' x 49' (square)	~ 1989

Although the original depth of the pits is unknown, hard rock was encountered at approximately 13 feet below ground surface.

3.3 Trenching Activities for Sampling

One trench was excavated within each former pit area in order to collect samples for RCRA waste characterization. The trenches were located in the center of each former pit area. The trenches were excavated using a trackhoe. Each trench was excavated to a depth of 13 feet bgs. Excavation below 13 feet was not possible due to the presence of hard rock at this depth.

In general, the soil profile encountered in both trenches was very similar and consisted primarily of river rock and loose sandy soil. The debris encountered in the Filter Pit consisted primarily of

old filters which were encountered at 2 feet bgs to 8 feet bgs. A small amount of concrete was encountered in the Engine Room Drain Pit area.

At the conclusion of sampling activities, excavated soil was pushed back into the trench from where the soil originated.

3.4 Sample Collection and Analysis

At least one sample was obtained from each trench at depths of 4 feet bgs, 8 feet bgs, 12 feet bgs, and 13 feet bgs (that is, 4 samples from each trench). Based upon field observations, an attempt was made to obtain a representative soil sample for characterization. This activity generated a total of 8 samples for waste characterization.

Laboratory analysis for RCRA waste characterization included TCLP volatiles, TCLP semi-volatiles, TCLP metals, reactivity, corrosivity and ignitability. In addition, the sample analysis plan included Total Petroleum Hydrocarbons (TPH) by method 8015mod (GRO & DRO). Laboratory analysis confirmed that samples collected in the course of this activity do not trigger RCRA hazardous waste criteria. A summary table of laboratory results is included as Table 1.

4. Proposed Excavation Activities

4.1 General Approach

The general approach to the excavation activities is to excavate affected soil in the immediate vicinity of the former pit areas for off-site disposal and to backfill the remaining excavated area with clean soil. The clean soil will be made up of soil stockpiled on site and the remaining will be brought in from off-site.

4.2 Excavation

The anticipated lateral and vertical limit of excavation in the pit areas is based upon information obtained from the recent waste characterization activities and from previous soil borings.

The purpose of this excavation is to remove any remaining contents of the former impoundments and the most heavily affected soil beneath the former impoundments to the maximum depth

practicable. All soil and debris removed from this area will be loaded into trucks for off-site disposal at an OCD permitted landfill facility (Controlled Recovery Inc.).

The proposed depth of excavation is 13 feet bgs. This depth is based on the maximum depth of excavation determined in the course of characterization activities.

The lateral limits of the excavation will extend 10 feet beyond the lateral limits of each pit. The exact lateral limits will be determined in the course of excavation activities but it is anticipated that each excavation will have dimensions of 50 feet by 50 feet.

The total volume of soil to be excavated from both pit areas is estimated at 2,400 cubic yards of soil in-place (3,100 yards excavated). It is anticipated that approximately 3,100 cubic yards will be transported off-site for disposal. If necessary, some clean overburden soil will be excavated and stockpiled around the perimeter of the excavation and then utilized for backfill material.

4.3 Bottom and Sidewall Soil Sampling

Soil samples will be collected from the bottom and sidewalls of the excavated areas for the purpose of assessing the level of contamination remaining beneath the excavated areas. This information will be useful in the development of subsequent remediation efforts to address remaining soil and ground water contamination. At a minimum, 12 samples will be collected from the bottom of each excavation area. Similarly, at a minimum, 12 samples will be collected from the sidewalls (@ 6-8 feet bgs) of each excavation area. Sample locations will be randomly spaced across the open excavation areas.

Bottom and sidewall soil samples will be submitted to a laboratory for analysis for VOCs by method 8260 and TPH by method 8015mod (GRO & DRO).

5. Off-Site Disposal Activities

5.1 Off-Site Disposal Facility

Approximately 3,100 cubic yards of excavated soil will by loaded into trucks and transported off-site for disposal. Soil will be transported to the Controlled Recovery Inc. landfill facility located about 5 miles east of the WT-1 Station site.

6. Management of Stockpiled Soil

6.1 Blended Soil

It is anticipated that approximately 500 to 1,000 cubic yards of clean overburden soil and less affected soil from the perimeter of the former impoundments will be stockpiled in the course of excavation activities. This material will be stockpiled around the perimeter of the excavations. This soil will be characterized by laboratory analysis prior to using the soil as backfill material.

One composite soil sample will be prepared per 100 cubic yards of stockpiled soil. Each composite sample will be submitted to a laboratory for analysis for BTEX by method 8021 and TPH by method 8015mod (GRO & DRO).

Based upon laboratory results, stockpiled soil that exceeds OCD guideline concentrations for benzene of 10 mg/kg, total BTEX of 50 mg/kg, or TPH of 1000 mg/kg will not be used for backfill material.

6.2 Backfill Soil

Backfill soil will originate from two sources. First, there is approximately 500 cubic yards of "clean" soil located on-site that will be utilized. This soil was generated in the course of soil remediation activities in the former WT-1 Station dehy area. The soil has subsequently been sampled and determined appropriate for on-site use as backfill material.

It is anticipated that approximately 2,500 cubic yards of clean soil will be brought on-site for use as backfill material. A grab sample will be collected for every 500 cubic yards of clean soil brought on-site to confirm that the backfill soil is clean. The confirmation samples will be submitted to a laboratory for analysis for BTEX by method 8021 and TPH by method 8015mod (GRO & DRO).

7. Backfill Activities

7.1 Preparation of Excavation Areas

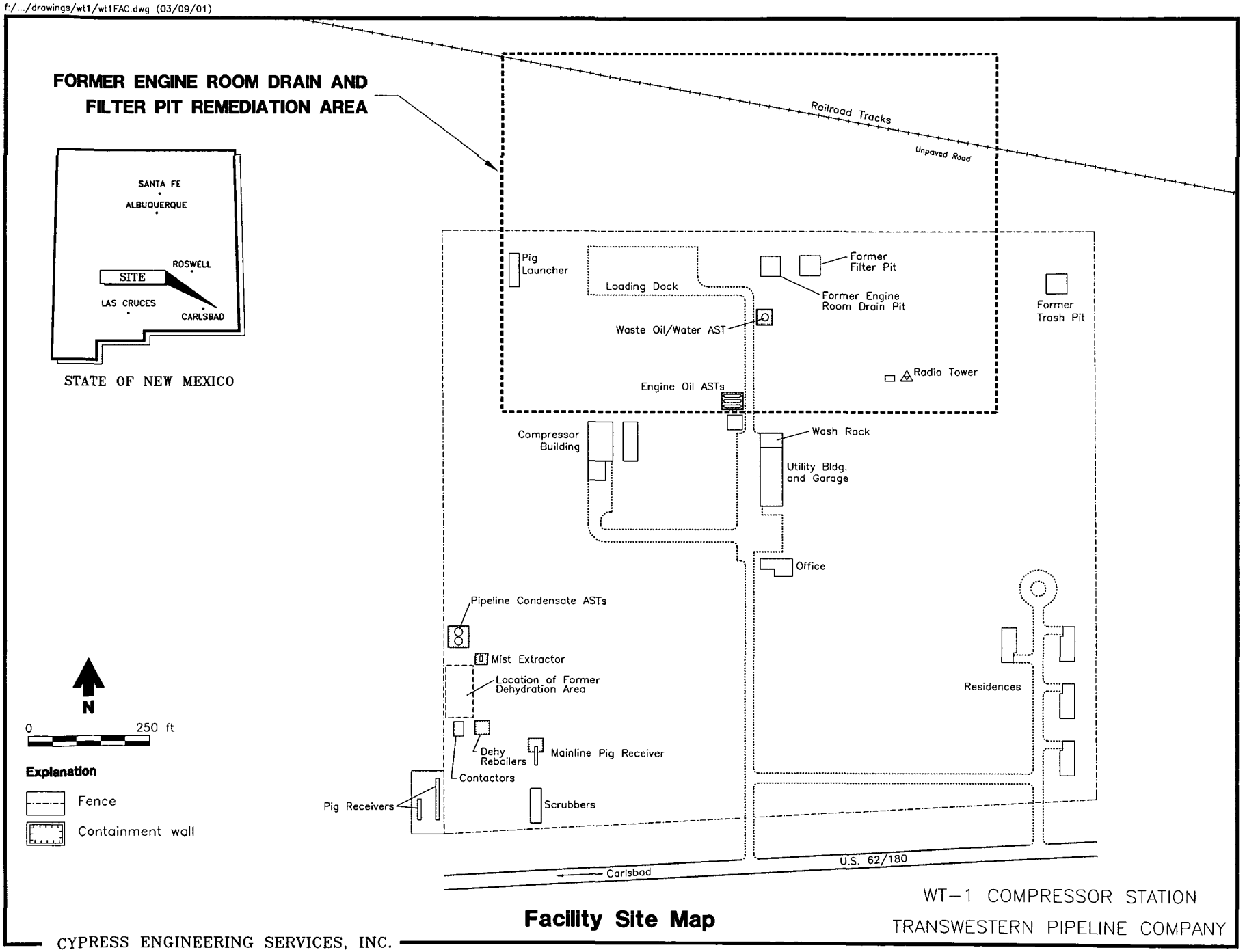
Subsequent to excavation and final sampling activities, the open excavations will be prepared in a manner to facilitate the placement of a plastic liner near the bottom of the excavated areas. The

Table 1. Summary of Analytical Results for RCRA Waste Characterization of the Engine Room Drain Pit and Filter Pit Areas Transwestern Pipeline Company WT-1 Compressor Station

Sample ID	Sampling Date	Ignitability (F)	pH (units)	TPH, GRO+DRO (mg/kg)	Reactivity	TCLP Metals (mg/L)								TCLP VOCs (mg/L)										TCLP SVOCs (mg/L)									
						Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dichlorobenzene	2-Butanone (MEK)	Benzene	Carbon Tetrachloride	Chlorobenzene	Chloroform	Tetrachloroethene	Trichloroethene	Vinyl Chloride	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dinitrotoluene	Cresols, Total	Hexachlorobenzene	Hexachlorobutadiene	Hexachloroethane	Nitrobenzene	Pentachlorophenol	Pyridine
RCRA Regulatory Levels:		<140	<2.0 >12.5	—	—	5.0	100	1.0	5.0	5.0	0.2	1.0	5.0	0.7	0.5	7.5	200.0	0.5	0.5	100.0	6.0	0.7	0.5	0.2	400.0	2.0	0.13	200.0	0.13	0.5	3.0	2.0	100.0	5.0
W. Pit @ 4'	11/22/02	NI	7.55	655	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00
W. Pit @ 8'	11/22/02	NI	7.56	3210	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00
W. Pit @ 12'	11/22/02	NI	7.66	29310	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00
W. Pit @ 13'	11/22/02	NI	7.53	17636	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00
E. Pit @ 4'	11/22/02	NI	6.78	115700	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00
E. Pit @ 8'	11/22/02	NI	7.88	55220	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00
E. Pit @ 12'	11/22/02	NI	7.87	19940	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00
E. Pit @ 13'	11/22/02	NI	7.90	22820	NR	< 5.0	< 100	< 1.0	< 5.0	< 5.0	< 0.020	< 1.0	< 5.0	< 0.70	< 0.50	< 7.5	< 200	< 0.50	< 0.50	< 100	< 6.0	< 0.70	< 0.50	< 0.20	< 400	< 2.00	< 0.130	< 200	< 0.130	< 0.500	< 3.00	< 2.00	< 100	< 5.00

Notes:
W. Pit - Engine Room Drain Pit
E. Pit - Filter Pit
NI - Not Ignitable
NR - Not Reactive
"—" - No applicable RCRA regulatory limit
TPH - Total Petroleum Hydrocarbons by method 8015mod (GRO+DRO)

f:/.../drawings/wt1/wt1FAC.dwg (03/09/01)



Facility Site Map

WT-1 COMPRESSOR STATION
TRANSWESTERN PIPELINE COMPANY

CYPRESS ENGINEERING SERVICES, INC.

Figure 1

f:/.../drawings/wt1/wt1pit.dwg (02/01/02)

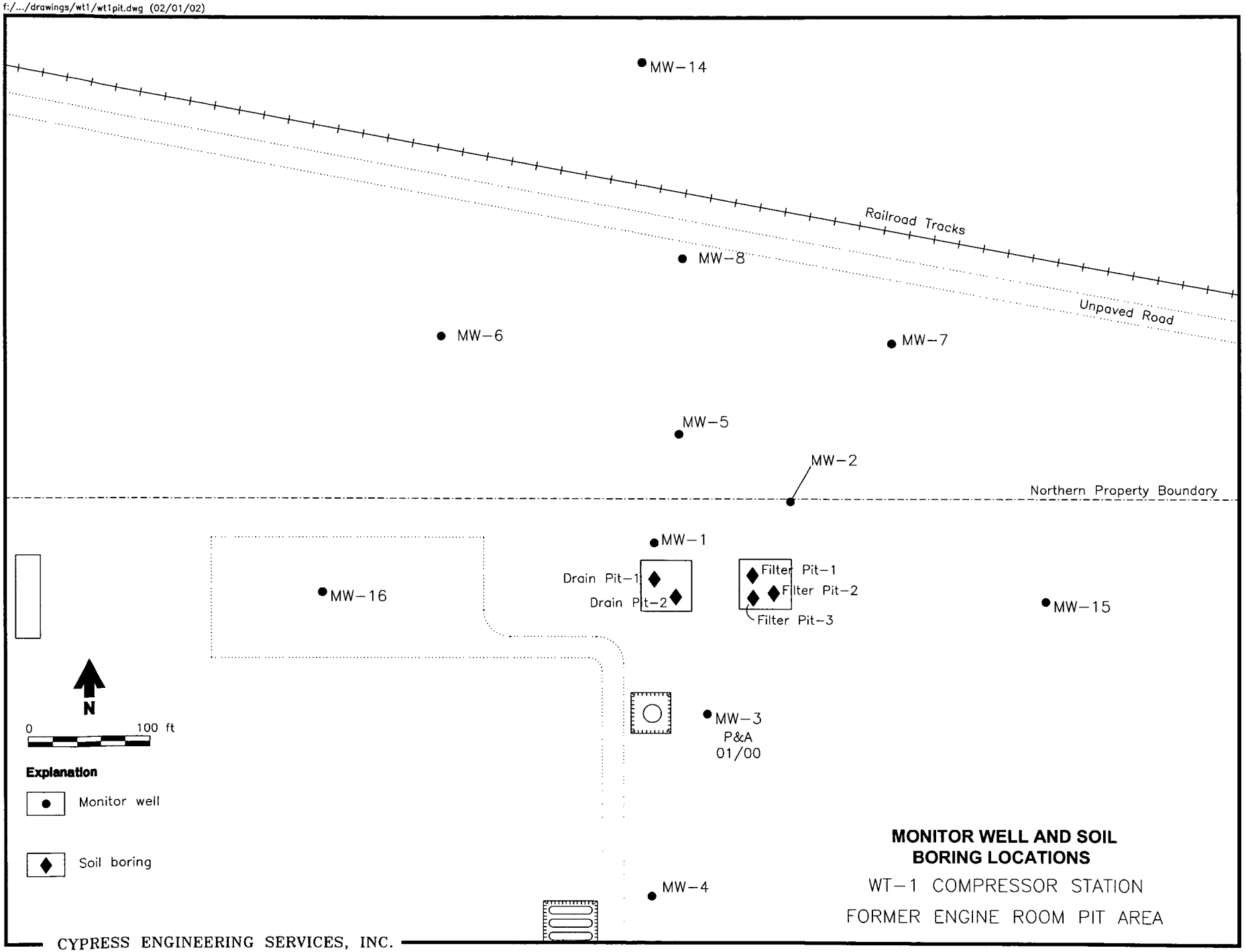


Figure 2

CYPRESS ENGINEERING SERVICES, INC.

Transwestern Pipeline Co. - WT-1 Compressor Station
Surface Impoundment Sampling – November 22, 2002

The edges of the pits were identified by exposing a plastic liner under a caliche cap.

Soil and debris from the Filter Pit Area.

Transwestern Pipeline Co. - WT-1 Compressor Station
Surface Impoundment Sampling – November 22, 2002

Excavation of a trench for collecting soil samples in the Engine Room Drain Pit Area.

Hall Environmental Analysis Laboratory

COVER LETTER

December 04, 2002

George Robinson
Cypress Engineering
10235 W. Little York Suite 256
Houston, TX 77040
TEL: (713) 856-7980
FAX (713) 856-7981

RE: WT-1

Order No.: 0211151

Dear George Robinson:

Hall Environmental Analysis Laboratory received 8 samples on 11/23/2002 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Project: WT-1
Lab Order: 0211151

CASE NARRATIVE

Analytical Comments for METHOD 8015GRO_S, SAMPLES 0211151-3, 4, 7, 8: Surrogates not recoverable due to matrix interference.

Analytical Comments for METHOD 8015DRO_S, SAMPLES 0211151- 3, 5, 6, 7, 8, A: Surrogates unrecoverable due to sample dilution and matrix interferences.

Analytical Comments for METHOD 8270TCLP, SAMPLE 0211151-08A: Low surrogate recovery due to emulsion formation during extraction

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-01

Client Sample W. Pit 4'
Collection 11/22/2002 9:00:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	95	5.0		mg/Kg	1	11/26/2002 12:46:42 PM
Motor Oil Range Organics (MRO)	560	50		mg/Kg	1	11/26/2002 12:46:42 PM
Surr: DNOP	85.5	60-124		%REC	1	11/26/2002 12:46:42 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/25/2002 11:23:31 AM
Surr: BFB	94.2	74-118		%REC	1	11/25/2002 11:23:31 AM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	100	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	109	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/3/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/3/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/3/2002
Cresols, Total	ND	200		mg/L	1	12/3/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/3/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/3/2002
Hexachloroethane	ND	3.00		mg/L	1	12/3/2002
Nitrobenzene	ND	2.00		mg/L	1	12/3/2002
Pentachlorophenol	ND	100		mg/L	1	12/3/2002
Pyridine	ND	5.00		mg/L	1	12/3/2002
Surr: 2,4,6-Tribromophenol	78.0	0-169		%REC	1	12/3/2002
Surr: 2-Fluorobiphenyl	58.1	6-118		%REC	1	12/3/2002
Surr: 2-Fluorophenol	46.2	0-103		%REC	1	12/3/2002
Surr: 4-Terphenyl-d14	29.2	3-135		%REC	1	12/3/2002
Surr: Nitrobenzene-d5	55.9	8-115		%REC	1	12/3/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-01

Client Sample W. Pit 4'
Collection 11/22/2002 9:00:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	32.1	0-127		%REC	1	12/3/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-02

Client Sample W. Pit 8'
Collection 11/22/2002 9:20:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	310	25		mg/Kg	5	12/2/2002 5:12:31 PM
Motor Oil Range Organics (MRO)	2900	250		mg/Kg	5	12/2/2002 5:12:31 PM
Surr: DNOP	116	60-124		%REC	5	12/2/2002 5:12:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/25/2002 11:54:17 AM
Surr: BFB	98.9	74-118		%REC	1	11/25/2002 11:54:17 AM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	96.9	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	116	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/3/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/3/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/3/2002
Cresols, Total	ND	200		mg/L	1	12/3/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/3/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/3/2002
Hexachloroethane	ND	3.00		mg/L	1	12/3/2002
Nitrobenzene	ND	2.00		mg/L	1	12/3/2002
Pentachlorophenol	ND	100		mg/L	1	12/3/2002
Pyridine	ND	5.00		mg/L	1	12/3/2002
Surr: 2,4,6-Tribromophenol	77.0	0-169		%REC	1	12/3/2002
Surr: 2-Fluorobiphenyl	54.6	6-118		%REC	1	12/3/2002
Surr: 2-Fluorophenol	47.6	0-103		%REC	1	12/3/2002
Surr: 4-Terphenyl-d14	27.2	3-135		%REC	1	12/3/2002
Surr: Nitrobenzene-d5	57.6	8-115		%REC	1	12/3/2002

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-02

Client Sample W. Pit 8'
Collection 11/22/2002 9:20:00 AM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	32.4	0-127		%REC	1	12/3/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-03

Client Sample W. Pit 12'
Collection 11/22/2002 10:05:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	3200	250		mg/Kg	50	11/26/2002 3:39:00 PM
Motor Oil Range Organics (MRO)	26000	2500		mg/Kg	50	11/26/2002 3:39:00 PM
Surr: DNOP	0	60-124	S	%REC	50	11/26/2002 3:39:00 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	110	20		mg/Kg	4	11/26/2002 12:40:57 PM
Surr: BFB	0	74-118	S	%REC	4	11/26/2002 12:40:57 PM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	96.4	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	103	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/3/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/3/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/3/2002
Cresols, Total	ND	200		mg/L	1	12/3/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/3/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/3/2002
Hexachloroethane	ND	3.00		mg/L	1	12/3/2002
Nitrobenzene	ND	2.00		mg/L	1	12/3/2002
Pentachlorophenol	ND	100		mg/L	1	12/3/2002
Pyridine	ND	5.00		mg/L	1	12/3/2002
Surr: 2,4,6-Tribromophenol	91.6	0-169		%REC	1	12/3/2002
Surr: 2-Fluorobiphenyl	56.0	6-118		%REC	1	12/3/2002
Surr: 2-Fluorophenol	45.4	0-103		%REC	1	12/3/2002
Surr: 4-Terphenyl-d14	25.3	3-135		%REC	1	12/3/2002
Surr: Nitrobenzene-d5	58.8	8-115		%REC	1	12/3/2002

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-03

Client Sample W. Pit 12'
Collection 11/22/2002 10:05:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	31.5	0-127		%REC	1	12/3/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-04

Client Sample W. Pit 13'
Collection 11/22/2002 1:00:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	1600	250		mg/Kg	50	11/26/2002 4:07:40 PM
Motor Oil Range Organics (MRO)	16000	2500		mg/Kg	50	11/26/2002 4:07:40 PM
Surr: DNOP	89.5	60-124		%REC	50	11/26/2002 4:07:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	36	10		mg/Kg	2	11/26/2002 1:11:34 PM
Surr: BFB	0	74-118	S	%REC	2	11/26/2002 1:11:34 PM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	93.8	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	110	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/3/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/3/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/3/2002
Cresols, Total	ND	200		mg/L	1	12/3/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/3/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/3/2002
Hexachloroethane	ND	3.00		mg/L	1	12/3/2002
Nitrobenzene	ND	2.00		mg/L	1	12/3/2002
Pentachlorophenol	ND	100		mg/L	1	12/3/2002
Pyridine	ND	5.00		mg/L	1	12/3/2002
Surr: 2,4,6-Tribromophenol	11.5	0-169		%REC	1	12/3/2002
Surr: 2-Fluorobiphenyl	49.5	6-118		%REC	1	12/3/2002
Surr: 2-Fluorophenol	32.6	0-103		%REC	1	12/3/2002
Surr: 4-Terphenyl-d14	23.7	3-135		%REC	1	12/3/2002
Surr: Nitrobenzene-d5	46.7	8-115		%REC	1	12/3/2002

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-04

Client Sample W. Pit 13'
Collection 11/22/2002 1:00:00 PM
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	23.4	0-127		%REC	1	12/3/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-05

Client Sample E. Pit 4'
Collection 11/22/2002 11:00:00

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	5700	1300		mg/Kg	250	12/2/2002 1:22:34 PM
Motor Oil Range Organics (MRO)	110000	13000		mg/Kg	250	12/2/2002 1:22:34 PM
Surr: DNOP	0	60-124	S	%REC	250	12/2/2002 1:22:34 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	ND	20		mg/Kg	1	11/26/2002 1:42:07 PM
Surr: BFB	99.4	74-118		%REC	1	11/26/2002 1:42:07 PM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	96.9	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	114	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/3/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/3/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/3/2002
Cresols, Total	ND	200		mg/L	1	12/3/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/3/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/3/2002
Hexachloroethane	ND	3.00		mg/L	1	12/3/2002
Nitrobenzene	ND	2.00		mg/L	1	12/3/2002
Pentachlorophenol	ND	100		mg/L	1	12/3/2002
Pyridine	ND	5.00		mg/L	1	12/3/2002
Surr: 2,4,6-Tribromophenol	106	0-169		%REC	1	12/3/2002
Surr: 2-Fluorobiphenyl	63.4	6-118		%REC	1	12/3/2002
Surr: 2-Fluorophenol	52.2	0-103		%REC	1	12/3/2002
Surr: 4-Terphenyl-d14	59.5	3-135		%REC	1	12/3/2002
Surr: Nitrobenzene-d5	63.4	8-115		%REC	1	12/3/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-05

Client Sample E. Pit 4'
Collection 11/22/2002 11:00:00

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	36.0	0-127		%REC	1	12/3/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-06

Client Sample E. Pit 8'
Collection 11/22/2002 11:10:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	2200	1300		mg/Kg	250	12/2/2002 1:51:15 PM
Motor Oil Range Organics (MRO)	53000	13000		mg/Kg	250	12/2/2002 1:51:15 PM
Surr: DNOP	0	60-124	S	%REC	250	12/2/2002 1:51:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	20	10		mg/Kg	2	11/26/2002 2:12:41 PM
Surr: BFB	118	74-118		%REC	2	11/26/2002 2:12:41 PM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	99.3	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	112	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/3/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/3/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/3/2002
Cresols, Total	ND	200		mg/L	1	12/3/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/3/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/3/2002
Hexachloroethane	ND	3.00		mg/L	1	12/3/2002
Nitrobenzene	ND	2.00		mg/L	1	12/3/2002
Pentachlorophenol	ND	100		mg/L	1	12/3/2002
Pyridine	ND	5.00		mg/L	1	12/3/2002
Surr: 2,4,6-Tribromophenol	93.9	0-169		%REC	1	12/3/2002
Surr: 2-Fluorobiphenyl	60.0	6-118		%REC	1	12/3/2002
Surr: 2-Fluorophenol	50.3	0-103		%REC	1	12/3/2002
Surr: 4-Terphenyl-d14	33.2	3-135		%REC	1	12/3/2002
Surr: Nitrobenzene-d5	59.5	8-115		%REC	1	12/3/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-06

Client Sample E. Pit 8'
Collection 11/22/2002 11:10:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	34.0	0-127		%REC	1	12/3/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-07

Client Sample E. Pit 12'
Collection 11/22/2002 11:20:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	820	500		mg/Kg	100	12/2/2002 2:20:02 PM
Motor Oil Range Organics (MRO)	19000	5000		mg/Kg	100	12/2/2002 2:20:02 PM
Surr: DNOP	0	60-124	S	%REC	100	12/2/2002 2:20:02 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	120	20		mg/Kg	4	11/26/2002 2:43:53 PM
Surr: BFB	0	74-118	S	%REC	4	11/26/2002 2:43:53 PM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	97.0	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	110	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/3/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/3/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/3/2002
Cresols, Total	ND	200		mg/L	1	12/3/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/3/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/3/2002
Hexachloroethane	ND	3.00		mg/L	1	12/3/2002
Nitrobenzene	ND	2.00		mg/L	1	12/3/2002
Pentachlorophenol	ND	100		mg/L	1	12/3/2002
Pyridine	ND	5.00		mg/L	1	12/3/2002
Surr: 2,4,6-Tribromophenol	84.5	0-169		%REC	1	12/3/2002
Surr: 2-Fluorobiphenyl	51.0	6-118		%REC	1	12/3/2002
Surr: 2-Fluorophenol	44.6	0-103		%REC	1	12/3/2002
Surr: 4-Terphenyl-d14	31.1	3-135		%REC	1	12/3/2002
Surr: Nitrobenzene-d5	49.9	8-115		%REC	1	12/3/2002

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-07

Client Sample E. Pit 12'
Collection 11/22/2002 11:20:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	30.9	0-127		%REC	1	12/3/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-08

Client Sample E. Pit 13'
Collection 11/22/2002 12:30:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	750	500		mg/Kg	100	12/2/2002 2:40:16 PM
Motor Oil Range Organics (MRO)	22000	5000		mg/Kg	100	12/2/2002 2:40:16 PM
Surr: DNOP	0	60-124	S	%REC	100	12/2/2002 2:40:16 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NB**
Gasoline Range Organics (GRO)	70	20		mg/Kg	4	11/26/2002 12:10:08 PM
Surr: BFB	0	74-118	S	%REC	4	11/26/2002 12:10:08 PM
VOLATILES, TCLP LEACHED						Analyst: **JDC**
Benzene	ND	0.50		mg/L	1	11/26/2002
2-Butanone	ND	200		mg/L	1	11/26/2002
Carbon Tetrachloride	ND	0.50		mg/L	1	11/26/2002
Chlorobenzene	ND	100		mg/L	1	11/26/2002
Chloroform	ND	6.0		mg/L	1	11/26/2002
1,4-Dichlorobenzene	ND	7.5		mg/L	1	11/26/2002
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	11/26/2002
1,1-Dichloroethene	ND	0.70		mg/L	1	11/26/2002
Hexachlorobutadiene	ND	0.50		mg/L	1	11/26/2002
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	11/26/2002
Trichloroethene (TCE)	ND	0.50		mg/L	1	11/26/2002
Vinyl chloride	ND	0.20		mg/L	1	11/26/2002
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	11/26/2002
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	11/26/2002
Surr: Dibromofluoromethane	94.8	70-130		%REC	1	11/26/2002
Surr: Toluene-d8	112	70-130		%REC	1	11/26/2002
SEMIVOLATILES, TCLP LEACHED						Analyst: **CS**
2,4,5-Trichlorophenol	ND	400		mg/L	1	12/4/2002
2,4,6-Trichlorophenol	ND	2.00		mg/L	1	12/4/2002
2,4-Dinitrotoluene	ND	0.130		mg/L	1	12/4/2002
Cresols, Total	ND	200		mg/L	1	12/4/2002
Hexachlorobenzene	ND	0.130		mg/L	1	12/4/2002
Hexachlorobutadiene	ND	0.500		mg/L	1	12/4/2002
Hexachloroethane	ND	3.00		mg/L	1	12/4/2002
Nitrobenzene	ND	2.00		mg/L	1	12/4/2002
Pentachlorophenol	ND	100		mg/L	1	12/4/2002
Pyridine	ND	5.00		mg/L	1	12/4/2002
Surr: 2,4,6-Tribromophenol	26.5	0-169		%REC	1	12/4/2002
Surr: 2-Fluorobiphenyl	15.6	6-118		%REC	1	12/4/2002
Surr: 2-Fluorophenol	12.4	0-103		%REC	1	12/4/2002
Surr: 4-Terphenyl-d14	8.99	3-135		%REC	1	12/4/2002
Surr: Nitrobenzene-d5	13.1	8-115		%REC	1	12/4/2002

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Lab Order: 0211151
Project: WT-1
Lab ID: 0211151-08

Client Sample E. Pit 13'
Collection 11/22/2002 12:30:00
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	6.10	0-127		%REC	1	12/4/2002
MERCURY, TCLP LEACHED						Analyst: **ADM**
Mercury	ND	0.020		mg/L	1	12/2/2002
EPA METHOD 6010C: TCLP METALS						Analyst: **ADM**
Arsenic	ND	5.0		mg/L	1	11/29/2002
Barium	ND	100		mg/L	1	11/29/2002
Cadmium	ND	1.0		mg/L	1	11/29/2002
Chromium	ND	5.0		mg/L	1	11/29/2002
Lead	ND	5.0		mg/L	1	11/29/2002
Selenium	ND	1.0		mg/L	1	11/29/2002
Silver	ND	5.0		mg/L	1	11/29/2002

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

SVL ANALYTICAL, INC.
One Government Gulch ▪ P.O. Box 929 ▪ Kellogg, Idaho 83827-0929 ▪ Phone: (208)784-1258 ▪ Fax: (208)783-0891

REPORT OF ANALYTICAL RESULTS

CLIENT : Hall Environmental
PROJECT: WT-1

Sample Receipt: 11/25/02
Report Date: 12/03/02

SVL JOB: 104102

SVL ID	CLIENT SAMPLE ID		CORR 9045	React SW846	IGNIT 1010
S317900	W.PIT 4'	11/22/02	7.55	NO	>140°F
S317901	W.PIT 8'	11/22/02	7.56	NO	>140°F
S317902	W.PIT 12'	11/22/02	7.56	NO	>140°F
S317903	W.PIT 13'	11/22/02	7.53	NO	>140°F
S317904	E.PIT 4'	11/22/02	6.78	NO	>140°F
S317905	E.PIT 8'	11/22/02	7.88	NO	>140°F
S317906	E.PIT 12'	11/22/02	7.87	NO	>140°F
S317907	E.PIT 13'	11/22/02	7.90	NO	>140°F

Soil Samples: As Received Basis

Certificate:

Reviewed By: Blake Johnson Date: 12/3/02

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Work Order: 0211151
Project: WT-1

QC SUMMARY REPORT

Method Blank

Sample	MB-2826	Batch	2826	Test	SW8015	Units:	mg/Kg		Analysis	11/26/2002 11:49:08		Prep	11/25/2002	
Client ID:				Run ID:	FID(17A)_021126A				SeqNo:	150209				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)		ND	5.0											
Motor Oil Range Organics (MRO)		ND	50											
Surr: DNOP		10.78	0	10	0	108	60	124	0					

Sample	MB-2839	Batch	2839	Test	SW8015	Units:	mg/Kg		Analysis	12/2/2002 11:26:53 AM		Prep	11/26/2002	
Client ID:				Run ID:	FID(17A)_021202A				SeqNo:	150453				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)		ND	5.0											
Motor Oil Range Organics (MRO)		ND	50											
Surr: DNOP		10.75	0	10	0	108	60	124	0					

Sample	MB-2824	Batch	2824	Test	SW8015	Units:	mg/Kg		Analysis	11/25/2002 1:26:25 PM		Prep	11/23/2002	
Client ID:				Run ID:	PIDFID_021125A				SeqNo:	150066				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)		1.52	5.0									J		
Surr: BFB		965.6	0	1000	0	96.6	74	118	0					

Sample	MB-2825	Batch	2825	Test	SW8015	Units:	mg/Kg		Analysis	11/25/2002 3:28:39 PM		Prep	11/24/2002	
Client ID:				Run ID:	PIDFID_021125A				SeqNo:	150067				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)		1.38	5.0									J		
Surr: BFB		909.8	0	1000	0	91.0	74	118	0					

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Cypress Engineering
Work Order: 0211151
Project: WT-1

QC SUMMARY REPORT

Method Blank

Sample	MB-2828	Batch	2828	Test	SW8015	Units: mg/Kg		Analysis	11/26/2002 3:14:31 PM	Prep	11/25/2002	
Client ID:				Run ID:	PIDFID_021126A			SeqNo:	150083			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		1.36	5.0									J
Surr: BFB		919.2	0	1000	0	91.9	74	118	0			

Sample	5ml rb-b	Batch	2815	Test	SW1311/826	Units: mg/L		Analysis	11/26/2002	Prep	11/23/2002	
Client ID:				Run ID:	NEPTUNE_021125B			SeqNo:	150034			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		ND	0.50									
2-Butanone		ND	200									
Carbon Tetrachloride		ND	0.50									
Chlorobenzene		ND	100									
Chloroform		ND	6.0									
1,4-Dichlorobenzene		ND	7.5									
1,2-Dichloroethane (EDC)		ND	0.50									
1,1-Dichloroethene		ND	0.70									
Hexachlorobutadiene		ND	0.50									
Tetrachloroethene (PCE)		ND	0.70									
Trichloroethene (TCE)		ND	0.50									
Vinyl chloride		ND	0.20									
Surr: 1,2-Dichloroethane-d4		0.009334	0	0.01	0	93.3	70	130	0			
Surr: 4-Bromofluorobenzene		0.01013	0	0.01	0	101	70	130	0			
Surr: Dibromofluoromethane		0.009304	0	0.01	0	93.0	70	130	0			
Surr: Toluene-d8		0.01066	0	0.01	0	107	70	130	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Cypress Engineering
Work Order: 0211151
Project: WT-1

QC SUMMARY REPORT

Method Blank

Sample	MB-2840	Batch	2840	Test	SW1311/827	Units: mg/L		Analysis	12/3/2002		Prep	11/27/2002	
Client ID:				Run ID:	ELMO_021203A			SeqNo:	150940				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
2,4,5-Trichlorophenol	ND	400											
2,4,6-Trichlorophenol	ND	2.0											
2,4-Dinitrotoluene	ND	0.13											
Cresols, Total	ND	200											
Hexachlorobenzene	ND	0.13											
Hexachlorobutadiene	ND	0.50											
Hexachloroethane	ND	3.0											
Nitrobenzene	ND	2.0											
Pentachlorophenol	ND	100											
Pyridine	ND	5.0											
Surr: 2,4,6-Tribromophenol	145.6	0	200	0	72.8	0	169	0					
Surr: 2-Fluorobiphenyl	46.77	0	100	0	46.8	6	118	0					
Surr: 2-Fluorophenol	100.1	0	200	0	50.0	0	103	0					
Surr: 4-Terphenyl-d14	28.94	0	100	0	28.9	3	135	0					
Surr: Nitrobenzene-d5	59.32	0	100	0	59.3	8	115	0					
Surr: Phenol-d6	63.81	0	200	0	31.9	0	127	0					

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Work Order: 0211151
Project: WT-1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample	LCS-2826	Batch	2826	Test	SW8015	Units: mg/Kg		Analysis	11/26/2002 12:17:48		Prep	11/25/2002	
Client ID:				Run ID:	FID(17A)_021126A			SeqNo:	150210				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	52.59	5.0	50	0	105	67.4	117	0					
Surr: DNOP	11.71	0	10	0	117	74	125	0					

Sample	LCS-2839	Batch	2839	Test	SW8015	Units: mg/Kg		Analysis	12/2/2002 11:55:28 AM		Prep	11/26/2002	
Client ID:				Run ID:	FID(17A)_021202A			SeqNo:	150454				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	55.43	5.0	50	0	111	67.4	117	0					
Surr: DNOP	10.65	0	10	0	106	74	125	0					

Sample	100ng lcs-b	Batch	2815	Test	SW8260B	Units: µg/L		Analysis	11/26/2002		Prep		
Client ID:				Run ID:	NEPTUNE_021125B			SeqNo:	149784				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Benzene	19.36	1.0	20	0	96.8	78.7	122	0					
Toluene	23.33	1.0	20	0	117	87.7	122	0					
Chlorobenzene	23.38	1.0	20	0	117	85.6	136	0					
1,1-Dichloroethene	15.58	1.0	20	0	77.9	70.7	117	0					
Trichloroethene (TCE)	20.69	1.0	20	0	103	76.9	130	0					
Surr: 1,2-Dichloroethane-d4	9.306	0	10	0	93.1	68.4	127	0					
Surr: 4-Bromofluorobenzene	10.49	0	10	0	105	70.4	126	0					
Surr: Dibromofluoromethane	9.88	0	10	0	98.8	70.2	126	0					
Surr: Toluene-d8	10.3	0	10	0	103	73.5	129	0					

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Cypress Engineering
Work Order: 0211151
Project: WT-1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample **LCS-2840** Batch **2840** Test **SW1311/827** Units: **mg/L** Analysis **12/3/2002** Prep **11/27/2002**
Client ID: Run ID: **ELMO_021203A** SeqNo: **150941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4,5-Trichlorophenol	43.15	400	100	0	43.1	9.57	92.2	0			J
2,4,6-Trichlorophenol	40.88	2.0	100	0	40.9	13	85.4	0			
2,4-Dinitrotoluene	54.32	0.13	100	0	54.3	21.5	89	0			
Cresols, Total	125.4	200	300	0	41.8	19.2	98.2	0			J
Hexachlorobenzene	*83.27*	*0.13*	*100*	*0*	83.3	22.9	*144*	*0*			
Hexachlorobutadiene	33.75	0.50	100	0	33.8	10.1	86	0			
Hexachloroethane	38.23	3.0	100	0	38.2	15.2	84.1	0			
Nitrobenzene	49.32	2.0	100	0	49.3	12.5	105	0			
Pentachlorophenol	59.42	100	100	0	59.4	32.8	89.9	0			J

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *04-Dec-02*

CLIENT: Cypress Engineering
Work Order: 0211151
Project: WT-1

QC SUMMARY REPORT

Sample Matrix Spike

Sample	0211151-01aMS	Batch	2824	Test	SW8015	Units: mg/Kg		Analysis	11/25/2002 3:59:14 PM		Prep		
Client ID:	W. Pit 4'			Run ID:	PIDFID_021125A			SeqNo:	150070				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	25.14	5.0	25	1.4	95.0	85.8	111	0					
Surr: BFB	1208	0	1250	0	96.6	74	118	0					
Sample	0211151-01aMSD	Batch	2824	Test	SW8015	Units: mg/Kg		Analysis	11/25/2002 4:29:46 PM		Prep		
Client ID:	W. Pit 4'			Run ID:	PIDFID_021125A			SeqNo:	150071				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	25.59	5.0	25	1.4	96.8	85.8	111	25.14	1.77	11.6			
Surr: BFB	1239	0	1250	0	99.1	74	118	1208	2.56	0			
Sample	0211143-06aMS	Batch	2828	Test	SW8015	Units: mg/Kg		Analysis	11/26/2002 7:18:53 PM		Prep		
Client ID:				Run ID:	PIDFID_021126A			SeqNo:	150090				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	25.47	5.0	25	1.34	96.5	85.8	111	0					
Surr: BFB	1279	0	1250	0	102	74	118	0					
Sample	0211143-06aMSD	Batch	2828	Test	SW8015	Units: mg/Kg		Analysis	11/26/2002 7:49:22 PM		Prep		
Client ID:				Run ID:	PIDFID_021126A			SeqNo:	150091				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	24.83	5.0	25	1.34	94.0	85.8	111	25.47	2.54	11.6			
Surr: BFB	1259	0	1250	0	101	74	118	1279	1.57	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

SVL ANALYTICAL, INC.

Quality Control Report
Part I Prep Blank and Laboratory Control Sample

Client :Hall Environmental — SVL JOB No: 104173

Analyte	Method	Matrix	Units	Prep Blank	True—LCS—Found		LCS %R	Analysis Date
Silver	6010B	WATER	mg/L	<0.0050	1.00	1.07	107.0	11/29/02
Arsenic	6010B	WATER	mg/L	<0.010	1.00	1.10	110.0	11/29/02
Barium	6010B	WATER	mg/L	<0.0020	1.00	1.04	104.0	11/29/02
Cadmium	6010B	WATER	mg/L	<0.0020	1.00	1.07	107.0	11/29/02
Chromium	6010B	WATER	mg/L	<0.0060	1.00	1.07	107.0	11/29/02
Lead	6010B	WATER	mg/L	<0.0050	1.00	1.06	106.0	11/29/02
Selenium	6010B	WATER	mg/L	<0.010	1.00	1.09	109.0	11/29/02
Mercury	7470	WATER	mg/L	<0.0002	0.0050	0.0052	104.0	12/02/02

LEGEND:
LCS = Laboratory Control Sample LCS %R = LCS Percent Recovery N/A = Not Applicable

SVL ANALYTICAL, INC.

Quality Control Report
Part II Duplicate and Spike Analysis

Client :Hall Environmental — SVL JOB No: 104173

Test	Method	Matrix	QC SAMPLE ID Units	QC SAMPLE ID Result	Duplicate or MSD Found	Duplicate or MSD RPD%	Matrix Spike Result	Matrix Spike SPK ADD		Matrix Spike %R	Analysis Date
Ag	6010B	WATER	1 mg/L	<0.0050	<0.0050	UDL	1.18	1.00		118.0	11/29/02
As	6010B	WATER	1 mg/L	0.072	0.069	4.3	1.34	1.00		126.8	11/29/02
As	6010B	WATER	1 mg/L	0.072	N/A	N/A	1.31	1.00	A	123.8	11/29/02
Ba	6010B	WATER	1 mg/L	0.507	0.516	1.8	1.52	1.00		101.3	11/29/02
Cd	6010B	WATER	1 mg/L	<0.0020	<0.0020	UDL	1.01	1.00		101.0	11/29/02
Cr	6010B	WATER	1 mg/L	<0.0060	<0.0060	UDL	1.03	1.00		103.0	11/29/02
Pb	6010B	WATER	1 mg/L	0.0061	<0.0050	200.0	1.00	1.00		99.4	11/29/02
Se	6010B	WATER	1 mg/L	0.013	0.017	26.7	1.31	1.00		129.7	11/29/02
Se	6010B	WATER	1 mg/L	0.013	N/A	N/A	1.27	1.00	A	125.7	11/29/02
Hg	7470	WATER	1 mg/L	0.0013	0.0017	26.7	0.0022	0.0010		90.0	12/02/02

LEGEND:
RPD% = (|SAM - DUP|/((SAM + DUP)/2) * 100) UDL = Both SAM & DUP not detected. *Result or *Found: Interference reqired dilution.
RPD% = (|SPK - MSD|/((SPK + MSD)/2) * 100) M in Duplicate/MSD column indicates MSD.
SPIKE ADD column, A = Post Digest Spike; %R = Percent Recovery N/A = Not Analyzed; R > 4S = Result more than 4X the Spike Added
QC Sample 1: SVL SAM No.: 318316 Client Sample ID: 0211151-1

SVL ANALYTICAL, INC.

Quality Control Report
Part I Prep Blank and Laboratory Control Sample

Client :Hall Environmental — SVL JOB No: 104122

Analyte	Method	Matrix	Units	Prep Blank	True—LCS—Found		LCS %R	Analysis Date
Corrosivity	9045	SOIL		5.9	8.6	8.5	98.8	12/02/02
Reactivity	SW846	SOIL	YES/NO	NO	N/A		N/A	12/02/02
Ignitibility	1010	SOIL	°F	N/A	81.0	80.0	98.8	12/02/02

LEGEND:
LCS = Laboratory Control Sample LCS %R = LCS Percent Recovery N/A = Not Applicable

SVL ANALYTICAL, INC.

Quality Control Report
Part II Duplicate and Spike Analysis

Client :Hall Environmental — SVL JOB No: 104122

Test	Method	Matrix	QC SAMPLE ID		Duplicate or MSD		Matrix Spike			Analysis
			Units	Result	Found	RPD%	Result	SPK ADD	%R	Date
CORR	9045	SOIL	1	7.6	7.6	0.0		N/A	N/A	12/02/02
React	SW846	SOIL	1 YES/NO	NO	NO	N/A		N/A	N/A	12/02/02
IGNIT	1010	SOIL	1 °F	>140	>140	N/A	N/A	N/A	N/A	12/02/02

LEGEND:
RPD% = (|SAM - DUP|/((SAM + DUP)/2) * 100) UDL = Both SAM & DUP not detected. *Result or *Found: Interference reqired dilution.
RPD% = (|SPK - MSD|/((SPK + MSD)/2) * 100) M in Duplicate/MSD column indicates MSD.
SPIKE ADD column, A = Post Digest Spike; %R = Percent Recovery N/A = Not Analyzed; R > 4S = Result more than 4X the Spike Added
QC Sample 1: SVL SAM No.: 317900 Client Sample ID: W.PIT 4'

CHAIN-OF-CUSTODY RECORD

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345-3975 Fax 505.345.4107
www.hallenvironmental.com

Client: CYPRESS ENG.	Project Name: WT-1.
Address: 10235 W. LITTLE YORK STE 256. HOUSTON TX 77040-3229.	Project #:
	Project Manager: GEORGE ROBINSON
Phone #: (713) 856-7980	Sampler: GEORGE FRIEND.
Fax #: (713) 856-7991	Samples Cold?: ☐ Yes ☐ No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HCl	Preservative: ICE	HEAL No.
11-22	0900	S	W. PIT 4'	2/40Z			✓	0211151-1
	0920	S	W. PIT 8'				✓	-2
	1005	S	W. PIT ~~12'~~ 12'				✓	-3
	1300	S	W. PIT 13'				✓	-4
	1100	S	E. PIT 4'				✓	-5
	1110	S	E. PIT 8'				✓	-6
	1120	S	E. PIT 12'				✓	-7
	1230	S	E. PIT 13'				✓	-8

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	Volatiles Full List (8021)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals 6010-200.7 2456.2 7471	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260 (VOA) TCLP	8270 (Semi-VOA) TCLP	RCF.		Air Bubbles or Headspace (Y or N)
		↓										✓	✓	✓		
		✓										✓	✓	✓		
		✓										✓	✓	✓		
		✓										✓	✓	✓		
		✓										✓	✓	✓		
		✓										✓	✓	✓		
		✓										✓	✓	✓		
		✓										✓	✓	✓		

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-22-02	1530		11/23/02 12:00
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: 3°C