



TETRA TECH, INC.

1703 W. Industrial Ave.
Midland, Texas 79701
(432) 686-8081

October 5, 2007

Mr. Gerry Guye
New Mexico Oil Conservation Commission
1301 W. Grand Ave
Artesia, NM 88210

Mr. Paul Evens
U.S. Bureau of Land Management
602 E. Greene St.
Carlsbad, NM 88220

RE: Grayburg Deep 10 Battery Findings Report
Eddy County, New Mexico
Unit C, Sec. 19, T17S, R30E
API 30-015-25796

Gentlemen;

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this findings report for a subsurface investigation at ConocoPhillips' Grayburg Unit, Graybury Deep 10 Battery crude oil and produced water release site (Site; Figure 1). This work is in support of ConocoPhillips efforts to remediate a recent 115 barrel mixed crude oil/produced water release into an unlined 35 x 55 foot bermed catch basin (C141 attached; Figure 2). The Site is located approximately 2 miles west of Loco Hills in Eddy County, New Mexico (32° 49.514698N, 104° 0.71802W). The Bureau of Land Management is the land administrator.

The Site is located immediately north of the western portion of the Delaware Basin. The area is underlain by Guadalupian age formations, which contains a thick sequence of sandstones, shales, siltstone, and evaporites¹. In the immediate vicinity of the Site, topography is nearly level to moderately undulating. The Simona Series soil at the Site is calcareous sand overlying fractured indurated caliche.²

Exposure Pathway Analysis

Depth to water in the vicinity of the Site is estimated at over 100 feet below ground surface (fbgs). This interpretation is based potentiometric surface contours (330 fbgs) described by Hiss¹ for aquifer systems in northern Eddy County. The New Mexico Office of State Engineer's database and the United States Geological Survey's database^{3,4} did not yield depth to

¹ Hiss, W.L. 1980. Movement of Ground Water in Permian Guadalupian Aquifer Systems, Southeastern New Mexico and Western Texas. In New Mexico Geological Society 31st Field Conference publication entitled "Trans-Pecos Region Southeastern New Mexico and West Texas." Pp 289 – 294.

² U.S. Department of Agriculture, Natural Resources Conservation Services. Webb Soil Survey Database.

³ New Mexico Office of State Engineer. W.A.T.E.R.S. Database.

⁴ United States Geological Survey. Groundwater Levels for the Nation Database.

groundwater information for this area. The U.S. Geological Survey, 1955 topographic map, 1:24,000 scale, entitled "Red Lake SE New Mexico" identifies a windmill approximately 3.3 miles west of the Site. No information is available on the depth of water at this location. The nearest surface water body is a playa, located approximately 1,950 feet southeast of the Site.

As per the subsurface site assessment characterization protocol outlined in New Mexico Oil Conservation Division's (NMOCD) "*Guidelines for Remediation of Leaks, Spills and Releases*," dated August 13, 1993 and information provided in this report, the site is assigned the following score:

<u>Criteria</u>		<u>Ranking Score</u>
Depth to groundwater	>100 feet	0
Distance from water source	>1,000 feet	0
Distance from domestic water source	>200 feet	0
Distance from surface water body	>1,000 feet	<u>0</u>
<i>Total Ranking Score</i>		0

The remediation action level for a ranking score of 0 is 10 parts per million (ppm) for benzene, 50 ppm for total benzene, toluene, ethylbenzene and total xylenes (BTEX), and 5,000 ppm for total petroleum hydrocarbons (TPH).

Scope of Work

At the request of ConocoPhillips, Tetra Tech initiated a subsurface investigation of the mixed crude oil/produced water release site. Tetra Tech advanced five (5) exploratory trenches using a backhoe at Grayburg Deep 10 Battery to find a chloride (< 1,000 ppm) and BTEX (< 100 ppm) clean boundary. The objective was to find a "clean boundary" in the horizontal and vertical extent.

Excavated soil samples were chloride field screened using a brine spill test kit developed by a U.S. Environmental Protection Agency funded Integrated Petroleum Environmental Consortium⁵ and by electrical conductivity (EC) field screening techniques⁶. A photo-ionization detector (PID) was used to detect the presence of volatile organic compound (VOC) vapors in the sample headspace.

Excavation soil samples were taken at 5 foot intervals from 0-15 fbgs and field screened using a chloride field test kit, EC meter, and a PID to find the horizontal and vertical chloride and BTEX clean boundaries. The practical excavation depth was 15 fbgs owing to the limit of the backhoe arm extension. Final PID readings were used as final confirmation of bottom residual for a total

⁵ U.S. Environmental Protection Agency Grant No. R827015-01-1. IPEC Guidelines for Remediation of Small Brine Spills, January 12, 2004. Univ. of Tulsa, OK.

⁶ Conner, J.A. and C.J. Newell. 2004. Strategies for Addressing Oil Field Brine Releases to Plants, Soil and Groundwater. Publ. No. 4758, American Petroleum Institute, Washington D.C. p 25.

BTEX reading of 50 ppm or less. Two soil samples from each excavation were retained and submitted to the laboratory for analyses. The sampling interval was based on chloride test kit analysis, PID measurements and on the judgment of the field personnel. The soil sample with the highest chloride concentration and the highest PID measurement, and the sample from the excavation total depth were retained for chemical analysis.

The samples (10) were placed into glass sample jars, sealed with Teflon-lined lids, and placed on ice for transportation to an analytical laboratory where they were analyzed for chloride (USEPA Method 300.0A), electrical conductivity (Standard Method 2510B SW-846 Method 9050A), total petroleum hydrocarbons (TPH_{DRO} and TPH_{GRO}, Method 8015) and BTEX (Method 8260). In addition, one basal sample for the trench inside the bermed catch basin was analyzed for BTEX and chloride synthetic precipitation leaching potential (SPLP_{BTEX} and SPLP_{Cl}; USEPA Method 1312/8015 & 300.0A, respectively). Owing to a transportation error, samples arrived at the laboratory above the preservation temperature requirement (4° C). Analysis was performed to support field screening analysis.

All soils generated by soil excavation were returned to each trench to be remediated later.

Findings

Excavations advanced during the investigation at the site encountered grayish loamy sandy soils at 0 – 3 fbs. The sub-soil was whitish caliche about two feet thick. The underlying unit was loamy brown sand interbedded with caliche.

Summaries of subsurface soil conditions are presented in Table 1. A complete analytical report is presented in Appendix B.

Field screening data for chloride and volatile organics were used to define the horizontal and vertical extent of affected soil (Table 1). Field chloride concentrations in the soils were reported at detectable concentrations in all samples collected. Outside the berm, field chloride ranged from 20 to 200 ppm. Inside the berm, trench GB-4, field chloride ranged from 35 to over 4,000 ppm. VOC field screening measured concentrations ranging from 0 to 7 ppm in trenches outside the berm while inside the berm, VOC concentrations in trench GB-4 ranged from 59 to 1,490 ppm.

Laboratory analyses for chloride concentrations are presented in Table 1. Chloride concentrations in trenches outside the berm ranged from 14.5 milligrams per kilogram (mg/kg) in trench GB-2 (5 feet) to 82.1 mg/kg at trench BG-5 (10 feet). In Trench BG-4, chloride concentration ranged from 322 – 10,000 mg/kg. SPLP analysis for trench bottom chloride concentrations in BG-4 was 14.9 milligrams per liter (mg/L).

TPH and BTEX laboratory analyses are present in Table 1. TPH and BTEX concentrations were not detected in trenches outside the bermed area. Gasoline and diesel range hydrocarbons (TPH_{GRO} and TPH_{DRO}) and BTEX concentrations inside the bermed area were detected above NMOCD remediation guidelines. SPLP analyses for trench bottom BTEX concentrations in BG-4 were not detected.

Conclusions

According to laboratory analysis of soils collected during this investigation, TPH and BTEX were reported in the excavation inside the bermed area and not detected in trenches outside the berm. Exposure pathway analysis indicated a ranking score of "0." Therefore, the site-specific remediation levels are 5,000 mg/kg for TPH, 50 mg/kg for BTEX and 10 mg/kg for benzene. Based on field screening results and supported by laboratory analyses presented in Table 1, the impacts to soil within the bermed area are above the NMOCD action level for BTEX and below action level outside the berm.

Based on field screening results and supported by laboratory analyses presented in Table 1, the chloride impacts to soil within the bermed area are above 10,000 mg/Kg and below 100 mg/Kg outside the bermed area.

RECOMMENDATIONS

Tetra Tech recommends the following actions be taken at Grayburg Deep Unit 10 Battery:

- Soil in the bermed catch basin will be excavated to a depth of approximately 8-10 feet and hauled to a State approved disposal location.
- Aliquot soil samples will be collected in a "W" pattern, composited into one sample for each sidewall and floor in the excavation, and field analyzed using PID and EC meters to determine that remediation levels have been achieved (< 100 ppm and < 1,200 micro-Siemens per centimeter, respectively). Companion composite samples will also be submitted to a laboratory for TPH_{GRO}, TPH_{DRO}, BTEX and chloride confirmation analyses to confirm that these constituents have been removed to concentrations below remediation guidelines.
- Tetra Tech will supervise and direct all subcontractor activities, and following the construction activities, prepare a report describing and documenting what was done for closure activities at the Site, including a site map. This report on activities and results will be submitted for NMOCD's review and ultimate closure of this voluntary remediation.

If you agree with these recommendations, Tetra Tech, on-behalf of ConocoPhillips, requests NMOCD's approval on the recommended remediation action. If you have any questions concerning this request please call Mr. Charles Durrett (432-686-8081) or me.

Sincerely,

Tetra Tech, Inc.

Greg W.
Pope

Greg W. Pope, P.G.
Project Manager

Digitally signed by Greg W. Pope
DN: CN = Greg W. Pope, C = US,
O = Maxam Technologies
Reason: I am approving this
document
Date: 2007.10.05 14:49:43 -0500

Table 1
ConocoPhillips Grayburg Unit
Grayburg Deep Unit 10 Battery
Subsurface Investigation
8/15/2006

Location	Sample Depth (ft)	Field Screening				Specific Conductivity (µmhos/cm)	Chloride (mg/Kg)	TPH		Benzene (mg/Kg)	Ethylbenzene (mg/Kg)	Toluene (mg/Kg)	Xylenes Total (mg/Kg)	SPLP BTEX (mg/L)
		VOC (ppm)	EC (µS/cm)	TDS (ppm)	Chloride (ppm)			GRO (mg/Kg)	DRO (mg/Kg)					
GB-1	5	0	134	67	20	309	19	ND	ND	ND	ND	ND	ND	
	10	0.1	702	350	200	1,590	26.3	ND	ND	ND	ND	ND	ND	
GB-2	5	1.4	115	58	20	211	14.5	ND	ND	ND	ND	ND	ND	
	10	0.1	442	225	100	1,670	18	ND	ND	ND	ND	ND	ND	
GB-3	5	0.1	235	158	20	218	32.5	ND	ND	ND	ND	ND	ND	
	10	0.1	408	203	125	816	73.6	ND	ND	ND	ND	ND	ND	
GB-4	0-0.5	248	111	57	35									
	5	1,490	3,410	1,701	>4,000	24,600	10,100	1,090	1,300	ND	690	228	4,480	
GB-5	10	59	914	461	500									
	15	621	689	352	325	1,310	322	3.57	38	ND	ND	ND	ND	ND
	5	7	170	97	20	312	33.9	ND	ND	ND	ND	ND	ND	
	10	0.8	364	180	20	538	82.1	ND	ND	ND	ND	ND	ND	

Note: Owing to a transportation error, samples arrived at the laboratory above the preservation temperature requirement (4° C).

VOC = Volatile organic compounds

TDS = Total dissolved solids

EC = electrical conductivity

ft = feet

ppm = parts per million

µS/cm = microSiemens per centimeter

mg/Kg = Milligrams per kilogram

TPH = Total petroleum hydrocarbons

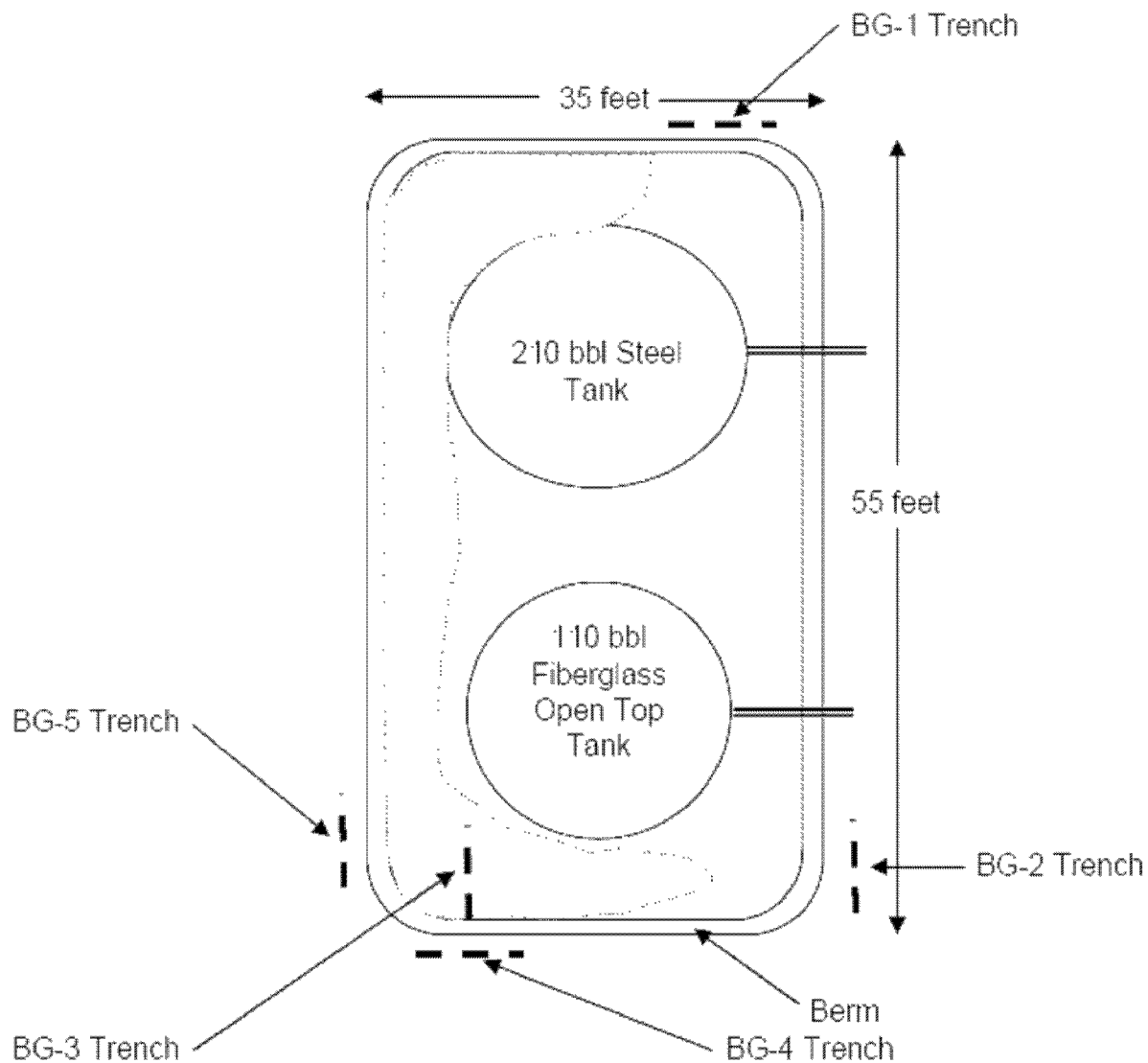
TPH_{GRO} = Gasoline range petroleum hydrocarbons

TPH_{DRO} = Diesel range petroleum hydrocarbons

SPLP = Synthetic precipitation leaching procedure

µmhos/cm = micro-ohms per centimeter

mg/L = Milligrams per liter



 TETRA TECH, INC.	
	Grayburg Unit
Figure 2. Grayburg Deep Unit 10 Battery Crude Oil/ Produced Water Release Site and Sampling Locations.	

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

ATTACHMENT 1

Form C-141
Revised October 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

30-015-25796

OPERATOR

☒ Initial Report ☐ Final Report

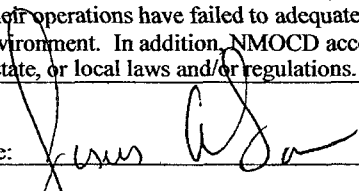
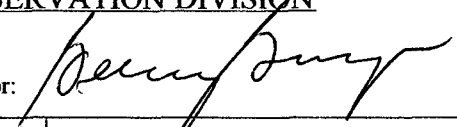
Name of Company ConocoPhillips Company	Contact Jesse A. Sosa	
Address 3300 N. "A" St., Bldg. 6 #247 Midland, TX 79705-5	Telephone No. (505)391-3126	
Facility Name Grayburg Deep Unit Well #10	Facility Type Gas Well	
Surface Owner BLM	Mineral Owner BLM	Lease No. LC028793A

LOCATION OF RELEASE

Unit Letter C	Section 19	Township 17S	Range 30E	Feet from the 660	North/South Line North	Feet from the 2480	East/West Line West	County Eddy
------------------	---------------	-----------------	--------------	----------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32.49512 Longitude 104.00718

NATURE OF RELEASE

Type of Release Oil and Produced Water	Volume of Release 115	Volume Recovered 0
Source of Release 3 inch bullplug on tank	Date and Hour of Occurrence am 6/29/07	and Hour of Discovery 9am 7/2/07
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Jim Amos (BLM) & Mike Bratser (NMOCD)	
By Whom? Jesse Sosa	Date and Hour 2 pm 07/02/2007	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* While making rounds MSO found contaminated area around tank. Contamination was caused by all fluids emptying out of tank due to half inch hole in 3 inch bullplug caused by internal corrosion. MSO had last checked location on Friday June 29, 2007 and fluid was still in tank.		
Describe Area Affected and Cleanup Action Taken.* HSE arrived on location and measured spill size affected area of 9 ft X 84 ft, all was inside diked and fenced area. Area will be delineated to determine necessary clean up actions.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Jesse A. Sosa	Approved by District Supervisor: 	
Title: HSER Lead	Approval Date: AUG 7 2007 Expiration Date: 9-07-07	
E-mail Address: Jesse.A.Sosa@conocophillips.com	Conditions of Approval:	
Date: 07/02/2007 Phone: (505)391-3126	Attached ☐	

* Attach Additional Sheets If Necessary

Work Plan on file

LABORATORY ANALYSIS

ANALYTICAL REPORT

JOB NUMBER: 340846
Project ID: CONOCO PHILLIPS

Prepared For:

Tetra Tech-Maxim Technologies, Inc.
1703 West Industrial
Midland, TX 79701

Attention: Charlie Durret

Date: 08/29/2007

Signature

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: skudchadkar@stl-inc.com

Date

TestAmerica Laboratories, Inc.
6310 Rothway Drive
Houston, TX 77040

PHONE: 713-690-4444

S A M P L E I N F O R M A T I O N

Date: 08/29/2007

Job Number.: 340846

Customer...: Tetra Tech-Maxim Technologies, Inc.

Attn.....: Charlie Durret

Project Number.....: 99003817

Customer Project ID....: CONOCO PHILLIPS

Project Description....: Conoco Phillips

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
340846-1	GB1 5FT	Soil	08/15/2007	08:30	08/20/2007	09:48
340846-2	GB1 10FT	Soil	08/15/2007	08:40	08/20/2007	09:48
340846-3	GB2 5FT	Soil	08/15/2007	09:15	08/20/2007	09:48
340846-4	GB2 10FT	Soil	08/15/2007	09:30	08/20/2007	09:48
340846-5	GB3 5FT	Soil	08/15/2007	10:00	08/20/2007	09:48
340846-6	GB3 10FT	Soil	08/15/2007	10:25	08/20/2007	09:48
340846-7	GB4 5FT	Soil	08/15/2007	11:15	08/20/2007	09:48
340846-8	GB4 15FT	Soil	08/15/2007	11:40	08/20/2007	09:48
340846-9	GB5 5FT	Soil	08/15/2007	12:40	08/20/2007	09:48
340846-10	GB5 10FT	Soil	08/15/2007	12:55	08/20/2007	09:48
340846-11	TRIP BLANK	Trip Blank	08/15/2007	00:00	08/20/2007	09:48

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB1 5FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 08:30
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-1
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	309		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	83.8		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	16.2		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	19.0		4.8	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1193.81	ug/Kg	08/22/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.9	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		18	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB1 10FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 08:40
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-2
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	1590		1.1	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	87.3		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	12.7		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	26.3		4.6	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1145.13	ug/Kg	08/22/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.5	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		17	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB2 5FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 09:15
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-3
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	211		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	84.3		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	15.7		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	14.5		4.7	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1185.98	ug/Kg	08/22/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.8	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		18	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB2 10FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 09:30
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-4
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	1670		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	85.3		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	14.7		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	18.0		4.7	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1171.89	ug/Kg	08/22/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.7	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		18	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB3 5FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 10:00
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-5
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	318		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	83.7		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	16.3		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	32.5		4.8	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1194.93	ug/Kg	08/22/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.9	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		18	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB3 10FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 10:25
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-6
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	816		1.1	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	90.9		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	9.08		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	73.6		4.4	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1099.85	ug/Kg	08/23/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.1	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		5	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		5	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		5	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		16	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB4 5FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 11:15
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-7
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	24600		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	81.8		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	18.2		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	10100		490	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	1090000		305548	ug/Kg	08/24/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	1300		100	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics	ND		6	ug/Kg	08/22/07	zfl
	Benzene, Soil*	690		60	ug/Kg	08/23/07	zfl
	Ethylbenzene, Soil*	228		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	4480		180	ug/Kg	08/23/07	zfl
	Xylenes (total), Soil*						

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB4 15FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 11:40
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-8
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA300.0 REV2.	Ion Chromatography Analysis Chloride, SPLP	14.9		5.0	mg/L	08/22/07	sur
SW-846 8260B	Volatile Organics Benzene, SPLP	ND		5	ug/L	08/28/07	ydy
	Ethylbenzene, SPLP	ND		5	ug/L	08/28/07	ydy
	Toluene, SPLP	ND		5	ug/L	08/28/07	ydy
	Xylenes (total), SPLP	ND		15	ug/L	08/28/07	ydy
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	1310		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	86.3		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	13.7		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	322		4.6	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	3570		1159.06	ug/Kg	08/23/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	38		9.6	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		17	ug/Kg	08/22/07	zfl
SW-846 1312	Zero Head Space (ZHE) Extraction, Solid*	Complete			mL	08/28/07	twr

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB5 5FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 12:40
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-9
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	312		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	86.5		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	13.5		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	33.9		4.6	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1156.71	ug/Kg	08/23/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.6	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		17	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

L A B O R A T O R Y T E S T R E S U L T S

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Customer Sample ID: GB5 10FT
Date Sampled.....: 08/15/2007
Time Sampled.....: 12:55
Sample Matrix.....: Soil

Laboratory Sample ID: 340846-10
Date Received.....: 08/20/2007
Time Received.....: 09:48

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
EPA 120.1	Specific Conductivity @ 25 degrees C, So*1	538		1.2	* umhos/cm	08/23/07	sur
SM-2540 G Mod.	% Solids, Soil	83.7		0.01	%	08/20/07	enc
SM-2540 G Mod.	Moisture, Soil	16.3		0.01	%	08/20/07	enc
SW-846 9056	Chloride, Soil*	82.1		4.8	mg/Kg	08/25/07	sur
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil*	ND		1194.58	ug/Kg	08/22/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil*	Complete				08/22/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil*	ND		9.9	mg/Kg	08/24/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Ethylbenzene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Toluene, Soil*	ND		6	ug/Kg	08/22/07	zfl
	Xylenes (total), Soil*	ND		18	ug/Kg	08/22/07	zfl

* In Description = Dry Wgt.

Job Number.: 340846			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/29/2007		
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS			ATTN: Charlie Durret		

Test Method.....: SM-2540 G Mod.								Analyst....: enc			
Method Description.: Moisture (Total + Fixed Solids, Ash)					Units.....: %			Test Code.: %SOLID			
Parameter.....: % Solids					Batch(s)....: 183865						
QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	340846-10		83.7112			83.7112	0.0	10.0		08/20/2007	1630
MB	183865--21		0.0000							08/20/2007	1630

Test Method.....: SW-846 9056								Analyst....: sur			
Method Description.: Ion Chromatography Analysis								Units.....: mg/L			
Parameter.....: Bromide (Br)								Batch(s)....: 184204			
QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
ICV		WCS46049	18.873		20.00		94.4	90.0-110.		08/25/2007	1350
ICB			0							08/25/2007	1405
MB	184204--21		0							08/25/2007	1421
LCS	184204--21	WCS46049	18.711		20.00		93.6	90.0-110.		08/25/2007	1437
CCV		WCS46049	18.591		20.00		93.0	90.0-110.		08/25/2007	1642
CCB			0							08/25/2007	1657
CCV		WCS46049	18.787		20.00		93.9	90.0-110.		08/25/2007	1934
CCB			0							08/25/2007	1949
DU	341059-1		0			0	0	1		08/25/2007	2052
MS	341059-1	WCS45524	8.9868		10.000000	0	89.9	90-110	A	08/25/2007	2107
CCV		WCS46049	18.730		20.00		93.7	90.0-110.		08/25/2007	2225
CCB			0							08/25/2007	2241
CCV		WCS46049	18.727		20.00		93.6	90.0-110.		08/26/2007	0133
CCB			0							08/26/2007	0148
MB	184204--21		0							08/26/2007	0204
LCS	184204--21	WCS46049	18.760		20.00		93.8	90.0-110.		08/26/2007	0220
CCV		WCS46049	18.690		20.00		93.5	90.0-110.		08/26/2007	0322
CCB			0							08/26/2007	0338

Test Method.....: SW-846 9056							Analyst....: sur				
Method Description.: Ion Chromatography Analysis					Units.....: mg/L		Test Code.: CHL				
Parameter.....: Chloride					Batch(s)....: 184204						
QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
ICV		WCS46049	19.255		20.00		96.3	90.0-110.		08/25/2007	1350
ICB			0.3311							08/25/2007	1405
MB	184204--21		0.3106							08/25/2007	1421
LCS	184204--21	WCS46049	19.163		20.00		95.8	90.0-110.		08/25/2007	1437
DU	340846-2		0.4175			0.4125	0.0050	0.5000		08/25/2007	1539
MS	340846-2	WCS45524	9.0156		10.000000	0.4125	86.0	90-110	A	08/25/2007	1555
CCV		WCS46049	18.907		20.00		94.5	90.0-110.		08/25/2007	1642
CCB			0.3220							08/25/2007	1657
CCV		WCS46049	18.902		20.00		94.5	90.0-110.		08/25/2007	1934
CCB			0.3267							08/25/2007	1949
DU	341059-1		1.0043			1.0160	0.0117	0.5000		08/25/2007	2052
MS	341059-1	WCS45524	9.8536		10.000000	1.0160	88.4	90-110	A	08/25/2007	2107
CCV		WCS46049	19.053		20.00		95.3	90.0-110.		08/25/2007	2225
CCB			0.3149							08/25/2007	2241
CCV		WCS46049	19.054		20.00		95.3	90.0-110.		08/26/2007	0133
CCB			0.3310							08/26/2007	0148
MB	184204--21		0.3210							08/26/2007	0204

Q U A L I T Y C O N T R O L R E S U L T S											
Job Number.: 340846						Report Date.: 08/29/2007					
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.				PROJECT: CONOCO PHILLIPS				ATTN: Charlie Durret			

Test Method.....: SW-846 9056							Analyst....: sur				
Method Description.: Ion Chromatography Analysis					Units.....: mg/L		Test Code.: CHL				
Parameter.....: Chloride					Batch(s)...: 184204						
QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
LCS	184204--21	WCS46049	19.088		20.00		95.4	90.0-110.		08/26/2007	0220
CCV		WCS46049	19.113		20.00		95.6	90.0-110.		08/26/2007	0322
CCB			0.3409							08/26/2007	0338

Test Method.....: SW-846 9056							Analyst....: sur				
Method Description.: Ion Chromatography Analysis							Units.....: mg/L				
Parameter.....: Fluoride (F)							Batch(s)....: 184204				
QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
ICV		WCS46049	10.284		10.00		102.8	90.0-110.		08/25/2007	1350
ICB			0							08/25/2007	1405
MB	184204--21		0							08/25/2007	1421
LCS	184204--21	WCS46049	10.637		10.00		106.4	90.0-110.		08/25/2007	1437
OCV		WCS46049	10.511		10.00		105.1	90.0-110.		08/25/2007	1642
OCB			0							08/25/2007	1657
OCV		WCS46049	10.499		10.00		105.0	90.0-110.		08/25/2007	1934
OCB			0							08/25/2007	1949
DU	341059-1		0			0	0	0		08/25/2007	2052
MS	341059-1	WCS45524	2.0529		2.000000	0	102.6	90-110		08/25/2007	2107
OCV		WCS46049	10.776		10.00		107.8	90.0-110.		08/25/2007	2225
OCB			0							08/25/2007	2241
OCV		WCS46049	10.772		10.00		107.7	90.0-110.		08/26/2007	0133
OCB			0							08/26/2007	0148
MB	184204--21		0							08/26/2007	0204
LCS	184204--21	WCS46049	10.764		10.00		107.6	90.0-110.		08/26/2007	0220
OCV		WCS46049	10.875		10.00		108.8	90.0-110.		08/26/2007	0322
OCB			0							08/26/2007	0338

Test Method.....: SM-2540 G Mod.										Analyst....: enc	
Method Description.: Moisture (Total + Fixed Solids, Ash)						Units.....: %		Test Code.: MOIST			
Parameter.....: Moisture						Batch(s)....: 183865					
QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	340846-10		16.2888			16.2888	0.0	10.0		08/20/2007	1630

Test Method.....: SW-846 9056							Analyst....: sur	
Method Description.: Ion Chromatography Analysis					Units.....: mg/L		Test Code.: NO3	
Parameter.....: Nitrogen, Nitrate as N (NO3-N)					Batch(s)....: 184204			

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
ICV		WCS46049	9.4200		10.0		94.2	90.0-110.		08/25/2007	1350
ICB			0							08/25/2007	1405
MB	184204--21		0							08/25/2007	1421
LCS	184204--21	WCS46049	9.3237		10.0		93.2	90.0-110.		08/25/2007	1437
CCV		WCS46049	9.2922		10.0		92.9	90.0-110.		08/25/2007	1642
CCB			0							08/25/2007	1657
CCV		WCS46049	9.2666		10.0		92.7	90.0-110.		08/25/2007	1934

Job Number.: 340846			Q U A L I T Y C O N T R O L R E S U L T S			Report Date.: 08/29/2007		
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS			ATTN: Charlie Durret		

Test Method.....: SW-846 9056		Analyst...: sur
Method Description.: Ion Chromatography Analysis	Units.....: mg/L	Test Code.: NO3
Parameter.....: Nitrogen, Nitrate as N (NO3-N)	Batch(s)...: 184204	

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
CCB			0							08/25/2007	1949
DU	341059-1		0.7067			0.6963	0.0104	0.2500		08/25/2007	2052
MS	341059-1	WCS45524	2.4092		2.000000	0.6963	85.6	90-110	A	08/25/2007	2107
CCV		WCS46049	9.3010		10.0		93.0	90.0-110.		08/25/2007	2225
CCB			0							08/25/2007	2241
CCV		WCS46049	9.3092		10.0		93.1	90.0-110.		08/26/2007	0133
CCB			0							08/26/2007	0148
MB	184204--21		0							08/26/2007	0204
LCS	184204--21	WCS46049	9.3277		10.0		93.3	90.0-110.		08/26/2007	0220
CCV		WCS46049	9.3234		10.0		93.2	90.0-110.		08/26/2007	0322
CCB			0							08/26/2007	0338

Test Method.....: SW-846 9056			Analyst....: sur
Method Description.: Ion Chromatography Analysis	Units.....: mg/L		Test Code.: NO2
Parameter.....: Nitrogen, Nitrite as N (NO2-N)	Batch(s)....: 184204		

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
ICV		WCS46049	10.496		10.0		105.0	90.0-110.		08/25/2007	1350
ICB			0							08/25/2007	1405
MB	184204--21		0							08/25/2007	1421
LCS	184204--21	WCS46049	10.380		10.0		103.8	90.0-110.		08/25/2007	1437
CCV		WCS46049	10.278		10.0		102.8	90.0-110.		08/25/2007	1642
CCB			0							08/25/2007	1657
CCV		WCS46049	10.261		10.0		102.6	90.0-110.		08/25/2007	1934
CCB			0							08/25/2007	1949
DU	341059-1		0			0	0	0		08/25/2007	2052
MS	341059-1	WCS45524	1.8726		2.000000	0	93.6	90-110		08/25/2007	2107
CCV		WCS46049	10.339		10.0		103.4	90.0-110.		08/25/2007	2225
CCB			0							08/25/2007	2241
CCV		WCS46049	10.325		10.0		103.2	90.0-110.		08/26/2007	0133
CCB			0							08/26/2007	0148
MB	184204--21		0							08/26/2007	0204
LCS	184204--21	WCS46049	10.347		10.0		103.5	90.0-110.		08/26/2007	0220
CCV		WCS46049	10.349		10.0		103.5	90.0-110.		08/26/2007	0322
CCB			0							08/26/2007	0338

Test Method.....: EPA 120.1		Analyst....: sur
Method Description.: Specific Conductance @ 25 degrees C	Units.....: umhos/cm	Test Code.: COND
Parameter.....: Specific Conductivity @ 25 degrees C	Batch(s)....: 184117	

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	340993-7		1742			1744	0.1	20		08/23/2007	1845
CCV		WC3753	1045		1000		104.5	90.0-110.		08/23/2007	1845
CCB			0.22							08/23/2007	1845
CCB			0.23							08/23/2007	1845
CCV		WC3910	103.1		100		103.1	90.0-110.		08/23/2007	1845
CCV		WC3910	103.6		100		103.6	90.0-110.		08/23/2007	1845
MS	340846-4	WC3587	1506		100.000000	1421	85.0	75-125		08/23/2007	1845
DU	340846-4		1418			1421	0.2	20		08/23/2007	1845

Q U A L I T Y C O N T R O L R E S U L T S			
Job Number.: 340846		Report Date.: 08/29/2007	
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.		PROJECT: CONOCO PHILLIPS	ATTN: Charlie Durret

Test Method.....: EPA 120.1		Analyst....: sur	
Method Description.: Specific Conductance @ 25 degrees C		Units.....: umhos/cm	
Parameter.....: Specific Conductivity @ 25 degrees C		Batch(s)....: 184117	

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	340906-1		459			461	0.4	20		08/23/2007	1845
MS	340906-1	WC3587	557		100.000000	461	96.0	75-125		08/23/2007	1845
LCS	184117--21	WC3754	10.41		10		104.1	90.0-110.		08/23/2007	1845
MB	184117--21		0.28							08/23/2007	1845
MB	184117--21		0.22							08/23/2007	1845
LCS	184117--21	WC3754	10.43		10		104.3	90.0-110.		08/23/2007	1845
OCB			0.23							08/23/2007	1845
OCV		WC3753	1038		1000		103.8	90.0-110.		08/23/2007	1845
OCV		WC3910	103.9		100		103.9	90.0-110.		08/23/2007	1845
MS	340993-7	WC3587	1837		100.000000	1744	93.0	75-125		08/23/2007	1845

Test Method.....: SW-846 9056		Analyst....: sur	
Method Description.: Ion Chromatography Analysis		Units.....: mg/L	
Parameter.....: Sulfate (SO4)		Batch(s)....: 184204	

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
ICV		WCS46049	19.603		20.00		98.0	90.0-110.		08/25/2007	1350
ICB			0							08/25/2007	1405
MB	184204--21		0							08/25/2007	1421
LCS	184204--21	WCS46049	19.320		20.00		96.6	90.0-110.		08/25/2007	1437
OCV		WCS46049	19.269		20.00		96.3	90.0-110.		08/25/2007	1642
OCB			0							08/25/2007	1657
OCV		WCS46049	19.236		20.00		96.2	90.0-110.		08/25/2007	1934
OCB			0							08/25/2007	1949
DU	341059-1		0.5181			0.5356	0.0175	0.5000		08/25/2007	2052
MS	341059-1	WCS45524	9.7710		10.000000	0.5356	92.4	90-110		08/25/2007	2107
OCV		WCS46049	19.278		20.00		96.4	90.0-110.		08/25/2007	2225
OCB			0							08/25/2007	2241
OCV		WCS46049	19.392		20.00		97.0	90.0-110.		08/26/2007	0133
OCB			0							08/26/2007	0148
MB	184204--21		0							08/26/2007	0204
LCS	184204--21	WCS46049	19.521		20.00		97.6	90.0-110.		08/26/2007	0220
OCV		WCS46049	19.509		20.00		97.5	90.0-110.		08/26/2007	0322
OCB			0							08/26/2007	0338

Q U A L I T Y C O N T R O L R E S U L T S									
Job Number.: 340846					Report Date.: 08/29/2007				
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS			ATTN: Charlie Durret			
QC Type	Description		Reag. Code	Lab ID	Dilution Factor	Date	Time		
Test Method.....: SW-846 8015B									

Job Number.: 340846		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/29/2007	
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.		PROJECT: CONOCO PHILLIPS			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
MSD	Matrix Spike Duplicate	EXS082007F	340846-1		08/22/2007	0902	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
TVPH as GRO, Soil		244.415	249.769	250.000000	13.2693	92.5 2.250-150 20	
LCS	Laboratory Control Sample	EXS082007F	184165-1		08/23/2007	1506	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
TVPH as GRO, Soil		252.394		250.000000		101.049-151	
MB	Method Blank		184165-1		08/23/2007	1606	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
TVPH as GRO, Soil		11.2661					
SB	Spiked Blank	EX051707A	184165-1		08/23/2007	1859	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
TVPH as GRO, Soil		264.800		250.000000	11.2661	10149.0-151.0	
SBD	Spiked Blank Duplicate	EX051707A	184165-1		08/23/2007	1924	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
TVPH as GRO, Soil		286.617	264.800	250.000000	11.2661	110.1 7.949-151 20	
Test Method.....: EPA300.0 REV2.1		Units.....: mg/L			Analyst....: sur		
Method Description.: Ion Chromatography Analysis		Batch(s)....: 183995					
OCB	Continuing Calibration Blank				08/22/2007	0059	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride		0					
OCB	Continuing Calibration Blank				08/22/2007	0406	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride		0.2837					

QUALITY CONTROL RESULTS							
Job Number.: 340846				Report Date.: 08/29/2007			
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS		ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
CCB	Continuing Calibration Blank				08/22/2007	0730	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	0						
CCB	Continuing Calibration Blank				08/22/2007	1110	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	0						
CCB	Continuing Calibration Blank				08/22/2007	1229	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	0						
CCV	Continuing Calibration Verification	WCS46049			08/22/2007	0044	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	18.986		20.00		94.9		90.0-110.0
CCV	Continuing Calibration Verification	WCS46049			08/22/2007	0351	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	18.946		20.00		94.7		90.0-110.0
CCV	Continuing Calibration Verification	WCS46049			08/22/2007	0714	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	18.991		20.00		95.0		90.0-110.0
CCV	Continuing Calibration Verification	WCS46049			08/22/2007	1055	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	18.875		20.00		94.4		90.0-110.0
CCV	Continuing Calibration Verification	WCS46049			08/22/2007	1213	
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits F
Chloride	18.884		20.00		94.4		90.0-110.0

Q U A L I T Y C O N T R O L R E S U L T S								
Job Number.: 340846				Report Date.: 08/29/2007				
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		
DU	Method Duplicate		340714-2	10	08/22/2007	0217		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Soil	4.8552			4.8226	0.7		20	
DU	Method Duplicate		340714-7	100	08/22/2007	0509		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Soil	0.6999			0.7149	0.0150		0.5000	
DU	Method Duplicate		340714-18	10	08/22/2007	0935		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Soil	9.7299			9.7656	0.4		20	
DU	Method Duplicate		340714-6		08/22/2007	1142		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, SPLP	2.1872			2.2015	0.0143		0.5000	
ICB	Initial Calibration Blank				08/21/2007	2207		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	0							
ICV	Initial Calibration Verification	WCS46049			08/21/2007	2152		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.314		20.00		96.6		90.0-110.0	
LCS	Laboratory Control Sample	WCS46049			08/21/2007	2239		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.120		20.00		95.6		90.0-110.0	
LCS	Laboratory Control Sample	WCS46049			08/22/2007	0801		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	18.999		20.00		95.0		90.0-110.0	

Job Number.: 340846		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/29/2007	
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.		PROJECT: CONOCO PHILLIPS			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
MB	Method Blank				08/21/2007	2223	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride		0					
MB	Method Blank	SPLP			08/21/2007	2254	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride, SPLP		0.9568				b	
MB	Method Blank				08/22/2007	0745	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride		0.2876					
MS	Matrix Spike	WCS45524	340714-2	10	08/22/2007	0233	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride, Soil		13.718		10.000000	4.8226	89.0 90-110 A	
MS	Matrix Spike	WCS45524	340714-7	100	08/22/2007	0525	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride, Soil		9.0887		10.000000	0.7149	83.7 90-110 A	
MS	Matrix Spike	WCS45524	340714-18	10	08/22/2007	0950	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride, Soil		18.931		10.000000	9.7656	91.7 90-110	
MS	Matrix Spike	WCS45524	340714-6		08/22/2007	1157	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Chloride, SPLP		11.031		10.000000	2.2015	88.3 90-110 A	

Q U A L I T Y C O N T R O L R E S U L T S									
Job Number.: 340846					Report Date.: 08/29/2007				
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
Test Method.....: SW-846 8015B									

Q U A L I T Y C O N T R O L R E S U L T S									
Job Number.: 340846					Report Date.: 08/29/2007				
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
MS	Matrix Spike	VS082107E	340714-11		08/22/2007	1436			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Soil	49.5414		50.00	ND	99		65-135		
Ethylbenzene, Soil	49.0176		50.00	ND	98		60-140		
Toluene, Soil	50.8901		50.00	ND	102		64-135		
Xylenes (total), Soil	146.053		150.0	ND	97		60-140		
MSD	Matrix Spike Duplicate	VS082107E	340714-11		08/22/2007	1502			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Soil	47.3868	49.5414	50.00	ND	95		65-135		
					4.4		30.0		
Ethylbenzene, Soil	43.0145	49.0176	50.00	ND	86		60-140		
					13.0		30.0		
Toluene, Soil	45.0744	50.8901	50.00	ND	90		64-135		
					12.1		30.0		
Xylenes (total), Soil	133.137	146.053	150.0	ND	89		60-140		
					9.3		30.0		
LCS	Laboratory Control Sample	VS082107H			08/23/2007	1122			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Soil	51.3896		50.00	ND	102.8		68-121		
Ethylbenzene, Soil	49.9869		50.00	ND	100.0		66-130		
Toluene, Soil	53.5904		50.00	ND	107.2		66-127		
Xylenes (total), Soil	156.084		150.	ND	104.1		37-160		
MB	Method Blank	VS082107C			08/23/2007	1310			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Soil	ND								
Ethylbenzene, Soil	ND								
Toluene, Soil	ND								
Xylenes (total), Soil	ND								
MS	Matrix Spike	VS082107E	340984-1		08/23/2007	1402			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Soil	45.8476		50.00	ND	92		65-135		
Ethylbenzene, Soil	42.7138		50.00	ND	85		60-140		
Toluene, Soil	45.8014		50.00	ND	92		64-135		
Xylenes (total), Soil	135.286		150.0	ND	90		60-140		

QUALITY CONTROL RESULTS									
Job Number.: 340846					Report Date.: 08/29/2007				
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.			PROJECT: CONOCO PHILLIPS			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
MSD	Matrix Spike Duplicate	VS082107E	340984-1		08/23/2007	1428			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Soil	48.6911	45.8476	50.00	ND	97		65-135		
					6.0		30.0		
Ethylbenzene, Soil	48.2473	42.7138	50.00	ND	96		60-140		
					12.2		30.0		
Toluene, Soil	50.3213	45.8014	50.00	ND	101		64-135		
					9.4		30.0		
Xylenes (total), Soil	147.862	135.286	150.0	ND	99		60-140		
					8.9		30.0		
LCS	Laboratory Control Sample	VS082107H				08/28/2007	1131		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Water	53.4589		50.00	ND	106.9		68-127		
Ethylbenzene, Water	43.5906		50.00	ND	87.2		64-132		
Toluene, Water	49.3157		50.00	ND	98.6		63-127		
Xylenes (total), Water	131.398		150.	ND	87.6		37-161		
MB	Method Blank	VS082107C				08/28/2007	1250		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, Water	ND								
Ethylbenzene, Water	ND								
Toluene, Water	ND								
Xylenes (total), Water	ND								
MS	Matrix Spike	VS082107E	340826-1	100.00000		08/28/2007	1408		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, TCLP	176.740		50.00	130.327	93		63-123		
MSD	Matrix Spike Duplicate	VS082107E	340826-1	100.00000		08/28/2007	1434		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, TCLP	186.959	176.740	50.00	130.327	113		63-123		
					5.6		30.0		
PB	Prep. Blank	VS082107C		20.00000		08/28/2007	1224		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F	
Benzene, TCLP	ND								
Ethylbenzene, TCLP	ND								
Toluene, TCLP	ND								
Xylenes (total), TCLP	ND								

Job Number.: 340846		Q U A L I T Y C O N T R O L R E S U L T S				Report Date.: 08/29/2007	
CUSTOMER: Tetra Tech-Maxim Technologies, Inc.		PROJECT: CONOCO PHILLIPS			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
PB	Prep. Blank	VS082107C			08/28/2007	1527	
Parameter/Test Description		QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits F	
Benzene, SPLP		ND					
Ethylbenzene, SPLP		ND					
Toluene, SPLP		ND					
Xylenes (total), SPLP		ND					

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 340846

Report Date.: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Method.....: Total Extractable Petroleum Hydrocarbons
Batch(s).....: 184223

Method Code....: 8015D
Test Matrix....: Soil

Prep Batch.....: 184002
Equipment Code: EXTGC01

Lab ID	DT	Sample ID	Date	OTERPH						
340846- 1		GB1 5FT	08/24/2007	72						
340846- 2		GB1 10FT	08/24/2007	71						
340846- 3		GB2 5FT	08/24/2007	72						
340846- 4		GB2 10FT	08/24/2007	70						
340846- 5		GB3 5FT	08/24/2007	73						
340846- 6		GB3 10FT	08/24/2007	69						
340846- 7		GB4 5FT	08/24/2007	466d						
340846- 7 MS		GB4 5FT	08/24/2007	525d						
340846- 7 MSD		GB4 5FT	08/24/2007	494d						
340846- 8		GB4 15FT	08/24/2007	71						
340846- 9		GB5 5FT	08/24/2007	72						
340846- 10		GB5 10FT	08/24/2007	81						
184002--21 LCS			08/24/2007	80						
184002--21 MB			08/24/2007	76						

Test	Test Description	Limits
OTERPH	o-Terphenyl	60 - 140

S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 340846

Report Date.: 08/29/2007

CUSTOMER: 483648

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Method.....: Total Volatile Petroleum Hydrocarbons
Batch(s).....: 183999 184165

Method Code....: 8015G
Test Matrix....: Soil

Prep Batch.....:
Equipment Code: BTEX07

Lab ID	DT	Sample ID	Date	ATFT	BFB					
183999-	1	LCS	08/21/2007	99.6	97.9					
183999-	1	MB	08/21/2007	103.2	97.7					
183999-	2	LCS	08/22/2007	102.2	99.6					
183999-	2	MB	08/22/2007	95.6	94.5					
184165-	1	LCS	08/23/2007	92.1	93.2					
184165-	1	MB	08/23/2007	101.0	97.3					
184165-	1	SB	08/23/2007	102.1	98.6					
184165-	1	SBD	08/23/2007	98.9	96.9					
340714-	1	MS	08/21/2007	101.9	96.0					
340714-	1	MSD	08/21/2007	93.5	92.8					
340846-	1	GB1 5FT	08/22/2007	101.0	89.8					
340846-	1	MS	08/22/2007	103.2	100.4					
340846-	1	MSD	08/22/2007	97.6	96.2					
340846-	2	GB1 10FT	08/22/2007	106.0	94.0					
340846-	3	GB2 5FT	08/22/2007	106.7	94.3					
340846-	4	GB2 10FT	08/22/2007	101.8	91.1					
340846-	5	GB3 5FT	08/22/2007	103.9	93.9					
340846-	6	GB3 10FT	08/23/2007	101.3	91.3					
340846-	7	GB4 5FT	08/24/2007	239.6d	1839.d					
340846-	8	GB4 15FT	08/23/2007	98.3	87.3					
340846-	9	GB5 5FT	08/23/2007	97.1	87.6					
340846-	10	GB5 10FT	08/22/2007	101.5	92.7					

Test	Test Description	Limits
ATFT	a,a,a-Trifluorotoluene	50 - 150
BFB	BFB (Surrogate)	50 - 150

SURROGATE RECOVERIES REPORT

Job Number.: 340846

Report Date.: 08/29/2007

CUSTOMER: 483648

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Method.....: Volatile Organics
Batch(s).....: 184344

Method Code....: 8260
Test Matrix....: Water

Prep Batch.....:
Equipment Code: GCMSVOA04

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFIM	TOLD8
184344--21	LCS		08/28/2007	88.1	77.6	94.8	87.5
184344--21	MB		08/28/2007	82.5	113.2	98.8	104.5

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4	70 - 130
BRFLBE	4-Bromofluorobenzene	70 - 130
DBRFIM	Dibromofluoromethane	70 - 130
TOLD8	Toluene-d8	70 - 130

Method.....: Volatile Organics
Batch(s).....: 184344

Method Code....: 8260
Test Matrix....: SPLP

Prep Batch.....:
Equipment Code: GCMSVOA04

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFIM	TOLD8
184286--21	PB		08/28/2007	82.4	111.0	97.2	105.2
340846--	8	GB4 15FT	08/28/2007	83.9	110.0	101.3	101.0

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4	70 - 130
BRFLBE	4-Bromofluorobenzene	70 - 130
DBRFIM	Dibromofluoromethane	70 - 130
TOLD8	Toluene-d8	70 - 130

Method.....: Volatile Organics
Batch(s).....: 184063 184090

Method Code....: 8260
Test Matrix....: Soil

Prep Batch.....:
Equipment Code: GCMSVOA05

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFIM	TOLD8
184063--21	LCS		08/22/2007	105.5	106.4	101.9	106.8
184063--21	MB		08/22/2007	90.3	113.1	93.8	96.1
184090--21	LCS		08/23/2007	106.3	99.2	108.1	107.9
184090--21	MB		08/23/2007	90.6	114.6	91.2	100.7
340714--	11 MS	JA 6 0-6	08/22/2007	89.9	94.6	88.3	92.3
340714--	11 MSD	JA 6 0-6	08/22/2007	88.2	85.6	87.7	83.4
340846--	1	GB1 5FT	08/22/2007	96.3	101.3	92.9	93.1
340846--	2	GB1 10FT	08/22/2007	96.4	103.3	97.0	95.0
340846--	3	GB2 5FT	08/22/2007	100.5	97.5	92.9	94.0
340846--	4	GB2 10FT	08/22/2007	99.4	93.0	92.3	89.2
340846--	5	GB3 5FT	08/22/2007	97.4	92.6	89.5	92.2
340846--	6	GB3 10FT	08/22/2007	89.9	100.2	88.1	87.8
340846--	7	GB4 5FT	08/22/2007	87.5	63.1	85.9	82.3
340846--	7	GB4 5FT	08/23/2007	95.2	121.0	96.9	103.2
340846--	8	GB4 15FT	08/22/2007	99.3	88.1	92.2	87.7
340846--	9	GB5 5FT	08/22/2007	86.2	94.1	85.4	87.7
340846--	10	GB5 10FT	08/22/2007	97.6	98.6	92.1	90.1
340984--	1 MS	MW-12 (22.5-25.0')	08/23/2007	99.9	111.2	100.9	101.0
340984--	1 MSD	MW-12 (22.5-25.0')	08/23/2007	85.3	111.7	94.5	99.1
184063--21	LCS		08/22/2007	89.8	104.4	90.4	93.1
184090--21	LCS		08/23/2007	86.4	103.4	83.3	89.2

Job Number.: 340846

SURROGATE RECOVERIES REPORT

Report Date.: 08/29/2007

CUSTOMER: 483648

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Method.....: Volatile Organics

Method Code....: 8260

Prep Batch.....:

Batch(s).....: 184063 184090

Test Matrix....: Soil

Equipment Code: GCMSVQA04

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4	61 - 130
BRFLBE	4-Bromofluorobenzene	57 - 140
DBRFIM	Dibromofluoromethane	68 - 130
TOLD8	Toluene-d8	50 - 130

Method.....: Volatile Organics

Method Code....: 8260

Prep Batch.....:

Batch(s).....: 184344

Test Matrix....: TCLP

Equipment Code: GCMSVQA04

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFIM	TOLD8
184285--21	PB		08/28/2007	80.9	113.9	101.6	104.7
340826--	1 MS	BTEX WATER	08/28/2007	92.0	110.5	102.6	105.0
340826--	1 MSD	BTEX WATER	08/28/2007	92.3	107.4	102.9	102.3

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4	70 - 130
BRFLBE	4-Bromofluorobenzene	70 - 130
DBRFIM	Dibromofluoromethane	70 - 130
TOLD8	Toluene-d8	70 - 130

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 08/29/2007

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) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 3) According to 40CFR Part 136.3, pH, Chlorine Residual, and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field, (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.
- 4) For all USACE projects, the QC limits are based on "mean +/- 2 sigma", which are the warning limits.

General Information:

- Cresylic Acid is the combination of o,m and p-Cresol. The combination is reported as the final result.
- m-Cresol and p-Cresol co-elute. The result of the two is reported as either m&p-cresol or as p-cresol.
- m-Xylene and p-Xylene co-elute. The result of the two is reported as m,p-Xylene.
- N-Nitrosodiphenylamine decomposes in the gas chromatograph inlet forming dipheylamine and, consequently, may be detected as diphenylamine.
- Methylene Chloride and Acetone are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- Trimethylsilyl(Diazomethane) is used to esterify acid herbicides in Method SW-846 8151A.
- For Inorganic analyses, duplicate QC limits are determined as follows: If the sample result is less than or equal to 5 times the reporting limit, the RPD limit is equal to the reporting limit. If the sample result is greater than 5 times the reporting limit, the RPD limit is the method defined RPD.
- For TRRP reports, the header on the column RL is equivalent to a MQL/PQL.
- Results for LCS and MS/MSD recoveries listed in the report are reported as ug/L on-column values which are not corrected for variables such as sample volumes or weights extracted, final volume of extracts and dilutions. To correct QC on-column recoveries to reflect actual spiking volumes for soils, multiply the values reported for Diesel Range Organics and Semivolatiles by 33.3 and Gasoline Range Organics by 20. The 8260 and 1006 results will not require correction. The only corection required for water analysis is for method 1006 where the reported concentraiton must be multiplied by 0.1.
- Due to limitation of the reporting software, results for the Method blank in the Semivolatile fraction are reported as "0". Which indicates there was no compound detected at the reporting limit for the compound reveiwed.

Explanation of Qualifiers:

- U - This qualifier indicates that the analyte was analyzed but not detected.
- J - (Organics only) This qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- B - (Inorganics only) This Qualifier indicates that the analyte is an estimated value between the RL and the MDL.
- N - (Organics only) This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic charachterization of a TIC, such as "chlorinated hydrocarbon", the "N" flag is not used.

Explanation of General QC Outliers:

- A - Matrix interference present in sample.
- a - MS/MSD analyses yielded comparable poor recoveries, indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
- b - Target analyte was found in the method blank.
- M - QC sample analysis yielded recoveries outside QC acceptance criteria. This sample was reanalyzed.
- L - LCS analysis yielded high recoveries, indicating a potential high bias. No target analytes were observed above the RL in the associated samples.
- G - Marginal outlier within 1% of acceptance criteria.
- r - RPD value is outside method acceptance criteria.
- C - Poor RPD values observed due to the non-homogenous nature of the sample.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 08/29/2007

- O - Sample required dilution due to matrix interference.
- D - Sample reported from a dilution.
- d - Spike and/or surrogate diluted.
- P - The recovery of this analyte is outside default QC limits. The data is accepted and will be used to calculate in-house statistical limits.
- E - The reported concentration exceeds the instrument calibration.
- F - The analyte is outside QC limits. The sample data is accepted since this analyte is not reported in associated samples.
- H - Continuing Calibration Verification (CCV) standard is not associated with the samples reported.
- q - See the subcontract final report for qualifier explanation.
- W - The MS/MSD recoveries are outside QC acceptance criteria because the amount spiked is much less than the amount found in the sample.
- K - High recovery will not affect the quality of reported results.
- Z - See case narrative.

Explanation of Organic QC Outliers:

- e - Method blank analysis yielded phthalate concentrations above the RL. Phthalates are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- S - Sample reanalyzed/reextracted due to poor surrogate recovery. Reanalysis confirmed original analysis indicating a possible matrix interference.
- T - Sample analysis yielded poor surrogate recovery.
- R - The RPD between the two GC columns is greater than 40% and no anomalies are present. The higher result is reported as per EPA Method 8000B.
- I - The RPD between the two GC columns is greater than 40% and anomalies are present. The lower of the two results has been reported.
- X - Gaseous compound. In-house QC limits are advisory.
- Y - Ketone compounds have poor purge efficiency. In-house QC limits are advisory.
- f - Surrogate not associated with reported analytes.

Explanation of Inorganic QC Outliers:

- Q - Method blank analysis yielded target analytes above the RL. Associated sample results are greater than 10 times the concentrations observed in the method blank.
- V - The RPD control limit for sample results less than 5 times the RL is +/- the RL value. Sample and duplicate results are within method acceptance criteria.
- e - Serial dilution failed due to matrix interference.
- g - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is greater than or equal to 0.995.
- s - BOD/cBOD seed value is not within method acceptance criteria. Due to the nature of the test method, the sample cannot be reanalyzed.
- l - BOD/cBOD LCS value is not within method acceptance criteria. Due to the nature of the test method, sample cannot be reanalyzed.
- N - Spiked sample recovery is not within control limits.
- n - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is less than 0.995.
- * - Duplicate analysis is not within control limits.

Abbreviations:

- Batch - Designation given to identify a specific extraction, digestion, preparation, or analysis set.
 - CCV - Continuing Calibration Verification
 - CRA - Low level standard check - GEAA, Mercury
 - CRI - Low level standard check - ICP
 - Dil Fac - Dilution Factor - Secondary dilution analysis
 - DLFac - Detection Limit Factor
-

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 08/29/2007

DU - Duplicate
EB - Extraction Blank (TCLP, SPLP, etc.)
ICAL - Initial Calibration
ICB - Initial Calibration Blank
ICV - Initial Calibration Verification
ISA - Interference Check Sample A - ICP
ISB - Interference Check Sample B - ICP
LCD - Laboratory Control Duplicate
LCS - Laboratory Control Sample
MB - Method Blank
MD - Method Duplicate
MDL - Method Detection Limit
MQL - Method Quantitation Limit (TRRP)
MS - Matrix Spike
MSD - Matrix Spike Duplicate
ND - Not Detected
PB - Preparation Blank
PREPF - Preparation Factor
RL - Reporting Limit
RPD - Relative Percent Difference
RRF - Relative Response Factor
RT - Retention Time
SQL - Sample Quantitation Limit (TRRP)
TIC - Tentatively Identified Compound

Method References:

- (1) EPA 600/4-79-020 Methods for the Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-94-111 Methods for the Determination of METals in Environmental Samples, Supplement I, May 1994.
- (3) EPA SW846 Test Methods for Evaluating Solid Waste, Third Edition, September 1986; Update I July 1992; Update II, September 1994, Update IIA August 1993; Update IIB, January 1995; Update III, December 1996, Update IVA January 1998, Update IVB November 2000.
- (4) Standard Methods for the Examination of Water and Wastewater, 16th Edition (1985), 17th Edition (1989), 18th Edition (1992), 19th Edition (1995), 20th Edition (1998).
- (5) HACH Water Analysis Handbook 3rd Edition (1997).
- (6) Federal Register, July 1, 1990 (40 CFR Part 136 Appendix A).
- (7) Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition, January 1997.
- (9) Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Department of Agriculture, 1954.

LABORATORY CHRONICLE

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Lab ID: 340846-1	Client ID: GB1 5FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1452
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1053
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	183999		08/22/2007 0635
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1553
					1.00000
					1.00000
Lab ID: 340846-2	Client ID: GB1 10FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1508
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1137
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	183999		08/22/2007 0659
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1619
					1.00000
					1.00000
Lab ID: 340846-3	Client ID: GB2 5FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1610
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1221
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	183999		08/22/2007 0724
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1645
					1.00000
					1.00000
Lab ID: 340846-4	Client ID: GB2 10FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1626
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1306
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	183999		08/22/2007 0748
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1711
					1.00000
					1.00000
Lab ID: 340846-5	Client ID: GB3 5FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1728
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1350
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	183999		08/22/2007 0813
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1737
					1.00000
					1.00000
Lab ID: 340846-6	Client ID: GB3 10FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1744
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1434

L A B O R A T O R Y C H R O N I C L E

Job Number: 340846

Date: 08/29/2007

CUSTOMER: Tetra Tech-Maxim Technologies, Inc.

PROJECT: CONOCO PHILLIPS

ATTN: Charlie Durret

Lab ID: 340846-6	Client ID: GB3 10FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	184165		08/23/2007 1631
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1803
					DILUTION
					1.0000
					1.000000
Lab ID: 340846-7	Client ID: GB4 5FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1831
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 0925
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	184165		08/24/2007 1254
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1946
SW-846 8260B	Volatile Organics	1	184090		08/23/2007 1336
					DILUTION
					100
					10
					250.00
					1.000000
					10.00000
Lab ID: 340846-8	Client ID: GB4 15FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 1312	1312 SPLP Zero Headspace Extraction	1	184286		08/28/2007 1600
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
EPA300.0 REV2.	Ion Chromatography Analysis	1	183995		08/22/2007 0028
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1847
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 1312	Synthetic Precipitate Leachate Procedure	1	183882		08/20/2007 1500
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1519
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	184165		08/23/2007 1656
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1829
SW-846 8260B	Volatile Organics	1	184344	184286	08/28/2007 1553
					DILUTION
					10
					1.0000
					1.000000
					1.000000
Lab ID: 340846-9	Client ID: GB5 5FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 1918
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1221
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	184165		08/23/2007 1720
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1854
					DILUTION
					1.0000
					1.000000
Lab ID: 340846-10	Client ID: GB5 10FT	Date Recvd: 08/20/2007	Sample Date: 08/15/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED
SW-846 3550B	Extraction (Ultrasonic) DRO	1	184002		08/22/2007 1000
SW-846 9056	Ion Chromatography Analysis	1	184204		08/25/2007 2005
SM-2540 G Mod.	Moisture (Total + Fixed Solids, Ash)	1	183865		08/20/2007 1630
EPA 120.1	Specific Conductance @ 25 degrees C	1	184117		08/23/2007 1845
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	184223	184002	08/24/2007 1306
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	183999		08/22/2007 1154
SW-846 8260B	Volatile Organics	1	184063		08/22/2007 1920
					DILUTION
					1.0000
					1.000000