



TETRA TECH, INC.

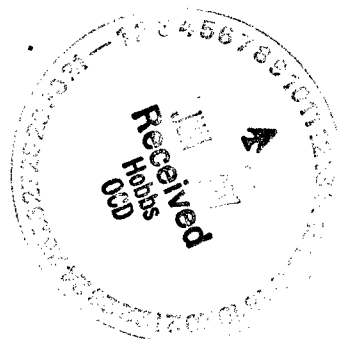
June 8, 2007

Mr. Mark Whitaker
New Mexico Oil Conservation Division
1625 N. French Dr.
Hobbs, New Mexico 88240

RE: Findings Report
MCA Philmex #4 Battery
Lea County, New Mexico
Unit N, Sec. 26, T17S, R33E
Tetra Tech Project No. 7640024

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

RP#
1236



Dear Mr. Whitaker:

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this findings report for the delineation of a crude oil release at ConocoPhillips' MCA Philmex #4 Battery (Site; Figure 1). This work is in support of ConocoPhillips' efforts to remediate a recent 47 barrel crude oil release at this location. The Site is located above the Mescalero Ridge, approximately 8.1 miles east of the ConocoPhillips MCA Unit office in Lea County, New Mexico (32.80006°N, 103.63585°W). The New Mexico State Land Office is the land administrator. A C141 report for this release is on file with the New Mexico Oil Conservation Division (NMOCD; Attachment A).

Exposure Pathway Analysis

There are no water well records for Section 27, Township 17 South, Range 33 East (New Mexico Office of the State Engineer, iWater database). The nearest records are in the Southeast ¼ of the Southeast ¼ of the Northeast ¼ of Section 35, immediately South of Section 26. These data indicate groundwater to be approximately 150 to 160 feet below ground surface (fbgs). The nearest playa is approximately 850 feet east northeast of the battery (Figure 1).

As per the subsurface site assessment characterization protocol outlined in NMOCD's "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	200 – 1,000 feet	10
Total Ranking Score		10

The remediation action level for a ranking score of 1-19 is 10 parts per million (ppm) for benzene, 50 ppm for total benzene, toluene, ethylbenzene and total xylenes (BTEX), and 1,000 ppm for total petroleum hydrocarbons (TPH).

Scope of Work

The crude oil footprint delineated the lateral extent of the affected area (approximately 8,600 square feet) by the petroleum stained edge (Figure 2). To delineate the vertical crude oil affected soil:

- Tetra Tech advanced three (3) borings using a truck mounted air rotary drilling unit at Philmex #4 to find the TPH clean boundary (Figure 2).

- The borings were logged so that observations concerning soil types, lithologic changes, and the environmental condition of the encountered soils were noted (See Attachment B – Boring Logs).
- Soil samples were taken at 2 foot intervals from 0-10 fbs. Each sample was field screened for TPH using the PetroFLAG System (USEPA, 2001¹). The photo-ionization detector (PID) malfunctioned and was not used measure volatile organic carbon concentrations.
- Two (2) soil samples from each boring were retained and submitted to a laboratory for analyses. The sampling intervals were based on PetroFLAG measurements, and on the judgment of the field geologist. The soil sample with the highest PetroFLAG measurement and the sample from the boring total depth (TD) were retained for chemical analysis.
- Soil samples were placed into appropriate sample containers, placed on ice and transported, under a chain of custody, to an analytical laboratory where they were analyzed for TPH (Method 8015 GRO-DRO), and BTEX (Method 8260B).

Findings

The Site is nearly level to gently sloping and has Jal series soils. The Jal series has a 0-12 inches sandy loam surface overlaying 12-60 inches of soft caliche. Fragmental platy caliche is observed in the area (Turner et al²). The soils encountered during excavation activities at the Site consisted of mostly dark grayish-brown gravelly loam overlying indurated caliche (See Attachment B – Boring Logs).

The Site is located above the Mescalero Ridge. In this area of the High Plains, the Ogallala sands are overlain by sediments of the lower Pliocene to middle Miocene Group. The general character of the sediment is semi-consolidated, fine-grained, calcareous sand, capped with thick a layer of caliche. Depth to water in the vicinity of the Site is approximately 160 fbs (Nicholson and Clebsch, 1961³).

Summaries of subsurface soil conditions are presented in Tables 1 and 2 and on excavation logs (Appendix A). A complete analytical report is presented in Appendix C.

PetroFlag analyses for diesel range hydrocarbons (TPH_D) are presented in Table 1. TPH_D concentrations were used to preliminarily describe the extent of vertical migration of hydrocarbons.

The laboratory analyses of soils confirmed the extent of vertical migration of TPH constituents (Table 2). All three borings had concentrations of TPH above the regulatory action level of 1,000 milligrams per kilogram (mg/Kg) in near surface samples. TPH concentrations in the bottom sampling depths were below the regulatory action level and ranged from 34 to 925 mg/Kg in borings SB-2, and -1, respectively.

BTEX data are presented in Table 2. Benzene concentrations were detected in all three near surface soil boring samples and were below the regulatory action level of 10 ppm. Benzene was reported as non-detect in all three boring TD soil samples. BTEX concentrations were above the regulatory action level of 50 ppm in all near surface soil samples. BTEX concentrations in the bottom sampling depths were below the regulatory action level and ranged from non-detect in borings SB-2 and -3 to 0.06 mg/Kg in SB-1.

¹ U.S. Environmental Protection Agency, 2001. Innovative Technology Verification Report, Dexsil Corporation PetroFLAG™ System. Prepared by Tetra Tech EM Inc. for USEPA National Exposure Research Laboratory Office of Research and Development. EPA/R-01/092.

² Turner, Millard T., Dellon N. Cox, Brice C. Mickelson, Archie J. Roath, and Carl D. Wilson. 1974. Soil Survey Lea County, New Mexico. USDA Soil Conser. Serv., Washington DC. 20402. p. 89.

³ Nicholson, A. and A. Clebsch, 1961. Geological and Ground-Water Conditions in Southern Lea County, New Mexico. NM Bur. of Mines & Mineral Res. Ground-Water Rpt 6. p. 123.

Conclusions

According to laboratory analysis of soils collected during this investigation, petroleum hydrocarbon constituents were reported above the regulatory action levels for TPH and BTEX in the three (3) boring near surface soil samples. TPH and BTEX concentrations attenuated to below the regulatory action levels with depth. Since groundwater is greater than 100 feet below the affected depth and the nearest water source is greater than 1,000 feet away, the site-specific remediation levels through laboratory analysis are 1,000 mg/Kg for TPH, 50 mg/Kg for BTEX and 10 mg/Kg for benzene.

It is estimated that the affected area is approximately 8,600 square feet and penetration of petroleum hydrocarbon constituents is approximately 4 fogs (Figure 2).

Recommendations

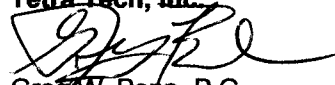
Tetra Tech recommends the following actions be taken at Philmex #4 Battery crude oil release site:

- Soil in the area of above ground flowlines will be excavated approximately 6-inches below the lines. This soil will be thinly spread over the release site area.
- The affected soil in the area of the release will be treated with a three percent (%) Micro-Blaze® solution to encourage bioremediation. Micro-Blaze® contains surfactants, nutrients and non-pathogenic bacteria. When applied to a hydrocarbon-based contaminant, the surfactant starts emulsifying (breaking down) the contaminants into smaller molecules for more efficient degradation by the microbes. Photographs will be taken to document the before and after treatment at the site.
- To achieve a 3% application, it is estimated that for every 10 cubic yards of affected soil, one gallon of the concentrated Micro-Blaze® diluted with 333 gallons of water will be required. Approximately 1,274 cubic yards of affected soil will be flooded by 128 gallons of Micro-Blaze® diluted with 100 barrels of water. A small berm will be constructed around the release site to ensure the weight of the application solution forces penetration into the affected soil.
- Tetra Tech will supervise and direct all subcontractor activities, and following the application of Micro-Blaze®, prepare a report describing and documenting what was done 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 site following remediation.

Based on the above information, Tetra Tech requests NMOCD's approval on the recommended remediation action. ConocoPhillips has directed Tetra Tech to commence work on this project immediately following receipt of your notification to proceed. If you have any questions concerning this request please call Mr. Mickey Garner (505-391-3158) or me.

Sincerely,

Tetra Tech, Inc.



Greg W. Pope, P.G.
Project Manager

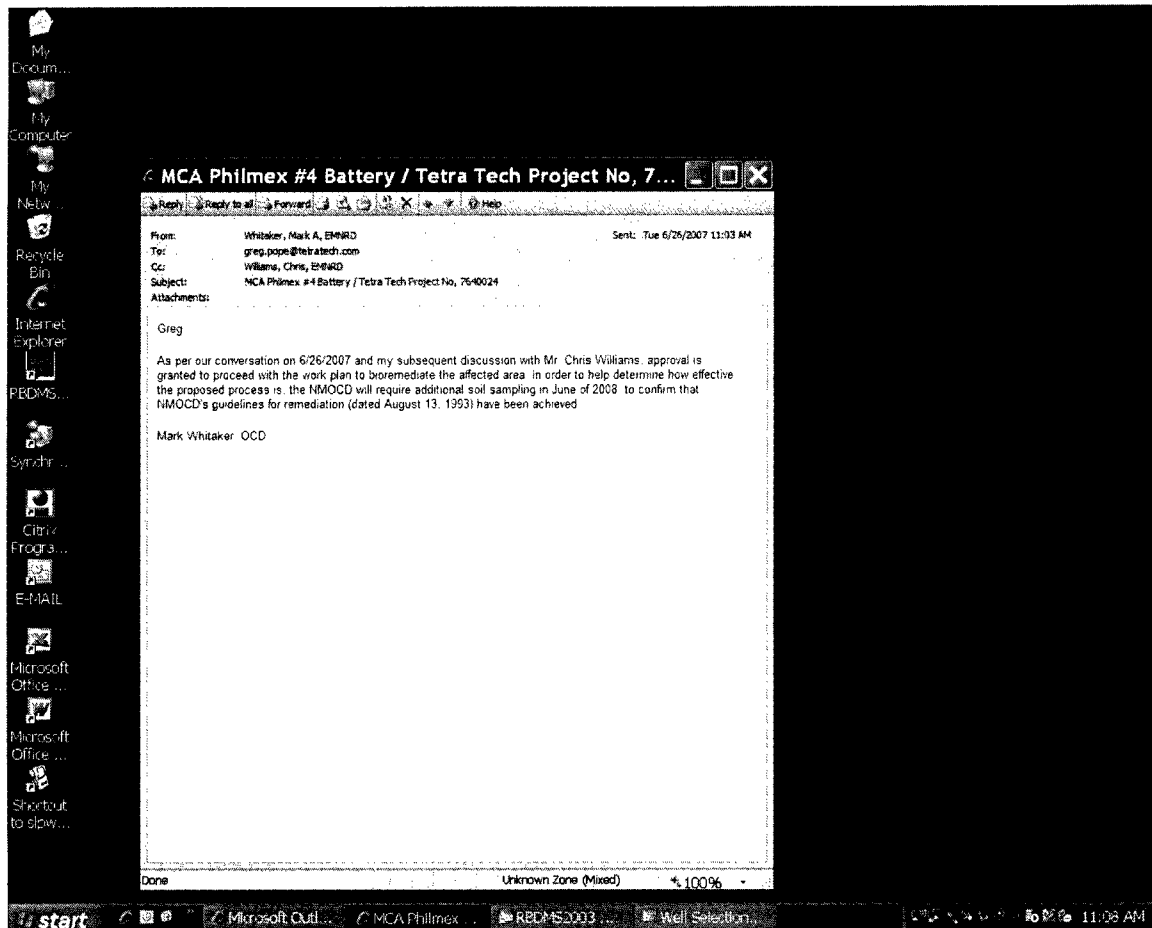
Attachments



Approved by
Chris Williams
6/26/07

06/26/2007

Sent e-mail
allowing to proceed
with work. ~~needed~~
requested additional
testing in 1 yr. MW



TABLES

Table 1
ConocoPhillips
Philmex #4 Battery
Soil Field Analysis
May 14, 2007

Sample Location	Depth (ft)	TPH (ppm)	VOC* (ppm)
SB-1	0-0.5	<4,000	
	2	1,011	
	4	621	
	6	219	
SB-2	0-0.5	<4,000	
	2	2204	
	4	499	
	6	357	
	8	212	
SB-3	0-0.5	<4,000	
	2	<4,000	
	4	642	
	6	240	

TPH = total petroleum hydrocarbons

VOC = volatile organic compounds

ft = feet

ppm = parts per million

* Equipment malfunction, no data

Table 2
ConocoPhillips
Philmex #4 Battery
Soil Lab Analysis
May 14, 2007

Parameter	Boring Location					
	SB-1		SB-2		SB-3	
Sample Depth (ft)	0-0.5	2	0-0.5	8	0-0.5	6
Total Petroleum Hydrocarbons (mg/Kg)						
TPH GRO	8,890	325	2,070	ND	6,320	1.91
TPH DRO	29,000	600	12,000	34	37,000	42
TPH Total	37,890	925	14,070	34	43,320	44
Volatile Organic Compounds (mg/Kg)						
Benzene	8.20	ND	1.00	ND	2.4	ND
Ethylbenzene	23.50	ND	7.20	ND	8.9	ND
Toluene	132.00	ND	21.10	ND	70	ND
Xylenes (Total)	289.00	0.059	115.00	ND	161.00	ND
BTEX Total	452.70	0.06	144.30	0.00	242.30	0.00

ft = feet

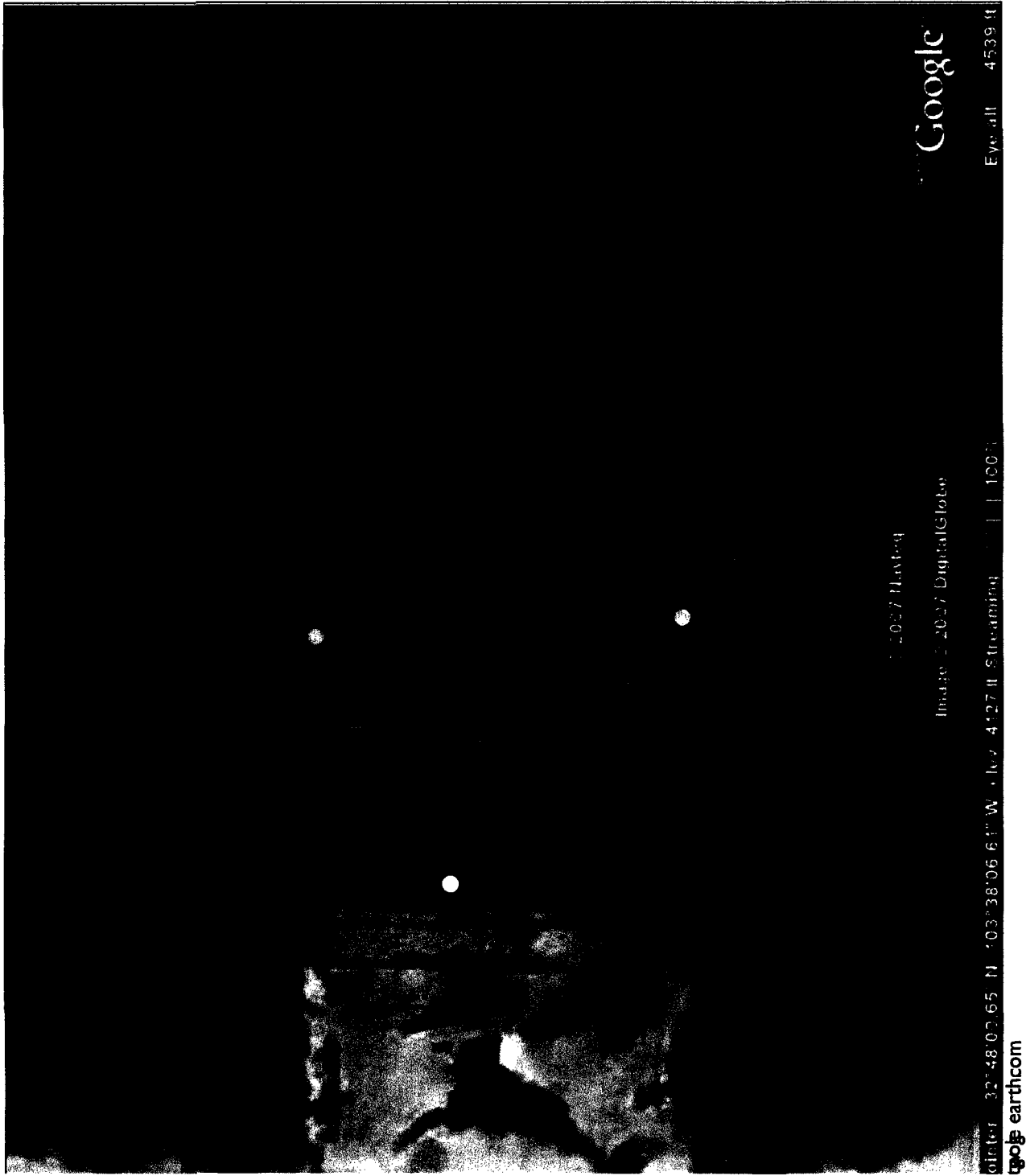
GRO = gasoline range hydrocarbons

DRO = diesel range hydrocarbons

mg/Kg = milligrams per kilogram

ND = not detected at or above laboratory detection levels

FIGURES



TETRA TECH, INC.

ConocoPhillips

MCA
Unit
New
Mexico

Figure 2. Philmex #4 Crude Oil
Release Site Sampling Locations ○

ATTACHMENT A
C141 Form

District I
25 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

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

Form C-14
Revised October 10, 2001

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company ConocoPhillips Company	Contact Mickey Garner	
Address 3300 North A St. Bldg 6, Midland, TX 79705-5406	Telephone No. 505.391.3158	
Facility Name Philmex Battery #4	Facility Type Oil and Gas	
Surface Owner State of New Mexico	Mineral Owner State of New Mexico	Lease No

LOCATION OF RELEASE

Unit Letter N	Section 26	Township 17S	Range 33E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
-------------------------	----------------------	------------------------	---------------------	---------------	------------------	---------------	----------------	----------------------

Latitude **N 32.80006** Longitude **W 103.63585**

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 47bbl (47oil, 0water)	Volume Recovered (35oil, 0water)
Source of Release 2" steel line on discharge of circulating pump.	Date and Hour of Occurrence 03-10-2007 1:00 am	Date and Hour of Discovery 03-10-2007 9:35 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Pat Caperton via voice mail	
By Whom? Mickey Garner	Date and Hour 03-12-2007 10:40 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*


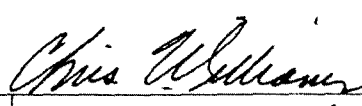
Describe Cause of Problem and Remedial Action Taken.*

The leak resulted from internal corrosion to a 2" steel line on the discharge of the circulating pump. The MSO shut down the pump and called a vacuum truck to pick up the free liquids.

Describe Area Affected and Cleanup Action Taken.*

A 75' X 170' area of pad and pasture were affected. No cows were present. The spill site will be delineated and remediated in accordance with NMOCD guidelines.

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: Mickey Garner	Approved by District Supervisor: 	
Title: HSER Lead	Approval Date: 3/13/07	Expiration Date: 3/13/08
E-mail Address: Mickey.D.Garner@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 03-12-2007	Phone: 505.391.3158	

- Attach Additional Sheets If Necessary

Facility - PHAC 0707427248
Incident - PHAC 0707427342
Application - PHAC 0707427473

RP

RP#1236

ATTACHMENT B
Boring Logs




SOIL BORING LOG

SB-1

CLIENT/PROJECT: ConocoPhillips
LOCATION: Philmex #4 Battery
COUNTY, STATE: Lea County, New Mexico
BORED BY: Laura Strumness
DATE/TIME START: 5/14/07 9:30
DATE/TIME FINISH: 5/14/07 10:00

PROJECT NUMBER: 7640024
DRILLING CO: Scarborough Drilling
DRILL TYPE: Air Rotary
BORING DIAMETER: 5-inch
GROUND SURFACE ELEVATION: unknown
GPS COORDINATES (N/E): 0 0

BORING NO.

(feet-bgs)	SAMPLE NUMBER	SAMPLE INTERVAL	PID READING (ppm)	LITHOLOGIC DESCRIPTION	USCS SYMBOL	LITHOLOGY	FIELD TEST ANALYSIS AND DRILLING NOTES	% RECOVERY	SYMBOLS	ELEVATION (feet-msl)
				TOPSOIL: clayey sand, brown (7.5YR 4/2), coated with oil	SC					0
	0-1									
		1-2		CALICHE: pale yellow (2.5Y 8/3), fine grained, dense-very dense, dry, hydrocarbon odor 1-4 fbgs						-2
		2-4								-4
		4-6			LS					-6
										-8
										-10

WELL COMPLETION INFORMATION

Page 1 of 1

Drilling Point Description : Ground Surface
Measuring Point Elevation (ft MSL): NA
Drilling Total Depth (ft BGS): 10
Initial Water Level (ft BTOC): NA

Type of Casing / Screen: NA
Casing Diameter (inches): NA
Well Screen Slot Size (inch): NA
Well Completion: Bentonite backfill to surface




SOIL BORING LOG

SB-2

CLIENT/PROJECT: ConocoPhillips
LOCATION: Philmeth #4 Battery
COUNTY, STATE: Lea County, New Mexico
DRILLED BY: Laura Strumness
DATE/TIME START: 5/14/07 10:30
DATE/TIME FINISH: 5/14/07 10:58

PROJECT NUMBER: 7640024
DRILLING CO: Scarborough Drilling
DRILL TYPE: Air Rotary
BORING DIAMETER: 5-inch
GROUND SURFACE ELEVATION: unknown
GPS COORDINATES (N/E): 0 0

BORING NO.

(feet-bgs)	SAMPLE NUMBER	SAMPLE INTERVAL	PID READING (ppm)	LITHOLOGIC DESCRIPTION	USCS SYMBOL	LITHOLOGY	FIELD TEST ANALYSIS AND DRILLING NOTES	% RECOVERY	SYMBOLS	ELEVATION (feet-msl)
				TOPSOIL: clayey sand, brown (7.5YR 4/2), coated with oil	SC					0
	0-1									
		1-2		CALICHE: pale yellow (2.5Y 8/3), fine grained, dense-very dense, dry, hydrocarbon odor 1-4 fbg						-2
		2-4								-4
		4-6			LS					-6
		6-8								-8
										-10

WELL COMPLETION INFORMATION

Page 1 of 1

Drilling Point Description : Ground Surface
Measuring Point Elevation (ft MSL): NA
Drilling Total Depth (ft BGS): 10
Initial Water Level (ft BTOC): NA

Type of Casing / Screen: NA
Casing Diameter (inches): NA
Well Screen Slot Size (inch): NA
Well Completion: Bentonite backfill to surface




SOIL BORING LOG

SB-3

CLIENT/PROJECT: ConocoPhillips
LOCATION: Philmex #4 Battery
COUNTY, STATE: Lea County, New Mexico
CREATED BY: Laura Strumness
START TIME: 5/14/07 11:30
FINISH TIME: 5/14/07 11:45

PROJECT NUMBER: 7640024
DRILLING CO: Scarborough Drilling
DRILL TYPE: Air Rotary
BORING DIAMETER: 5-inch
GROUND SURFACE ELEVATION: unknown
GPS COORDINATES (N/E): 0 0

BORING NO.

(feet-bgs)	SAMPLE NUMBER	SAMPLE INTERVAL	PID READING (ppm)	LITHOLOGIC DESCRIPTION	USCS SYMBOL	LITHOLOGY	FIELD TEST ANALYSIS AND DRILLING NOTES	% RECOVERY	SYMBOLS	ELEVATION (feet-msl)
										0
	0-1			TOPSOIL: clayey sand, brown (7.5YR 4/2), coated with oil	SC					
	1-2			CALICHE: pale yellow (2.5Y 8/3), fine grained, dense-very dense, dry, hydrocarbon odor 1-4 fbgs						-2
	2-4									-4
	4-6				LS					-6
										-8
										-10

WELL COMPLETION INFORMATION

Page 1 of 1

Drilling Point Description : Ground Surface
Drilling Point Elevation (ft MSL): NA
Drilling Total Depth (ft BGS): 10
Initial Water Level (ft BTOC): NA

Type of Casing / Screen: NA
Casing Diameter (inches): NA
Well Screen Slot Size (inch): NA
Well Completion: Bentonite backfill to surface

ATTACHMENT C
Laboratory Analytical Report

ANALYTICAL REPORT

JOB NUMBER: 335383
Project ID: PHILMEX

Prepared For:

Maxim Technologies, Inc.
1703 West Industrial
Midland, TX 79701

Attention: Charlie Durret

Date: 05/22/2007



Signature

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: skudchadkar@stl-inc.com



Date

Severn Trent Laboratories
6310 Rothway Drive
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 25

05/22/2007

Charlie Durret
Maxim Technologies, Inc.
1703 West Industrial
Midland, TX 79701

Reference:

Project : PHILMEX
Project No. : 335383
Date Received : 05/16/2007
STL Job : 335383

Dear Charlie Durret:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

1. SB1 0-6"
2. SB1 2'
3. SB2 0-6"
4. SB2 8'
5. SB3 0-6"
6. SB3 6'
7. TRIP BLANK

All holding times were met for the tests performed on these samples.

Enclosed, please find the Quality Control Summary. All quality control results for the QC batch that are applicable to the sample(s) are acceptable except as noted in the QC batch reports.

The test results in this report meet all NELAP requirements for STL Houston's NELAP accredited parameters. Any exceptions to NELAP requirements will be noted and included in a case narrative as a part of this report.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

Thank you for selecting Severn-Trent Laboratories to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

Sincerely,



Sachin G. Kudchadkar
Project Manager

SAMPLE INFORMATION

Date: 05/22/2007

Job Number.: 335383
Customer...: Maxim Technologies, Inc.
Attn.....: Charlie Durret

Project Number.....: 99003817
Customer Project ID....: PHILMEX
Project Description....: Conoco Phillips

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
335383-1	SB1 0-6"	Soil	05/14/2007	08:00	05/16/2007	08:51
335383-2	SB1 2'	Soil	05/14/2007	10:30	05/16/2007	08:51
335383-3	SB2 0-6"	Soil	05/14/2007	08:30	05/16/2007	08:51
335383-4	SB2 8'	Soil	05/14/2007	10:51	05/16/2007	08:51
335383-5	SB3 0-6"	Soil	05/14/2007	09:00	05/16/2007	08:51
335383-6	SB3 6'	Soil	05/14/2007	11:41	05/16/2007	08:51
335383-7	TRIP BLANK	Trip Blank	05/14/2007	00:00	05/16/2007	08:51

LABORATORY TEST RESULTS

Job Number: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Customer Sample ID: SB1 0-6"
Date Sampled.....: 05/14/2007
Time Sampled.....: 08:00
Sample Matrix.....: Soil

Laboratory Sample ID: 335383-1
Date Received.....: 05/16/2007
Time Received.....: 08:51

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil	8890000		1000000	ug/Kg	05/17/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil	Complete				05/16/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil	29000		5000	mg/Kg	05/17/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil	8200		600	ug/Kg	05/17/07	zfl
	Ethylbenzene, Soil	23500		600	ug/Kg	05/17/07	zfl
	Toluene, Soil	132000		6000	ug/Kg	05/18/07	zfl
	Xylenes (total), Soil	289000		19000	ug/Kg	05/18/07	zfl

* In Description = Dry Wgt.

Page 2

LABORATORY TEST RESULTS

Job Number: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Customer Sample ID: SB1 2'
Date Sampled.....: 05/14/2007
Time Sampled.....: 10:30
Sample Matrix.....: Soil

Laboratory Sample ID: 335383-2
Date Received.....: 05/16/2007
Time Received.....: 08:51

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil	325000		250000	ug/Kg	05/16/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil	Complete				05/16/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil	600		83	mg/Kg	05/17/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil	ND		5	ug/Kg	05/16/07	ysl
	Ethylbenzene, Soil	ND		5	ug/Kg	05/16/07	ysl
	Toluene, Soil	ND		5	ug/Kg	05/16/07	ysl
	Xylenes (total), Soil	59.5		15	ug/Kg	05/16/07	ysl

* In Description = Dry Wgt.

Page 3

LABORATORY TEST RESULTS

Job Number: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Customer Sample ID: SB2 0-6"
 Date Sampled.....: 05/14/2007
 Time Sampled.....: 08:30
 Sample Matrix.....: Soil

Laboratory Sample ID: 335383-3
 Date Received.....: 05/16/2007
 Time Received.....: 08:51

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil	2070000		500000	ug/Kg	05/16/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil	Complete				05/16/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil	12000		830	mg/Kg	05/17/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil	1000		600	ug/Kg	05/17/07	zfl
	Ethylbenzene, Soil	7200		600	ug/Kg	05/17/07	zfl
	Toluene, Soil	21100		600	ug/Kg	05/17/07	zfl
	Xylenes (total), Soil	115000		19000	ug/Kg	05/18/07	zfl

* In Description = Dry Wgt.

Page 4

LABORATORY TEST RESULTS

Job Number: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Customer Sample ID: SB2 8'
Date Sampled.....: 05/14/2007
Time Sampled.....: 10:51
Sample Matrix.....: Soil

Laboratory Sample ID: 335383-4
Date Received.....: 05/16/2007
Time Received.....: 08:51

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil	ND		1000.00	ug/Kg	05/16/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil	Complete				05/16/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil	34		8.3	mg/Kg	05/17/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil	ND		5	ug/Kg	05/16/07	yx1
	Ethylbenzene, Soil	ND		5	ug/Kg	05/16/07	yx1
	Toluene, Soil	ND		5	ug/Kg	05/16/07	yx1
	Xylenes (total), Soil	ND		15	ug/Kg	05/16/07	yx1

* In Description = Dry Wgt.

Page 5

LABORATORY TEST RESULTS

Job Number: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durrett

Customer Sample ID: SB3 0-6"
Date Sampled.....: 05/14/2007
Time Sampled.....: 09:00
Sample Matrix.....: Soil

Laboratory Sample ID: 335383-5
Date Received.....: 05/16/2007
Time Received.....: 08:51

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil	6320000		1000000	ug/Kg	05/17/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil	Complete				05/16/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil	37000		5000	mg/Kg	05/17/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil	2400		600	ug/Kg	05/17/07	zfl
	Ethylbenzene, Soil	8900		600	ug/Kg	05/17/07	zfl
	Toluene, Soil	70000		6000	ug/Kg	05/18/07	zfl
	Xylenes (total), Soil	161000		19000	ug/Kg	05/18/07	zfl

* In Description = Dry Wgt.

Page 6

LABORATORY TEST RESULTS

Job Number: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Customer Sample ID: SB3 6'
Date Sampled.....: 05/14/2007
Time Sampled.....: 11:41
Sample Matrix.....: Soil

Laboratory Sample ID: 335383-6
Date Received.....: 05/16/2007
Time Received.....: 08:51

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8015B	Total Volatile Petroleum Hydrocarbons TVPH as GRO, Soil	1910		1000.00	ug/Kg	05/16/07	cad
SW-846 3550B	Extraction (Ultrasonic) DRO Ultrasonic Extraction, Soil	Complete				05/16/07	mra
SW-846 8015B	Total Extractable Petroleum Hydrocarbons TEPH - as Diesel, Soil	42		8.3	mg/Kg	05/17/07	jps
SW-846 8260B	Volatile Organics						
	Benzene, Soil	ND		5	ug/Kg	05/16/07	ysl
	Ethylbenzene, Soil	ND		5	ug/Kg	05/16/07	ysl
	Toluene, Soil	ND		5	ug/Kg	05/16/07	ysl
	Xylenes (total), Soil	ND		15	ug/Kg	05/16/07	ysl

* In Description = Dry Wgt.

Page 7

LABORATORY TEST RESULTS

Job Number: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Customer Sample ID: TRIP BLANK
Date Sampled.....: 05/14/2007
Time Sampled.....: 00:00
Sample Matrix.....: Trip Blank

Laboratory Sample ID: 335383-7
Date Received.....: 05/16/2007
Time Received.....: 08:51

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 8260B	Volatile Organics						
	Benzene, Water	ND		5	ug/L	05/17/07	zfl
	Ethylbenzene, Water	ND		5	ug/L	05/17/07	zfl
	Toluene, Water	ND		5	ug/L	05/17/07	zfl
	Xylenes (total), Water	ND		15	ug/L	05/17/07	zfl

* In Description = Dry Wgt.

Page 8

QUALITY CONTROL RESULTS

Job Number.: 335383

Report Date.: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

Test Method.....: SW-846 8015B

Units.....: ug/L

Analyst....: cad

Method Description.: Total Volatile Petroleum Hydrocarbons

Batch(s)....: 177765 177862

LCS	Laboratory Control Sample	BXS050107F	177765-1		05/15/2007	0956
-----	---------------------------	------------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TVPH as GRO, Soil	335.311		250.000000		134.1	49-151	

LCS	Laboratory Control Sample	BXS051607G	177765-2		05/16/2007	1340
-----	---------------------------	------------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TVPH as GRO, Soil	286.125		250.000000		114.5	49-151	

MB	Method Blank		177765-1		05/15/2007	1150
----	--------------	--	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
as GRO, Soil	ND						

MB	Method Blank		177765-2		05/16/2007	1422
----	--------------	--	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TVPH as GRO, Soil	ND						

MS	Matrix Spike	BX120706A	335230-2		05/15/2007	2144
----	--------------	-----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TVPH as GRO, Soil	270.172		250.000000	ND	108.1	50.0-150.0	

MS	Matrix Spike	BX120706A	335383-4		05/16/2007	2112
----	--------------	-----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TVPH as GRO, Soil	293.350		250.000000	26.3016	106.8	50.0-150.0	

MSD	Matrix Spike Duplicate	BX120706A	335230-2		05/15/2007	2209
-----	------------------------	-----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TVPH as GRO, Soil	285.121	270.172	250.000000	ND	114.0 5.4	50-150 20	

Job Number.: 335383			QUALITY CONTROL RESULTS			Report Date.: 05/22/2007		
CUSTOMER: Maxim Technologies, Inc.			PROJECT: PHILMEX			ATTN:		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time		

MSD	Matrix Spike Duplicate	BX120706A	335383-4		05/16/2007	2137		
-----	------------------------	-----------	----------	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
TVPH as GRO, Soil	341.432	293.350	250.000000	26.3016	126.1 15.1		50-150 20	

LCS	Laboratory Control Sample	BXS051607G	177862-1		05/17/2007	1258		
-----	---------------------------	------------	----------	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
TVPH as GRO, Soil	361.618		250.000000		144.6		49-151	

MB	Method Blank		177862-1		05/17/2007	1424		
----	--------------	--	----------	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
TVPH as GRO, Soil	11.9177							

	Matrix Spike	BX120706A	335232-1		05/17/2007	1913		
--	--------------	-----------	----------	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
TVPH as GRO, Soil	281.407		250.000000	53.7493	91.1		50.0-150.0	

MSD	Matrix Spike Duplicate	BX120706A	335232-1		05/17/2007	1938		
-----	------------------------	-----------	----------	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
TVPH as GRO, Soil	292.610	281.407	250.000000	53.7493	95.5 3.9		50-150 20	

Test Method.....: SW-846 8015B Units.....: mg/L Analyst....: jps
Method Description.: Total Extractable Petroleum Hydrocarbons Batch(s)....: 177864

LCS	Laboratory Control Sample	GC010907	177714		05/17/2007	1917		
-----	---------------------------	----------	--------	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
TEPH - as Diesel, Soil	1064.52		1000.000000		106.5		70-130	

MB	Method Blank	GC051507	177714		05/17/2007	1834		
----	--------------	----------	--------	--	------------	------	--	--

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
TEPH - as Diesel, Soil	ND							

QUALITY CONTROL RESULTS

Job Number.: 335383

Report Date.: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

MS	Matrix Spike	QC041707	335383-6		05/17/2007	1834
----	--------------	----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TEPH - as Diesel, Soil	1778.24		1000.000000	1266.86	51	70-130	A

MSD	Matrix Spike Duplicate	QC041707	335383-6		05/17/2007	1917
-----	------------------------	----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
TEPH - as Diesel, Soil	1592.57	1778.24	1000.000000	1266.86	33 11.0	70-130 30.0	A

Test Method.....: SW-846 8260B
Method Description.: Volatile Organics

Units.....: ug/L
Batch(s)....: 177788 177920 177928

Analyst....: yxl

LCS	Laboratory Control Sample	VS051507H			05/16/2007	1201
-----	---------------------------	-----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Soil	52.9221		50.00	ND	105.8	68-121	
Ethylbenzene, Soil	55.7420		50.00	ND	111.5	66-130	
Toluene, Soil	55.9816		50.00	ND	112.0	66-127	
Xylenes (total), Soil	168.284		150.	ND	112.2	37-160	

MB	Method Blank	VS051507C			05/16/2007	1254
----	--------------	-----------	--	--	------------	------

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	VS051507E	335383-2		05/16/2007	1346
----	--------------	-----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Soil	49.3540		50.00	ND	99	65-135	
Ethylbenzene, Soil	43.5689		50.00	ND	87	60-140	
Toluene, Soil	48.5359		50.00	ND	97	64-135	
Xylenes (total), Soil	183.791		150.0	59.4783	83	60-140	

MSD	Matrix Spike Duplicate	VS051507E	335383-2		05/16/2007	1411
-----	------------------------	-----------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Soil	45.8229	49.3540	50.00	ND	92 7.4	65-135 30.0	
F benzene, Soil	38.9086	43.5689	50.00	ND	78 11.3	60-140 30.0	
Toluene, Soil	43.6871	48.5359	50.00	ND	87 10.5	64-135 30.0	

QUALITY CONTROL RESULTS									
Job Number.: 335383					Report Date.: 05/22/2007				
CUSTOMER: Maxim Technologies, Inc.			PROJECT: PHILMEX			ATTN:			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time			
MSD	Matrix Spike Duplicate	VS051507E	335383-2		05/16/2007	1411			
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F		
Xylenes (total), Soil	204.618	183.791	150.0	59.4783	97 10.7	60-140 30.0			
LCS	Laboratory Control Sample	VS051507E				05/17/2007	1132		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F		
Benzene, Soil	44.7123		50.00	ND	89.4	68-121			
Ethylbenzene, Soil	49.2793		50.00	ND	98.6	66-130			
Toluene, Soil	50.4183		50.00	ND	100.8	66-127			
Xylenes (total), Soil	155.124		150.0	ND	103.4	37-160			
MB	Method Blank	VS051507C				05/17/2007	1222		
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	VS051507E	335383-1			05/17/2007	1927		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F		
Benzene, Soil	108.498		50.00	65.9435	85	65-135			
Ethylbenzene, Soil	232.322		50.00	188.073	88	60-140			
Toluene, Soil	779.060		50.00	764.931	28	64-135	A		
Xylenes (total), Soil	1771.62		150.0	1640.57	87	60-140			
MSD	Matrix Spike Duplicate	VS051507E	335383-1			05/17/2007	1952		
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F		
Benzene, Soil	111.667	108.498	50.00	65.9435	91 2.9	65-135 30.0			
Toluene, Soil	803.693	779.060	50.00	764.931	78 3.1	64-135 30.0			

Job Number.: 335383	QUALITY CONTROL RESULTS	Report Date.: 05/22/2007
---------------------	-------------------------	--------------------------

CUSTOMER: Maxim Technologies, Inc.	PROJECT: PHILMEX	ATTN:
------------------------------------	------------------	-------

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

LCS	Laboratory Control Sample	VS051507H			05/17/2007	1107
-----	---------------------------	-----------	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene, Water	48.4500		50.00	ND	96.9		68-127	
Ethylbenzene, Water	50.3416		50.00	ND	100.7		64-132	
Toluene, Water	49.5921		50.00	ND	99.2		63-127	
Xylenes (total), Water	152.038		150.	ND	101.4		37-161	

MB	Method Blank	VS051507C			05/17/2007	1312
----	--------------	-----------	--	--	------------	------

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	VS051507E	334953-1	20.00000	05/17/2007	1403
----	--------------	-----------	----------	----------	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene, TCLP	46.4988		50.00	ND	93		63-123	

MSD	Matrix Spike Duplicate	VS051507E	334953-1	20.00000	05/17/2007	1428
-----	------------------------	-----------	----------	----------	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene, TCLP	46.9964	46.4988	50.00	ND	94 1.1		63-123 30.0	

SURROGATE RECOVERIES REPORT

Job Number.: 335383

Report Date.: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Method.....: Total Extractable Petroleum Hydrocarbons
Batch(s).....: 177864

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

Prep Batch....: 177714
Equipment Code: EXTGC01

Lab ID	DT	Sample ID	Date	OTERPH
335383- 1		SB1 0-6"	05/17/2007	600A
335383- 2		SB1 2'	05/17/2007	55A
335383- 3		SB2 0-6"	05/17/2007	202A
335383- 4		SB2 8'	05/17/2007	82
335383- 5		SB3 0-6"	05/17/2007	23868A
335383- 6		SB3 6'	05/17/2007	84
335383- 6 MS		SB3 6'	05/17/2007	80
335383- 6 MSD		SB3 6'	05/17/2007	83
177714--21 LCS			05/17/2007	84
177714--21 MB			05/17/2007	92

Test	Test Description	Limits
OTERPH	o-Terphenyl	60 - 140

SURROGATE RECOVERIES REPORT

Job Number.: 335383

Report Date.: 05/22/2007

CUSTOMER: 483648

PROJECT: PHILMEX

ATTN: Charlie Durret

Method.....: Total Volatile Petroleum Hydrocarbons
Batch(s).....: 177765 177862

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

Prep Batch....:
Equipment Code: BTEX07

Lab ID	DT	Sample ID	Date	ATFT	BFB
177765-	1	LCS	05/15/2007	101.1	100.6
177765-	1	MB	05/15/2007	95.9	96.5
177765-	2	LCS	05/16/2007	95.5	99.2
177765-	2	MB	05/16/2007	92.7	97.3
177862-	1	LCS	05/17/2007	128.7	134.4
177862-	1	MB	05/17/2007	75.7	95.4
335230-	2	MS BKG-SB20	05/15/2007	96.4	90.2
335230-	2	MSD BKG-SB20	05/15/2007	96.8	90.8
335232-	1	MS BKG-SB05	05/17/2007	92.4	84.4
335232-	1	MSD BKG-SB05	05/17/2007	93.4	87.1
335383-	1	SB1 0-6"	05/17/2007	1159.d	9340.d
335383-	2	SB1 2'	05/16/2007	127.6	153.4d
335383-	3	SB2 0-6"	05/16/2007	143.4	693.1d
335383-	4	SB2 8'	05/16/2007	97.0	95.5
335383-	4	MS SB2 8'	05/16/2007	97.1	89.2
335383-	4	MSD SB2 8'	05/16/2007	97.8	97.9
335383-	5	SB3 0-6"	05/17/2007	330.6d	6185.d
335383-	6	SB3 6'	05/16/2007	98.7	93.8

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

SURROGATE RECOVERIES REPORT

Job Number.: 335383

Report Date.: 05/22/2007

CUSTOMER: 483648

PROJECT: PHILMEX

ATTN: Charlie Durret

Method.....: Volatile Organics
Batch(s).....: 177928

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

Prep Batch....:
Equipment Code: GCMSVOA05

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
177928--21	LCS		05/17/2007	94.9	96.6	103.3	96.6
177928--21	MB		05/17/2007	95.9	106.8	101.2	95.1
335383- 7		TRIP BLANK	05/17/2007	92.6	95.0	92.4	88.2

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

Method.....: Volatile Organics
Batch(s).....: 177788 177920

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

Prep Batch....:
Equipment Code: GCMSVOA05

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
177788--21	LCS		05/16/2007	96.0	106.0	104.6	109.3
788--21	MB		05/16/2007	72.6	84.8	71.1	79.2
177920--21	LCS		05/17/2007	83.2	103.7	90.9	104.0
177920--21	MB		05/17/2007	100.0	108.2	99.5	97.8
335383- 1		SB1 0-6"	05/17/2007	87.7	104.0	85.9	105.6
335383- 1		SB1 0-6"	05/18/2007	73.4	137.3	67.0A	96.6
335383- 1	MS	SB1 0-6"	05/17/2007	79.3	89.2	79.9	88.1
335383- 1	MSD	SB1 0-6"	05/17/2007	83.9	102.2	94.7	100.5
335383- 2		SB1 2'	05/16/2007	70.9	97.4	83.3	94.4
335383- 2	MS	SB1 2'	05/16/2007	60.2A	86.7	68.7	81.8
335383- 2	MSD	SB1 2'	05/16/2007	73.1	106.7	84.3	95.3
335383- 3		SB2 0-6"	05/17/2007	73.7	110.5	77.1	91.5
335383- 3		SB2 0-6"	05/18/2007	75.1	79.1	68.8	87.7
335383- 4		SB2 8'	05/16/2007	65.5	88.6	73.2	83.2
335383- 5		SB3 0-6"	05/17/2007	84.0	129.5	88.5	104.0
335383- 5		SB3 0-6"	05/18/2007	82.0	78.4	79.5	86.2
335383- 6		SB3 6'	05/16/2007	68.2	87.2	79.9	92.9

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

Method.....: Volatile Organics
Batch(s).....: 177928

Method Code...: 8260
Test Matrix....: TCLP

Prep Batch....:
Equipment Code: GCMSVOA05

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
334953- 1	MS	SANITARY SEWER SOLIDS	05/17/2007	85.5	93.4	92.7	96.3
334953- 1	MSD	SANITARY SEWER SOLIDS	05/17/2007	87.0	100.1	91.4	92.9

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4	70 - 130
BRFLBE	4-Bromofluorobenzene	70 - 130

SURROGATE RECOVERIES REPORT

Job Number.: 335383

Report Date.: 05/22/2007

CUSTOMER: 483648

PROJECT: PHILMEX

ATTN: Charlie Durret

Method.....: Volatile Organics
Batch(s).....: 177928Method Code...: 8260
Test Matrix...: TCLPPrep Batch....:
Equipment Code: GCMSVOA05

Test	Test Description	Limits
DBRFLM	Dibromofluoromethane	70 - 130
TOLD8	Toluene-d8	70 - 130

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 05/22/2007

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 correction required for water analysis is for method 1006 where the reported concentration 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 reviewed.

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 characterization 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: 05/22/2007

- 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 - GFAA, 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: 05/22/2007

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: 335383

Date: 05/22/2007

CUSTOMER: Maxim Technologies, Inc.

PROJECT: PHILMEX

ATTN: Charlie Durret

Lab ID: 335383-1	Client ID: SB1 0-6"	Date Recvd: 05/16/2007	Sample Date: 05/14/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)
SW-846 3550B	Extraction (Ultrasonic) DRO	1	177714		
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	177864	177714	
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	177862		
SW-846 8260B	Volatile Organics	1	177920		
SW-846 8260B	Volatile Organics	1	177920		
					DATE/TIME ANALYZED
					DILUTION
					05/16/2007 1600
					05/17/2007 2128 60
					05/17/2007 1645 1000.0
					05/17/2007 2017 1.00000
					05/18/2007 1258 10.0000
Lab ID: 335383-2	Client ID: SB1 2'	Date Recvd: 05/16/2007	Sample Date: 05/14/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)
SW-846 3550B	Extraction (Ultrasonic) DRO	1	177714		
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	177864	177714	
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	177765		
SW-846 8260B	Volatile Organics	1	177788		
					DATE/TIME ANALYZED
					DILUTION
					05/16/2007 1600
					05/17/2007 2213 10
					05/16/2007 1905 250.00
					05/16/2007 1437 1.00000
Lab ID: 335383-3	Client ID: SB2 0-6"	Date Recvd: 05/16/2007	Sample Date: 05/14/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)
SW-846 3550B	Extraction (Ultrasonic) DRO	1	177714		
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	177864	177714	
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	177765		
SW-846 8260B	Volatile Organics	1	177920		
SW-846 8260B	Volatile Organics	1	177920		
					DATE/TIME ANALYZED
					DILUTION
					05/16/2007 1600
					05/17/2007 1712 20
					05/16/2007 1930 500.00
					05/17/2007 2042 1.00000
					05/18/2007 1323 10.0000
Lab ID: 335383-4	Client ID: SB2 8'	Date Recvd: 05/16/2007	Sample Date: 05/14/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)
SW-846 3550B	Extraction (Ultrasonic) DRO	1	177714		
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	177864	177714	
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	177765		
SW-846 8260B	Volatile Organics	1	177788		
					DATE/TIME ANALYZED
					DILUTION
					05/16/2007 1600
					05/17/2007 1546
					05/16/2007 2047 1.0000
					05/16/2007 1503 1.00000
Lab ID: 335383-5	Client ID: SB3 0-6"	Date Recvd: 05/16/2007	Sample Date: 05/14/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)
SW-846 3550B	Extraction (Ultrasonic) DRO	1	177714		
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	177864	177714	
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	177862		
SW-846 8260B	Volatile Organics	1	177920		
SW-846 8260B	Volatile Organics	1	177920		
					DATE/TIME ANALYZED
					DILUTION
					05/16/2007 1600
					05/17/2007 2128 60
					05/17/2007 1715 1000.0
					05/17/2007 2106 1.00000
					05/18/2007 1348 10.0000
Lab ID: 335383-6	Client ID: SB3 6'	Date Recvd: 05/16/2007	Sample Date: 05/14/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)
SW-846 3550B	Extraction (Ultrasonic) DRO	1	177714		
SW-846 8015B	Total Extractable Petroleum Hydrocarbons	1	177864	177714	
SW-846 8015B	Total Volatile Petroleum Hydrocarbons	1	177765		
SW-846 8260B	Volatile Organics	1	177788		
					DATE/TIME ANALYZED
					DILUTION
					05/16/2007 1600
					05/17/2007 1712
					05/16/2007 2021 1.0000
					05/16/2007 1528 1.00000
Lab ID: 335383-7	Client ID: TRIP BLANK	Date Recvd: 05/16/2007	Sample Date: 05/14/2007		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)
SW-846 8260B	Volatile Organics	1	177928		
					DATE/TIME ANALYZED
					DILUTION
					05/17/2007 1838 1.00000

CHAIN OF CUSTODY RECORD

[illegible]

STL8222H-600 (0803)

STL Houston
6310 Rothway Drive
Houston, TX 77040

*RUSH TURNAROUND MAY REQUIRE SURCHARGE

,sckl		Job Sample Receipt Checklist Report		V2
Job Number.: 335383 Location.: 57216 Check List Number.: 1 Description.:				
Customer Job ID.....: Job Check List Date.: 05/16/2007		Date of the Report.: 05/16/2007		
Project Number.: 99003817 Project Description.: Conoco Phillips		Project Manager.....: sgk		
Customer.....: Maxim Technologies, Inc.		Contact.: Charlie Durret		
Questions ?	(Y/N) Comments			
Chain of Custody Received?..... Y				
...If "yes", completed properly?..... Y				
Custody seal on shipping container?..... N				
...If "yes", custody seal intact?.....				
Custody seals on sample containers?..... N				
...If "yes", custody seal intact?.....				
Samples chilled?..... Y				
Temperature of cooler acceptable? (4 deg C +/- 2). Y	3.5			
...If "no", is sample an air matrix?(no temp req.)				
Thermometer ID..... Y	464			
Samples received intact (good condition)?..... Y				
Volatile samples acceptable? (no headspace)..... Y				
Correct containers used?..... Y				
Adequate sample volume provided?..... Y				
Samples preserved correctly?..... Y				
Samples received within holding-time?..... Y				
Agreement between COC and sample labels?..... Y				
Radioactivity at or below background levels?..... Y				
Additional.....				
Comments.....				
Sample Custodian Signature/Date..... Y	tfc			



 5/16/07