

GW - 014

**ANNUAL
REPORT**

2011

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, August 30, 2011 4:39 PM
To: 'Moore, Darrell'
Cc: Lackey, Johnny
Subject: RE: Navajo Refining Company- Lea or Lovington Refinery (GW-014) Clean up at Tk 1202 and Tk 1204 Lovington

Darrell, et al.:

Good afternoon. I revisited the supplemental reports where the investigation and cleanup documentation from Tanks 1202 and 1204 was documented separate from the Annual Report. The information is attached to this e-mail message and scanned into the file (see file location below).

It appears that photos were lacking from the excavations of contaminated soils; however, waste manifests and vertical characterization appears to demonstrate that contamination appears to have been removed and was not found at deeper depths at significant concentrations. In the future, details on the excavation depth with color photos within the excavation are requested to assist with verification that visual staining was removed during the excavation.

Please contact me if you have questions. Thank you.

Note: Please be advised that OCD approval of this plan does not relieve Navajo Refining Company of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve Navajo Refining Company of responsibility for compliance with any other federal, state, or local laws and/or regulations.

File: OCD Online "Annual Report 2011"

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462

E-mail: CarlJ.Chavez@state.nm.us

Website: <http://www.emnrd.state.nm.us/ocd/>

"Why not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward with the Rest of the Nation?" To see how, go to "Pollution Prevention & Waste Minimization" at:

<http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>)

From: Moore, Darrell [<mailto:Darrell.Moore@hollyfrontier.com>]

Sent: Friday, August 26, 2011 3:41 PM

To: Chavez, Carl J, EMNRD

Cc: Lackey, Johnny

Subject: RE: Clean up at Tk 1202 and Tk 1204 Lovington

Carl

The documentation for both spills is in Supplement 2...back in the report.

From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]

Sent: Friday, August 26, 2011 3:37 PM

To: Moore, Darrell
Cc: Lackey, Johnny
Subject: RE: Clean up at Tk 1202 and Tk 1204 Lovington

Darrell:

I think the Annual Report is what precipitated the OCD comments. I will double check it for photos, waste manifests, analytical confirmation samples that document that corrective action was completed. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
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<http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>)

From: Moore, Darrell [<mailto:Darrell.Moore@hollyfrontier.com>]
Sent: Friday, August 26, 2011 3:29 PM
To: Chavez, Carl J, EMNRD
Cc: Lackey, Johnny
Subject: Clean up at Tk 1202 and Tk 1204 Lovington

Carl,

We received the attached letter from you asking for corrective actions for two spills we reported last year in Lovington. We sent our documentation of these cleanups in our 2010 Annual Report. The documentation includes boring locations, sampling, manifests of hauled-off dirt, etc for both spills. I looked on the OCD website and the report (with the documentation for both spills) is on the website. Are you expecting more than this? We've dug both spills up. Drilled borings and sampled to delineate the spills limits. You've got all those results.

Darrell Moore
Environmental Manager for Water and Waste
The Holly Frontier Companies
Phone: 575-746-5281
Cell: 575-703-5058

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TANKS 1202 &
1204 Investigation
& Remediation

2011

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New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary

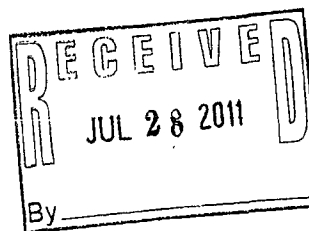
Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



July 26, 2011

Mr. Darrell Moore
Environmental Manager for Water & Waste
Navajo Refining Company- Lovington Refinery
PO Box 159
Artesia, New Mexico 88211-0159



Dear Mr. Moore:

**Re: NAVAJO REFINING COMPANY- LOVINGTON REFINERY DISCHARGE PERMIT
(GW-014) ANNUAL REPORT REVIEW 2011 & CORRECTIVE ACTIONS**

The New Mexico Oil Conservation Division (OCD) has completed its review of the above subject report received under Navajo Refining Company's cover letter dated April 15, 2011.

The OCD requires the following:

Tank Areas 1202 and Tank 1204:

Corrective actions associated with the tank investigations are required. Please provide documentation that corrective actions have been performed and verify that cleanup of environmental contamination at these locations have been adequately completed within 60 days of the date of this letter.

Please contact me at (505) 476-3490 if you have questions. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Carl J. Chavez".

Carl J. Chavez
Environmental Engineer

CJC/cjc

xc: OCD District Office

File: GW-014 ("Annual Reports" Thumbnail)

Oil Conservation Division
1220 South St. Francis Drive • Santa Fe, New Mexico 87505
Phone (505) 476-3440 • Fax (505) 476-3462 • www.emnrd.state.nm.us/OCD



istrict I
25 N. French Dr., Hobbs, NM 88240
istrict II
301 W. Grand Avenue, Artesia, NM 88210
istrict III
00 Rio Brazos Road, Aztec, NM 87410
istrict IV
20 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-141
Revised October 10, 2003

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: Navajo Refining Co. LLC	Contact: Aaron Strange
Address: 7406 South Main Lovington, NM	Telephone No. 575-748-3311
Facility Name: Lovington Plant	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Spill of Crude Naphtha Mix	Volume of Release: ~12 to 15 bbls	Volume Recovered: ~ 7 to 9 bbls
Source of Release: Underground Pipe Line	Date and Hour of Occurrence: 04/21/2010 ~ 15:00	Date and Hour of Discovery: 04/21/2010 ~ 15:10
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Spoke with Carl Chavez from OCD Santa Fe (505-476-3490), and left voicemail with OCD Hobbs office (575-393-6161 extension 111).	
By Whom? Aaron Strange	Date and Hour: 04/21/2010 at ~16:03 to Carl Chavez (OCD Santa Fe), and 04/21/2010 at ~16:28 to the OCD Hobbs office.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*
NA

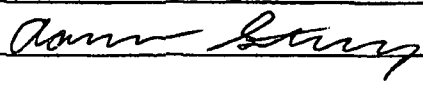
Describe Cause of Problem and Remedial Action Taken.*

On 04/21/2010 at ~ 15:10 a leak was found on the underground pipeline (Crude Naphtha Mix) that comes from Tank 1202. The Line was blocked in at the transfer pump and isolated until repairs are completed.

Describe Area Affected and Cleanup Action Taken.*

The area affected is under the road (by the warehouse) where the line leaked and where the leak pooled up under the pipe rack. The plant vacuum truck immediately started to remove the standing liquid. It recovered approximately 7 to 9 barrels of product. A backhoe has excavated the contaminated soil. Safety and Environmental Solutions will be doing the delineation on the spill and any bottom hole sampling.

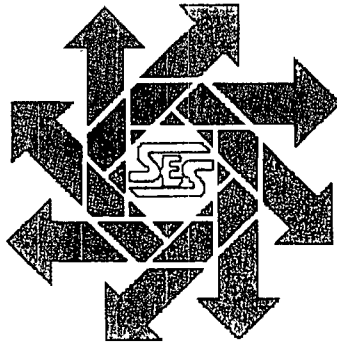
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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: Aaron Strange	Approved by District Supervisor:		
Title: Sr. Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: aaron.strange@hollycorp.com	Conditions of Approval:		Attached ☐
Date: 04/23/2010	Phone: 575-703-5057		

Attach Additional Sheets If Necessary

**Navajo Refining Company
Naptha/ Crude Release
Lea Refinery
Delineation Report/Work Plan
Section 36, Township 16S, Range 36E
Lea County, New Mexico**

October 22, 2010



Prepared for:

**Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211**

By:

**Safety & Environmental Solutions, Inc.
703 East Clinton
Hobbs, New Mexico 88240
(575) 397-0510**

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I. Company Contacts

NAME	Company	Telephone	E-mail
Darrell Moore	Navajo Refining	575-748-3311	darrell.moore@navajo-refining.com
Bob Allen	SESI	505-397-0510	ballen@sesi-nm.com

II. Background

On April 21, 2010 at 1510 hours a leak was found on the pipeline (crude-naptha mix) that comes from Tank 1202. The leak occurred in one of several pipelines that cross under a road within the refinery. The product surfaced at the southeast end of the crossing and flowed approximately 170 feet southeast on the northeast side of the ground level pipeline rack. At that point, it ponded in an area approximately 50 feet by 21 feet where it was recovered. Approximately 12 to 15 barrels was lost and an estimated 7 to 9 barrels was recovered by vacuum truck.

Notification was made by telephone to OCD Santa Fe about an hour after the release and a form C-141 was prepared and submitted to OCD. Safety and Environmental Solutions, Inc. (SESI) was engaged by Lea Refining Company to perform delineation services at the Lea Refinery.

III. Surface and Ground Water

The refinery has numerous monitor wells in the vicinity of this spill. The depth of water in the nearest monitor well (MW-3) is 103.29 feet below land surface measured on January 13, 2010.

IV. Soils

The surface soils in the area are predominantly sand and sandy loam.

V. Work Performed

On May 12, 2010, David Boyer, Hydro-geologist with SESI, was onsite with Eco Environmental Drilling to install a borehole to delineate the subsurface of the spill site. The borehole was advanced to a total depth of 34' bgs. Samples were taken approximately every 5', properly packaged and sent under chain of custody to ALS Laboratory Group in Houston, Texas for analysis for Total Petroleum Hydrocarbons (TPH GRO, DRO, ORO) (EPA Method SW8015) and Benzene, Toluene, Ethylbenzene and Xylenes (BTEX, EPA Method WS8021B).

The results of the analysis are as follows:

Sample ID	GRO (mg/kg)	DRO (mg/kg)	MOR (mg/kg)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
BH#1 0-4' (cuttings)	17	13,000	2,800	15,817	<0.12	0.15	2.8	4.9
BH#1 4-9'	16	7,200	1,800	9,016	<0.12	0.14	1.2	3.1
BH#1 13-14'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030
BH#1 18-19'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030
BH#1 23-24'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030

Sample ID	GRO (mg/kg)	DRO (mg/kg)	MOR (mg/kg)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
BH#1 28-29'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030
BH#1 33-34'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030

All borings were backfilled from total depth to surface with bentonite and hydrated.

PID readings taken on site indicated volatiles above 20 ppm to a depth of 24 feet thus drilling continued deeper than laboratory results would indicate was necessary. The laboratory results indicate only minimal vertical migration to the depth between 9 and 13 feet below ground surface.

VI. Action Plan

It is recommended that the spill area that is not under the piping be excavated to remove the most highly contaminated soils and backfilled with clean soil and returned to grade.

The excavated soils will be transported to an NMOCD approved facility for disposal. Upon completion a closure report will be submitted to the NMOCD.

VII. Figures & Appendices

Figure 1 – Vicinity Map

Figure 2 – Site Plan

Figure 3 – Logs of Boring

Appendix A – Analytical Results

Appendix B – C-141

Figure 1
Vicinity Map

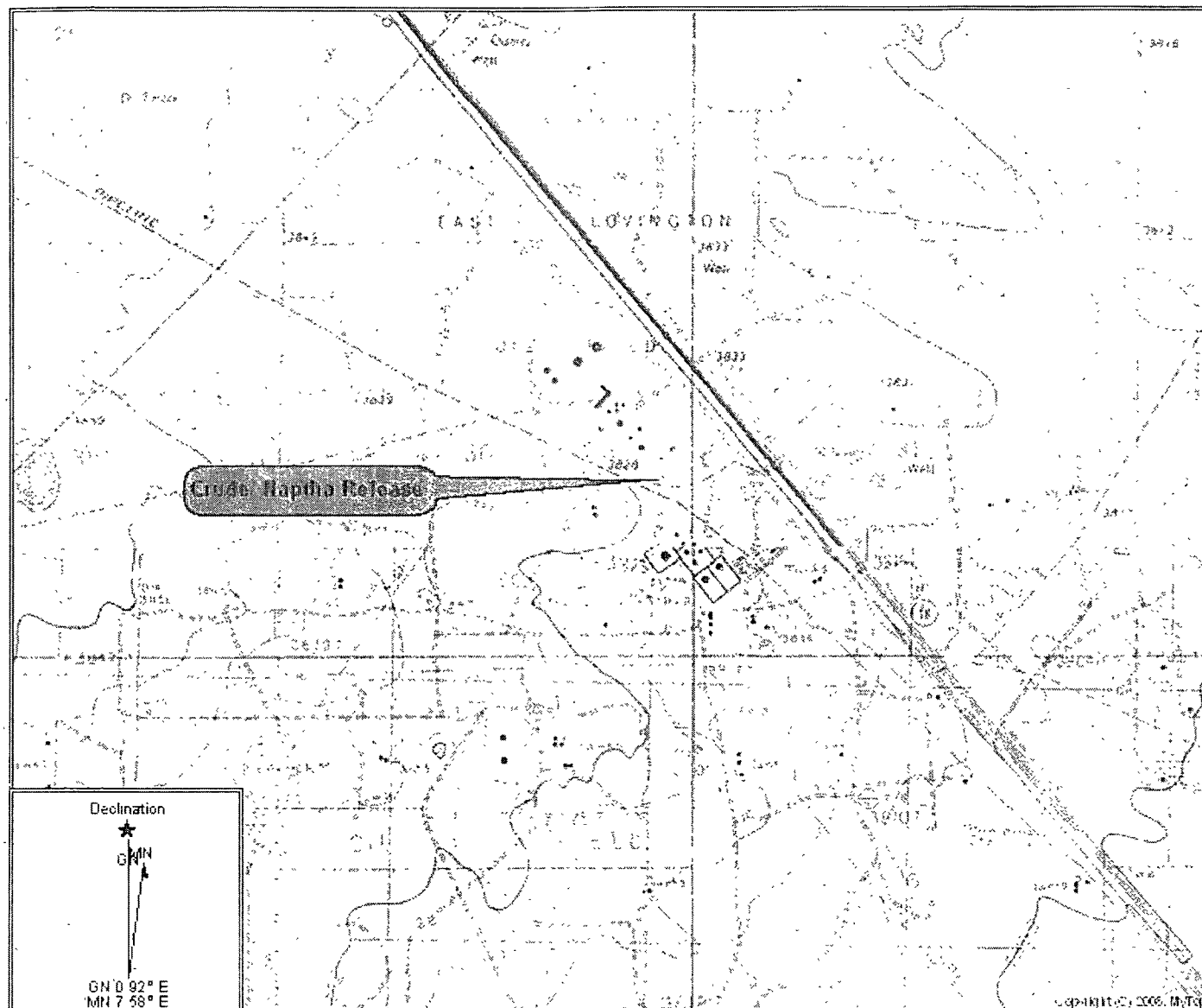
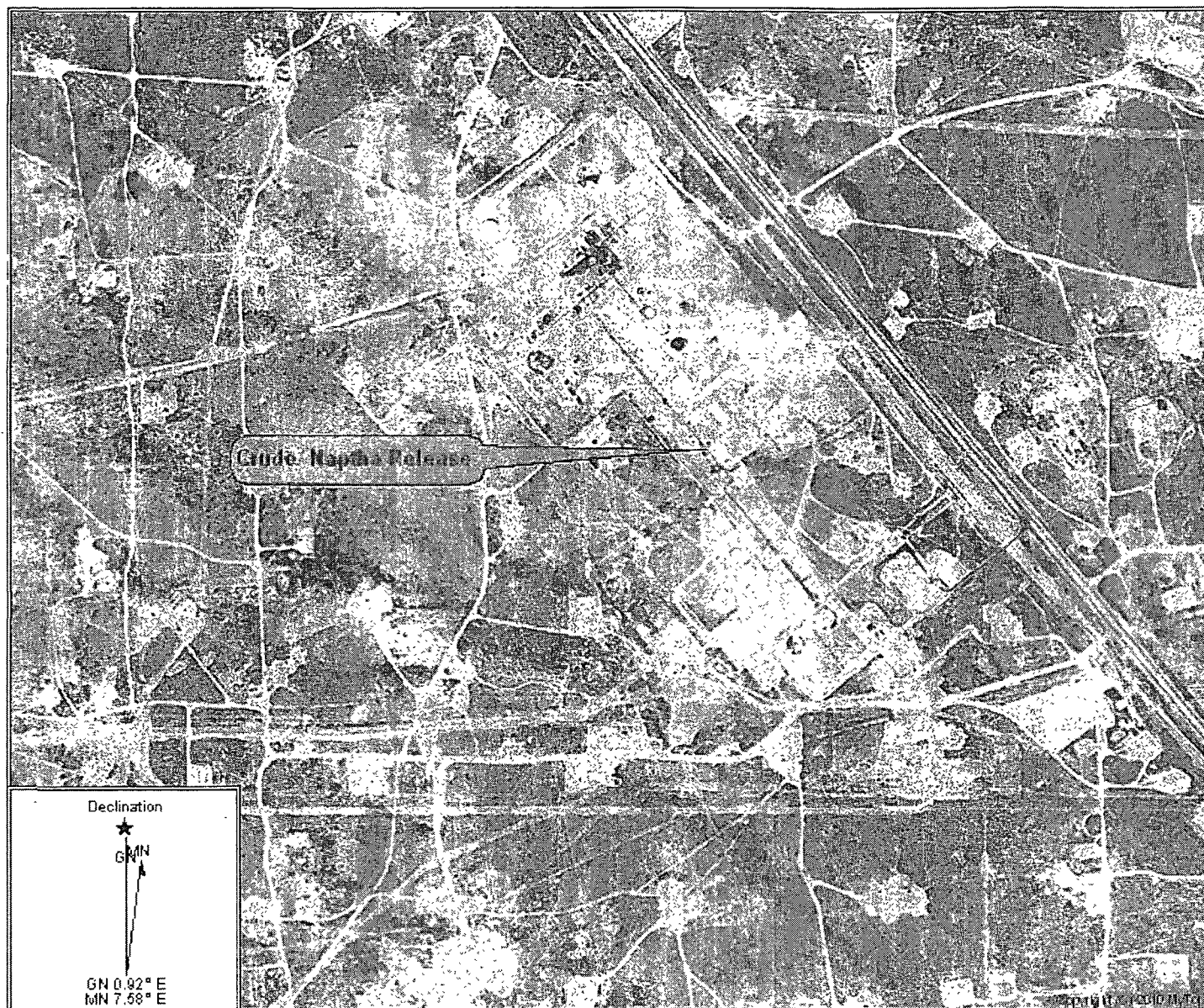


Figure 2 Site Plan



Map Name: NE LOVINGTON SE, NM
Scale: 1 inch = 1,000 ft

Map Center: 032.8764106° N 103.3027293° W
Horizontal Datum: WGS84

Figure 2

Log of Boring



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING 1

(Page 1 of 1)

Navajo Refinery
Les Refinery Crude/Naptha Release
Sec. 36, Township 16S, Range 36E
Eddy County, New Mexico
N32° 52' 39 3", W103° 18' 02.5"

Date/Time Started 05/12/10 9 15
Date/Time Completed : 05/12/10 12 30
Hole Diameter 8 1/4 in
Drilling Method Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

Drilled By Eco/Enviro Drilling
Sampling Method 5 ft core barrel
Logged By Dave Boyer, SESI

Depth in Feet	Sample Method	Sample Recovery (ft.)	USCS	GRAPHIC	Sample Method SS Split Spoon (18" or 24") CB Core Barrel (2 5' or 5') CT Auger Cuttings NR No recovery	DESCRIPTION	Lab No	GRO (mg/Kg)28	DRO (mg/Kg)	MOR (mg/Kg)	TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
0					Auger cuttings, 0-4 FT.										
1					0-2 ft. Loose Rock										
2	CT		CA/SM		2-4 ft. - CALICHE, with silty sand, sandy silt, light brown, strong H/C odor	1005384-01	17	13,000	2,800	15,817	<0 12	0 15	2 8	4 9	
3															
4															
5					4-9 ft. - CALICHE and SANDY SILT with light brown, added water at 9 ft to remove cuttings, H/C odor	1005384-02	16	7,200	1,800	9,016	<0 12	0 14	1 2	3 1	
6			CA/SM												
7	CB	0.9													
8															
9															
10			CA/SM		9-13 ft - CALICHE, soft and SANDY SILT										
11															
12	CB	1.4													
13															
14			SP		Transition from caliche to sand 13-14 ft. - SAND, slight H/C odor	1005384-03	<0.050	<1 7	<3.4	<5 1	<0.0010	<0.0010	<0.0010	<0.0010	
15															
16					14-19 ft. - SAND, light brown, very fine to fine grained, moist, occasional rock, slight H/C odor										
17	CB	2	SP			1005384-04	<0.050	<1 7	<3.4	<5 1	<0.0010	<0.0010	<0.0010	<0.0010	
18															
19															
20					19-24 ft. SAND, very fine grained, uniform, slightly moist, occasional caliche rock to 1 5 in, possible H/C odor										
21			SP			1005384-05	<0.050	<1 7	<3.4	<5 1	<0.0010	<0.0010	<0.0010	<0.0010	
22	CB	1.9													
23															
24															
25					24-29 ft. - SAND, light brown with occasional carbonate cemented sandstone, sand very fine grained, dry, no hydrocarbon staining or odor										
26			SP			1005384-06	<0.050	<1 7	<3.4	<5 1	<0.0010	<0.0010	<0.0010	<0.0010	
27	CB	1.9													
28															
29															
30					29-34 ft. - Added water for drilling SAND, light brown with frequent sandstone pieces, sandstone very well cemented, no hydrocarbon staining or odor.										
31			SP			1005384-08	<0.050	<1.7	<3.4	<5 1	<0.0010	<0.0010	<0.0010	<0.0010	
32	CB	1.6													
33															
34															
35															

Notes

Location is edge of dug pit where contamination removed
Plugged back to surface with 15 bags bentonite, hydrated.

Appendix A

Analytical Results

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



Environmental Division

28-May-2010

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (575) 748-6733
Fax: (575) 746-5421

Re: Lea Refinery Crude/Naptha Release

Work Order: 1005384

Dear Darrell,

ALS Laboratory Group received 7 samples on 13-May-2010 08:50 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Laboratory Group and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 20.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by Glenda H Ramos

JayLynn F Thibault
Project Manager



Certificate No: T104704231-09A-TX

ALS Group USA, Corp.

Part of the **ALS Laboratory Group**

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338

Phone: (281) 530-5656 Fax: (281) 530-5887

www.alsglobal.com www.elabi.com

A Campbell Brothers Limited Company

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
Project: Lea Refinery Crude/Naptha Release
Work Order: 1005384

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1005384-01	BH-1 Auger Cuttings 0-4'	Soil		5/12/2010 09:50	5/13/2010 08:50	☐
1005384-02	BH1 4-9'	Soil		5/12/2010 10:40	5/13/2010 08:50	☐
1005384-03	BH-1 13-14'	Soil		5/12/2010 10:55	5/13/2010 08:50	☐
1005384-04	BH-1 18-19'	Soil		5/12/2010 11:05	5/13/2010 08:50	☐
1005384-05	BH-1 23-24'	Soil		5/12/2010 11:15	5/13/2010 08:50	☐
1005384-06	BH-1 28-29'	Soil		5/12/2010 11:35	5/13/2010 08:50	☐
1005384-07	BH-1 33-34'	Soil		5/12/2010 12:05	5/13/2010 08:50	☐

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
Project: Lea Refinery Crude/Naptha Release
Work Order: 1005384

Case Narrative

BTEX (Sample 1005384-01 and 02) Lowest practical dilution due to matrix.

TPH (Sample 1005384-01 and 02) recovery out of control limits due to dilution.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH-1 Auger Cuttings 0-4'
 Collection Date: 5/12/2010 09:50 AM

Work Order: 1005384
 Lab ID: 1005384-01
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	13,000		340	mg/Kg	200	5/27/2010 04:41 PM
TPH (Motor Oil Range)	2,800		680	mg/Kg	200	5/27/2010 04:41 PM
Surr: 2-Fluorobiphenyl	0	S	70-130	%REC	200	5/27/2010 04:41 PM
GASOLINE RANGE ORGANICS			SW8015			Analyst: KKP
Gasoline Range Organics	17		0.25	mg/Kg	5	5/19/2010 04:01 PM
Surr: 4-Bromofluorobenzene	110		70-130	%REC	5	5/19/2010 04:01 PM
BTEX			SW8021B			Analyst: KKP
Benzene	ND		0.12	mg/Kg	125	5/20/2010 05:18 PM
Toluene	0.15		0.12	mg/Kg	125	5/20/2010 05:18 PM
Ethylbenzene	2.8		0.12	mg/Kg	125	5/20/2010 05:18 PM
Xylenes, Total	4.9		0.38	mg/Kg	125	5/20/2010 05:18 PM
Surr: 4-Bromofluorobenzene	96.0		75-131	%REC	125	5/20/2010 05:18 PM
Surr: Trifluorotoluene	83.2		73-130	%REC	125	5/20/2010 05:18 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company

Project: Lea Refinery Crude/Naptha Release

Work Order: 1005384

Sample ID: BH1 4-9'

Lab ID: 1005384-02

Collection Date: 5/12/2010 10:40 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	7,200		340	mg/Kg	200	5/27/2010 04:22 PM
TPH (Motor Oil Range)	1,800		680	mg/Kg	200	5/27/2010 04:22 PM
Surr: 2-Fluorobiphenyl	0	S	70-130	%REC	200	5/27/2010 04:22 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	16		0.25	mg/Kg	5	5/19/2010 05:08 PM
Surr: 4-Bromofluorobenzene	117		70-130	%REC	5	5/19/2010 05:08 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.12	mg/Kg	125	5/20/2010 05:46 PM
Toluene	0.14		0.12	mg/Kg	125	5/20/2010 05:46 PM
Ethylbenzene	1.2		0.12	mg/Kg	125	5/20/2010 05:46 PM
Xylenes, Total	3.1		0.38	mg/Kg	125	5/20/2010 05:46 PM
Surr: 4-Bromofluorobenzene	96.7		75-131	%REC	125	5/20/2010 05:46 PM
Surr: Trifluorotoluene	83.8		73-130	%REC	125	5/20/2010 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH-1 13-14'
 Collection Date: 5/12/2010 10:55 AM

Work Order: 1005384
 Lab ID: 1005384-03
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/27/2010 04:02 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/27/2010 04:02 PM
Surr: 2-Fluorobiphenyl	101		70-130	%REC	1	5/27/2010 04:02 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 06:42 PM
Surr: 4-Bromofluorobenzene	86.0		70-130	%REC	1	5/19/2010 06:42 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 04:46 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 04:46 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 04:46 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 04:46 PM
Surr: 4-Bromofluorobenzene	103		75-131	%REC	1	5/19/2010 04:46 PM
Surr: Trifluorotoluene	97.7		73-130	%REC	1	5/19/2010 04:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
Project: Lea Refinery Crude/Naptha Release
Sample ID: BH-1 18-19'
Collection Date: 5/12/2010 11:05 AM

Work Order: 1005384
Lab ID: 1005384-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/14/2010 06:20 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/14/2010 06:20 PM
Surr: 2-Fluorobiphenyl	106		70-130	%REC	1	5/14/2010 06:20 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 07:07 PM
Surr: 4-Bromofluorobenzene	82.4		70-130	%REC	1	5/19/2010 07:07 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 05:06 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 05:06 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 05:06 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 05:06 PM
Surr: 4-Bromofluorobenzene	99.7		75-131	%REC	1	5/19/2010 05:06 PM
Surr: Trifluorotoluene	97.8		73-130	%REC	1	5/19/2010 05:06 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH-1 23-24'
 Collection Date: 5/12/2010 11:15 AM

Work Order: 1005384
 Lab ID: 1005384-05
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/14/2010 06:40 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/14/2010 06:40 PM
Surr. 2-Fluorobiphenyl	105		70-130	%REC	1	5/14/2010 06:40 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 07:31 PM
Surr. 4-Bromofluorobenzene	81.5		70-130	%REC	1	5/19/2010 07:31 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 05:26 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 05:26 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 05:26 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 05:26 PM
Surr. 4-Bromofluorobenzene	99.5		75-131	%REC	1	5/19/2010 05:26 PM
Surr. Trifluorotoluene	96.9		73-130	%REC	1	5/19/2010 05:26 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH-1 28-29'
 Collection Date: 5/12/2010 11:35 AM

Work Order: 1005384
 Lab ID: 1005384-06
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/14/2010 06:59 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/14/2010 06:59 PM
Surr: 2-Fluorobiphenyl	82.7		70-130	%REC	1	5/14/2010 06:59 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 07:55 PM
Surr: 4-Bromofluorobenzene	80.8		70-130	%REC	1	5/19/2010 07:55 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 05:46 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 05:46 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 05:46 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 05:46 PM
Surr: 4-Bromofluorobenzene	98.0		75-131	%REC	1	5/19/2010 05:46 PM
Surr: Trifluorotoluene	94.7		73-130	%REC	1	5/19/2010 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha.Release
 Sample ID: BH-1 33-34'
 Collection Date: 5/12/2010 12:05 PM

Work Order: 1005384
 Lab ID: 1005384-07
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/14/2010 07:18 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/14/2010 07:18 PM
Surr: 2-Fluorobiphenyl	102		70-130	%REC	1	5/14/2010 07:18 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 08:19 PM
Surr: 4-Bromofluorobenzene	81.5		70-130	%REC	1	5/19/2010 08:19 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 06:06 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 06:06 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 06:06 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 06:06 PM
Surr: 4-Bromofluorobenzene	100		75-131	%REC	1	5/19/2010 06:06 PM
Surr: Trifluorotoluene	98.4		73-130	%REC	1	5/19/2010 06:06 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Work Order: 1005384
 Project: Lea Refinery Crude/Naptha Release

QC BATCH REPORT

Batch ID: 42940 Instrument ID FID-7 Method: SW8015M

MBLK Sample ID: FBLKS1-100514-42940 Units: mg/Kg Analysis Date: 5/14/2010 04:57 PM

Client ID: Run ID: FID-7_100514A SeqNo: 1965833 Prep Date: 5/14/2010 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	ND	1.7								
TPH (Motor Oil Range)	ND	3.4								
Surr: 2-Fluorobiphenyl	3.966	0.10	3.33	0	119	70-130	0			

LCS Sample ID: FLCSS1-100514-42940 Units: mg/Kg Analysis Date: 5/14/2010 05:16 PM

Client ID: Run ID: FID-7_100514A SeqNo: 1965834 Prep Date: 5/14/2010 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	37.29	1.7	33.33	0	112	70-130	0			
TPH (Motor Oil Range)	34.87	3.4	33.33	0	105	70-130	0			
Surr: 2-Fluorobiphenyl	4.212	0.10	3.33	0	126	70-130	0			

MS Sample ID: 1005384-07BMS Units: mg/Kg Analysis Date: 5/14/2010 07:38 PM

Client ID: BH-1 33-34' Run ID: FID-7_100514A SeqNo: 1965875 Prep Date: 5/14/2010 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	40.01	1.7	33.26	1.348	116	70-130	0			
TPH (Motor Oil Range)	42.82	3.4	33.26	0.9376	126	70-130	0			
Surr: 2-Fluorobiphenyl	3.802	0.10	3.323	0	114	70-130	0			

MSD Sample ID: 1005384-07BMSD Units: mg/Kg Analysis Date: 5/14/2010 07:57 PM

Client ID: BH-1 33-34' Run ID: FID-7_100514A SeqNo: 1965876 Prep Date: 5/14/2010 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	41.39	1.7	33.32	1.348	120	70-130	40.01	3.38	30	
TPH (Motor Oil Range)	39.94	3.4	33.32	0.9376	117	70-130	42.82	6.96	30	
Surr: 2-Fluorobiphenyl	3.536	0.10	3.329	0	106	70-130	3.802	7.25	30	

The following samples were analyzed in this batch:

1005384-01B	1005384-02B	1005384-03B
1005384-04B	1005384-05B	1005384-06B
1005384-07B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Navajo Refining Company
 Work Order: 1005384
 Project: Lea Refinery Crude/Naptha Release

QC BATCH REPORT

Batch ID: R91212 Instrument ID BTEX3 Method: SW8021B

MBLK Sample ID: BBLKS1-051910-R91212 Units: µg/Kg Analysis Date: 5/19/2010 11:42 AM

Client ID: Run ID: BTEX3_100519A SeqNo: 1964639 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	28.15	1.0	30	0	93.8	75-131	0			
Surr: Trifluorotoluene	28.41	1.0	30	0	94.7	73-130	0			

LCS Sample ID: BLCSS1-051910-R91212 Units: µg/Kg Analysis Date: 5/19/2010 11:12 AM

Client ID: Run ID: BTEX3_100519A SeqNo: 1964638 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.2	1.0	20	0	96	74-129	0			
Toluene	19.16	1.0	20	0	95.8	75-128	0			
Ethylbenzene	19.59	1.0	20	0	97.9	73-127	0			
Xylenes, Total	58.32	3.0	60	0	97.2	74-127	0			
Surr: 4-Bromofluorobenzene	27.31	1.0	30	0	91	75-131	0			
Surr: Trifluorotoluene	28.61	1.0	30	0	95.4	73-130	0			

MS Sample ID: 1005488-02AMS Units: µg/Kg Analysis Date: 5/19/2010 03:02 PM

Client ID: Run ID: BTEX3_100519A SeqNo: 1964646 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.12	1.0	20	0	95.6	74-129	0			
Toluene	18.91	1.0	20	0	94.5	75-128	0			
Ethylbenzene	19.53	1.0	20	0	97.6	73-127	0			
Xylenes, Total	58.41	3.0	60	0	97.3	74-127	0			
Surr: 4-Bromofluorobenzene	28.19	1.0	30	0	94	75-131	0			
Surr: Trifluorotoluene	29.01	1.0	30	0	96.7	73-130	0			

MSD Sample ID: 1005488-02AMSD Units: µg/Kg Analysis Date: 5/19/2010 03:22 PM

Client ID: Run ID: BTEX3_100519A SeqNo: 1964647 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.21	1.0	20	0	96.1	74-129	19.12	0.492	30	
Toluene	19.28	1.0	20	0	96.4	75-128	18.91	1.92	30	
Ethylbenzene	19.76	1.0	20	0	98.8	73-127	19.53	1.19	30	
Xylenes, Total	58.21	3.0	60	0	97	74-127	58.41	0.343	30	
Surr: 4-Bromofluorobenzene	29.28	1.0	30	0	97.6	75-131	28.19	3.79	30	
Surr: Trifluorotoluene	29.27	1.0	30	0	97.6	73-130	29.01	0.881	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation

Client: Navajo Refining Company
Work Order: 1005384
Project: Lea Refinery Crude/Naptha Release

QC BATCH REPORT

Batch ID: **R91212** Instrument ID **BTEX3** Method: **SW8021B**

The following samples were analyzed in this batch:

1005384-03A	1005384-04A	1005384-05A
1005384-06A	1005384-07A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Navajo Refining Company
 Work Order: 1005384
 Project: Lea Refinery Crude/Naptha Release

QC BATCH REPORT

Batch ID: R91273 Instrument ID BTEX1 Method. SW8021B

MBLK	Sample ID: BBLKW1-052010-R91273				Units: µg/L		Analysis Date: 5/20/2010 07:06 AM			
Client ID:	Run ID: BTEX1_100520A				SeqNo: 1966126		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	29.3	1.0	30	0	97.7	77-129	0			
Surr: Trifluorotoluene	26.99	1.0	30	0	90	75-130	0			

MBLK	Sample ID: MEOHW1-052010-R91273					Units: µg/L		Analysis Date: 5/20/2010 11:48 AM			
Client ID:	Run ID: BTEX1_100520A					SeqNo: 1966135		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 4-Bromofluorobenzene	28.94	1.0	30	0	96.5	77-129	0				
Surr: Trifluorotoluene	26.04	1.0	30	0	86.8	75-130	0				

LCS	Sample ID: BLC5W1-052010-R91273				Units: µg/L		Analysis Date: 5/20/2010 06:49 AM			
Client ID:	Run ID: BTEX1_100520A				SeqNo: 1966125		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.87	1.0	20	0	104	77-126	0			
Toluene	19.81	1.0	20	0	99	80-124	0			
Ethylbenzene	19.31	1.0	20	0	96.5	76-125	0			
Xylenes, Total	58.09	3.0	60	0	96.8	79-124	0			
Surr: 4-Bromofluorobenzene	29.17	1.0	30	0	97.2	77-129	0			
Surr: Trifluorotoluene	27.69	1.0	30	0	92.3	75-130	0			

MS	Sample ID: 1005463-08AMS					Units: µg/L		Analysis Date: 5/20/2010 10:10 AM			
Client ID:	Run ID: BTEX1_100520A					SeqNo: 1966131		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	19.94	1.0	20	0	99.7	77-126	0				
Toluene	19.48	1.0	20	0	97.4	80-124	0				
Ethylbenzene	19.33	1.0	20	0	96.6	76-125	0				
Xylenes, Total	57.59	3.0	60	0	96	79-124	0				
Surr: 4-Bromofluorobenzene	29.17	1.0	30	0	97.2	77-129	0				
Surr: Trifluorotoluene	26.32	1.0	30	0	87.7	75-130	0				

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Navajo Refining Company
Work Order: 1005384
Project: Lea Refinery Crude/Naptha Release

QC BATCH REPORT

Batch ID: R91273 Instrument ID BTEX1 Method: SW8021B

MSD Sample ID: 1005463-08AMSD Units: µg/L Analysis Date: 5/20/2010 10:27 AM

Client ID: Run ID: BTEX1_100520A SeqNo: 1966132 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.32	1.0	20	0	102	77-126	19.94	1.93	20	
Toluene	19.56	1.0	20	0	97.8	80-124	19.48	0.382	20	
Ethylbenzene	19.17	1.0	20	0	95.8	76-125	19.33	0.837	20	
Xylenes, Total	57.42	3.0	60	0	95.7	79-124	57.59	0.292	20	
Surr. 4-Bromofluorobenzene	29.49	1.0	30	0	98.3	77-129	29.17	1.1	20	
Surr. Trifluorotoluene	27.83	1.0	30	0	92.8	75-130	26.32	5.55	20	

The following samples were analyzed in this batch:

1005384-01A 1005384-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Navajo Refining Company
 Work Order: 1005384
 Project: Lea Refinery Crude/Naptha Release

QC BATCH REPORT

Batch ID: R91452 Instrument ID FID-9 Method: SW8015

MBLK Sample ID: GBLKS-051910-R91452 Units: mg/Kg Analysis Date: 5/19/2010 03:13 PM

Client ID: Run ID: FID-9_100519A SeqNo: 1970164 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	ND	0.050								
Surr: 4-Bromofluorobenzene	0.08416	0.0050	0.1	0	84.2	70-130	0			

LCS Sample ID: GLCSS-051910-R91452 Units: mg/Kg Analysis Date: 5/19/2010 01:55 PM

Client ID: Run ID: FID-9_100519A SeqNo: 1970162 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.165	0.050	1	0	116	70-130	0			
Surr: 4-Bromofluorobenzene	0.08689	0.0050	0.1	0	86.9	70-130	0			

LCSD Sample ID: GLCSDS-051910-R91452 Units: mg/Kg Analysis Date: 5/19/2010 02:19 PM

Client ID: Run ID: FID-9_100519A SeqNo: 1970163 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.134	0.050	1	0	113	70-130	1.165	2.63	30	
Surr: 4-Bromofluorobenzene	0.08509	0.0050	0.1	0	85.1	70-130	0.08689	2.09	30	

MS Sample ID: 1005384-07BMS Units: mg/Kg Analysis Date: 5/19/2010 09:07 PM

Client ID: BH-1 33-34' Run ID: FID-9_100519A SeqNo: 1970172 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.111	0.050	1	0	111	70-130	0			
Surr: 4-Bromofluorobenzene	0.0826	0.0050	0.1	0	82.6	70-130	0			

MSD Sample ID: 1005384-07BMSD Units: mg/Kg Analysis Date: 5/19/2010 09:30 PM

Client ID: BH-1 33-34' Run ID: FID-9_100519A SeqNo: 1970173 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.109	0.050	1	0	111	70-130	1.111	0.202	30	
Surr: 4-Bromofluorobenzene	0.08118	0.0050	0.1	0	81.2	70-130	0.0826	1.73	30	

The following samples were analyzed in this batch:

1005384-01B	1005384-02B	1005384-03B
1005384-04B	1005384-05B	1005384-06B
1005384-07B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
Project: Lea Refinery Crude/Naptha Release
WorkOrder: 1005384

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram



ALS Laboratory Group
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Chain of Custody Form

ALS Laboratory Group
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

Page 1 of 1

ALS Project Manager:

ALS Work Order #: 1005384

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order:		Project Name:	Lea Refinery New Wells Coker/Asphalt Release	A:	BTEX (8021)
Work Order:		Project Number:	NAU-10-004	B:	GRO (8015M)
Company Name:	Navajo Refining Company	Bill To Company:	Navajo Refining Company	C:	DRO (8015M)
Send Report To:	Darrell Moore	Invoice Attn:	Darrell Moore	D:	ORO (8015M)
Address:	P.O. Box 159	Address:	P.O. Box 159	E:	
City/State/Zip:	Artesia, NM 88211	City/State/Zip:	Artesia, NM 88211	F:	
Phone:	(505) 748-3311	Phone:	(505) 748-3311	G:	
Fax:	(505) 746-5421	Fax:	(505) 746-5421	H:	
e-Mail Address:	dgbayer@SESI-NM.com	e-Mail Address:		I:	
				J:	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold.
1	BH-1 Auger On/Off 0-4'	5/12/10	0950	Soil	8	2	X	X	X	X							
2	BH-1 4-9'		1040				X	X	X	X							
3	BH-1 13-14'		1055				X	X	X	X							
4	BH-1 18-19'		1105				X	X	X	X							
5	BH-1 23-24'		1115				X	X	X	X							
6	BH-1 28-29'		1135				X	X	X	X							
7	BH-1 33-34'	5/12/10	1205	Soil	8	2	X	X	X	X							
8																	
9																	
10																	

Sampler(s) Please Print & Sign: <i>Dave Boyer</i>		Shipment Method: <i>FEDEX</i>		Required Turnaround Time: (Check Box) ☒ Std 10 Wk Days ☐ 5 Wk Days ☐ Other		Results Due Date:	
Relinquished by: <i>Dave Boyer</i>	Date: <i>5/12/10</i> Time: <i>1615</i>	Received by: <i>[Signature]</i>	Notes: 10 Day TAT. Cc Dave Boyer				
Relinquished by:	Date:	Time:	Received by (Laboratory): <i>[Signature]</i>	Cooler ID:	Cooler Temp:	QC Package: (Check One Box Below) ☒ Level II Std QC ☐ TRRP Check List ☐ Level III Std QC/Raw Data ☐ TRRP Level IV ☐ Level IV SW/4H/CLP ☐ Other	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):				
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-50/35							

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are not to be used for legal purposes.
3. The accuracy of the results is dependent on the quality of the samples and the accuracy of the data provided.

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Sample Receipt Checklist

Client Name: NAVAJO REFINING

Date/Time Received: 13-May-10 08:50

Work Order: 1005384

Received by: RSZ

Checklist completed by Robert D. Harris 13-May-10
eSignature Date

Reviewed by: _____
eSignature Date

Matrices: soils

Carrier name: FedEx

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☒ No ☐ Not Present ☐

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Temperature(s)/Thermometer(s): 2.6c 002

Cooler(s)/Kit(s): 2491

Water - VOA vials have zero headspace? Yes ☐ No ☐ No VOA vials submitted ☒

Water - pH acceptable upon receipt? Yes ☐ No ☐ N/A ☒

pH adjusted? Yes ☐ No ☐ N/A ☒

pH adjusted by: _____

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

41 This portion can be removed for Recipient's records.

to 3/12/10 FedEx Tracking Number 869809949890

Sender's
Name

K. BAYER

Phone

313-587-1127

Company

IBEN

Address

JAMES E. CLINTON

Dept./Floor/Room

City

Houston

State

TX

ZIP

77040

Our Internal Billing Reference



ALS Laboratory Group

10450 Stancliff Rd., Suite 210

Houston, Texas 77099

Tel. +1 281 530 5656

Fax. +1 281 530 5887

Date:

Name:

Company:

CUSTODY SEAL

Date: 3/12/10 Time: 1645
Name: K. BAYER
Company: IBEN

Seal Broken By:

RS

Date:

5/13/10

District I
1825 N. French Dr., Hobbs, NM 88240
District II
1041 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-141
Revised October 10, 2003

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: Navajo Refining Co. LLC	Contact: Aaron Strange
Address: 7406 South Main Lovington, NM	Telephone No. 575-748-3311
Facility Name: Lovington Plant	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Spill of Crude Naphtha Mix	Volume of Release: ~12 to 15 bbls	Volume Recovered: ~ 7 to 9 bbls
Source of Release: Underground Pipe Line	Date and Hour of Occurrence: 04/21/2010 ~ 15:00	Date and Hour of Discovery: 04/21/2010 ~ 15:10
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Spoke with Carl Chavez from OCD Santa Fe (505-476-3490), and left voicemail with OCD Hobbs office (575-393-6161 extension 111).	
By Whom? Aaron Strange	Date and Hour: 04/21/2010 at ~16:03 to Carl Chavez (OCD Santa Fe), and 04/21/2010 at ~16:28 to the OCD Hobbs office.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
On 04/21/2010 at ~ 15:10 a leak was found on the underground pipeline (Crude Naphtha Mix) that comes from Tank 1202. The Line was blocked in at the transfer pump and isolated until repairs are completed.

Describe Area Affected and Cleanup Action Taken.*
The area affected is under the road (by the warehouse) where the line leaked and where the leak pooled up under the pipe rack. The plant vacuum truck immediately started to remove the standing liquid. It recovered approximately 7 to 9 barrels of product. A backhoe has excavated the contaminated soil. Safety and Environmental Solutions will be doing the delineation on the spill and any bottom hole sampling.

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: Aaron Strange	Approved by District Supervisor:		
Title: Sr. Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: aaron.strange@hollycorp.com	Conditions of Approval:		Attached ☐
Date: 04/23/2010	Phone: 575-703-5057		

Attach Additional Sheets If Necessary



Safety & Environmental Solutions

703 E. Clinton, P.O. Box 1613

Hobbs, New Mexico 88241

(575) 397-0510

Fax (575) 393-4388

Memorandum

Date: 11/15/10
To: Carl Chavez, NMOCD
cc: Darrell Moore, Navajo Refinery
From: David G. Boyer
RE: Boring and Monitor Well Logs

During the final printout of the soil boring and monitor well logs, the program used to generate the logs was corrupted and printing could not be completed. Therefore these logs are not included with this report. The problem will be reported to the software developer and we expect to have printouts by Friday, November 19.

I apologize for not providing these with the report. Please contact me at 575-397-0510 if you have any questions.

DGB/DGB

RECEIVED OGD
2010 NOV 16 P 4:44

Appendix B

C-141

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Blazos 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-141
Revised October 10, 2003

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: Navajo Refining Co. LLC	Contact: Aaron Strange	
Address: 7406 South Main Lovington, N.M.	Telephone No. 575-748-3311	
Facility Name: Artesia Plant	Facility Type: Petroleum Refinery	
Surface Owner	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Spill of Crude Naphtha Mix	Volume of Release: ~12 to 15 bbls	Volume Recovered: ~7 to 9 barrels
Source of Release: Underground Pipe Line.	Date and Hour of Occurrence: 04/21/2010 ~ 15:00	Date and Hour of Discovery: 04/21/2010 ~ 15:10
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Spoke with Carl Chavez with OCD in Santa Fe (505-476-3490), and left a voicemail with the OCD Hobbs Office (575-393-6161 extension 111).	
By Whom? Aaron Strange	Date and Hour: 04/21/2010 at ~16:03 to Carl Chavez (OCD Santa Fe), 04/21/2010 at ~16:28 to the OCD Hobbs office.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse NA	

If a Watercourse was Impacted, Describe Fully.* NA

Describe Cause of Problem and Remedial Action Taken.*

On 04/21/2010 at ~ 15:10 a leak was found on the underground pipeline (Crude Naphtha Mix) that comes from Tank 1202. The Line was blocked in at the transfer pump and isolated until repairs are completed.

Describe Area Affected and Cleanup Action Taken.*

The area affected is under the road (by the warehouse) where the line leaked and where the leak pooled up under the pipe rack. The plant vacuum truck immediately started to remove the standing liquid. It recovered approximately 7 to 9 barrels of product. A backhoe has excavated the contaminated soil. Safety and Environmental Solutions will be doing the delineation on the spill and any bottom hole sampling.

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: Aaron Strange	Approved by District Supervisor:		
Title: Sr. Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: aaron.strange@hollycorp.com	Conditions of Approval:		Attached ☐
Date: 04/22/2010	Phone: 575-703-5057		

35251

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Lea Plant
Address 7406 S. Main (575) 396-5821
City/State Lovington, N.M. 88260 Telephone No.

ORIGIN OF WASTE:

Operations Center _____ Permit No. NMD360010367
Property Name Lovington
(Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)		
Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____
DESCRIPTION / NOTES		
<u>Crude Contaminated Soil 10 yds</u>		

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
Signature of Generator's Authorized Agent

6-8-10
Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name _____
Address _____
City/State _____

Telephone No.

432

Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
Signature of Transporter's Agent

6-8-10
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
Signature of Facility Agent

6-8-10
Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Wajo Refining Lea Plant
 Address 7406 S. Main
 City/State Lovington, N.M. 88260

(575) 396-5821
 Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. NMD360010367

Property Name Lovington
 (Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)

Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____

DESCRIPTION / NOTES

Crude Contaminated Soil 10 yds

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
 Signature of Generator's Authorized Agent

6-8-10

Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
 Address 4611 W. Hwy 1
 City/State EMERY, NV

700-525-5915

Telephone No.

47

Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
 Signature of Transporter's Agent

6-8-10

Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

6-1-10

Date and Time Received

35253

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Lea Plant
 Address 7406 S. Main
 City/State Lovington, N.M. 88260

(575) 396-5821
 Telephone No.

ORIGIN OF WASTE:

Operations Center _____ Permit No. NMD360010367

Property Name Lovington
 (Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)		
Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____
DESCRIPTION / NOTES		
<u>Crude Contaminated Soil 10 yds</u>		

CERTIFICATION: The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
 Signature of Generator's Authorized Agent

6-8-10
 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
 Address 4647 W. 190
 City/State SMITH

1001517 517
 Telephone No.
432
 Truck No.

CERTIFICATION: I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
 Signature of Transporter's Agent

6-8-10
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079
 Telephone No.
www.crihobbs.com
 E-mail

CERTIFICATION: I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

6-11-10
 Date and Time Received

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

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

Form C-141
Revised October 10, 2003

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: Navajo Refining Co. LLC	Contact: Aaron Strange
Address: 7406 South Main Lovington, N.M.	Telephone No. 575-748-3311
Facility Name: Lovington Plant	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit-Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

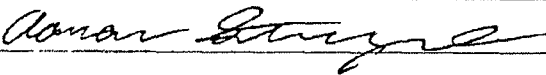
Type of Release: Spill (cleaning media consisting of 3 drums of BP 44231 soap, 1/2 drum of BP 9272 H2S scavenger, ~ 2-3 bbls of diesel and the rest is water).	Volume of Release: ~680 barrels	Volume Recovered: ~475 barrels
Source of Release: Broken discharge hose from pump being used to circulate the cleaning media.	Date and Hour of Occurrence: 6/22/10 ~ 14:02	Date and Hour of Discovery: 6/22/10 ~ 14:45
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Left voicemail with Carl Chavez (OCD Santa Fe) Spoke with Michael Leighton (City Manager of Lovington). Left voicemail with Larry Johnson (OCD Hobbs).	
By Whom? Johnny Lackey to Santa Fe OCD and to City of Lovington. Darrell Moore to Hobbs OCD.	Date and Hour: 06/22/2010 at ~15:00 to Carl Chavez (Santa Fe OCD); 06/22/2010 at ~15:08 to City of Artesia; and 06/22/2010 at ~15:29 to Larry Johnson to (OCD Hobbs).	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully. * NA

Describe Cause of Problem and Remedial Action Taken.*
On 6/22/10 at ~ 14:02 the discharge hose broke on the pump from Tank 1204 that was being used to circulate cleaning media. The pump and suction valves were blocked in.

Describe Area Affected and Cleanup Action Taken.*
The area affected was inside the tank dike of Tank 1204. Approximately 680 barrels of cleaning media spilled onto the ground but remained within the Tank 1204 tank dike. The media consisted of 3 drums of BP 44231 soap, 1/2 drum of BP 9272 H2S scavenger, ~ 2-3 bbls of diesel and the rest is water. Vacuum trucks were brought in to remove the standing media and put it back into the tank. ~475 barrels of the media was recovered with vacuum trucks. The contaminated soil has been removed and placed into roll-off bins for disposal. Bottom hole samples have been collected and sent for analysis.

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: Aaron Strange	Approved by District Supervisor:		
Title: Sr. Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: aaron.strange@hollycorp.com	Conditions of Approval:		Attached ☐
Date: 7/07/10	Phone: 575-703-5057		

Tank 1204 Cleaning Media Release Narrative

Background:

Tank 1204 which normally contains diesel fuel was being cleaned. At approximately 14:02 on June 22, 2010 the discharge hose being used to circulate the cleaning media broke. The pump and suction valves were blocked in.

The area affected by the release was inside the tank dike of Tank 1204. Approximately 680 barrels of cleaning media spilled onto the ground but remained within the tank dike. The media consisted of 3 drums of BP 44321 soap, ½ drum of BP 9272 H₂S scavenger, approximately 2-3 barrels of diesel with the rest being water. Vacuum trucks were brought in to remove the standing media and put back in the tank. Approximately 475 barrels of the media was recovered with vacuum trucks. The contaminated surface soil was removed and placed into roll-off bins for disposal.

Investigation:

The release detailed on the attached C-141 was investigated April 4, 2011 by drilling two soil borings at the location of the release. A Foremost-Mobile model B-57 hollow stem auger with a 5-foot sample tube was used to drill and extract soil borings to a depth of 35 feet. Samples of the resultant soil were taken every 5 feet, properly cooled and sent together with a chain-of-custody to ALS Environmental Laboratory in Houston Texas. Each sample was analyzed for volatile and semi-volatile hydrocarbons that would best characterize the diesel fuel in the tank. Soil boring logs are attached with this report.

Results:

The results of the analyses are shown on the attached spreadsheet with detections above the reporting limit highlighted. The results were compared to soil screening criteria developed by the NM Environment Department to aid in determination of the threat of a spill or release to damage the environment. Volatile hydrocarbons, including benzene, ethylbenzene, toluene and xylenes, were not detected except for naphthalene. Several semi-volatile hydrocarbons were detected as shown in the table. All detections (except those semi-volatiles not listed in the soil screening document) were well below NMED guidance. In addition, the maximum depth of contamination of the diesel fuel hydrocarbons was 30 feet and not detected below that depth in either borehole.

No soil screening information was readily available for dibenzofuran which is an aromatic ether having the chemical formula C₁₂H₈O. It is recovered from a wash oil fraction of coal tar that boils between 275 °C and 290 °C. Redistillation separates dibenzofuran from acenaphthene, which boils at a lower temperature. Its source and reason for detection at the release location are unknown. However, the maximum depth of dibenzofuran detection was 20 feet. No information was found on benzaldehyde. Phthalates are a common contaminant found in plasticizers; the source here is unknown but may be a laboratory artifact.

Conclusion:

The release did not reach groundwater which is at a depth of about 105 feet. The water solubility of semi-volatiles is generally slight and the low concentrations of hydrocarbons found in the subsurface do not constitute a threat to the groundwater.

Tank 1204 Borehole Soil Sampling Results compared with NM Environment Department Soil Screening Levels

	Chemical:	Benzene (mg/Kg)	Ethyl- benzene (mg/Kg)	Toluene (mg/Kg)	Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Naphthalene 8270 (mg/Kg)	2-Methyl Naphthalene (mg/Kg)
	Residential Soil	15.5	69.6	5,570	1,090	45.0	45.0	NL
	Industrial/ Occupational Soil	85.4	385	57,900	3,610	252	252	NL
	Construction Worker Soil	471	6,630	21,100	3,130	702	702	NL
Date: 4/4/2011								
Borehole BH-1								
	5 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.075
	10 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.18
	15 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.019	0.50
	20 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.13
	25 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	30 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	35 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
Borehole BH-2								
	5 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	10 feet	<0.0050	<0.0050	<0.0050	<0.015	0.033	0.58	5.2
	15 feet	<0.0050	<0.0050	<0.0050	<0.015	0.024	0.11	0.93
	20 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.32
	25 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	30 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	35 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
Source: NMED Soil Screening Levels, July 2009, Revision 5.0								

Tank 1204 Borehole Soil Sampling Results compared with NM Environment Department Soil Screening Levels

1,1-Biphenyl (mg/Kg)	Acenaphthene (mg/Kg)	Acetophenone (mg/Kg)	Anthracene (mg/Kg)	Benzaldehyde (mg/Kg)	Bis(2-ethylhexyl) phthalate (mg/Kg)	Dibenzofuran (mg/Kg)	Fluorene (mg/Kg)	Phenanthrene (mg/Kg)
3,910	3,440	7,820	17,200	NL	280	NL	2,290	1,830
56,800	36,700	114,000	183,000	NL	1,370	NL	24,400	20,500
15,500	18,600	31,000	66,800	NL	4,760	NL	8,910	7,150
0.25	0.22	<0.0066	0.10	<0.0066	<0.0066	0.37	0.074	0.20
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.24
<0.0066	<0.0066	0.014	<0.0066	<0.0066	0.010	0.50	0.49	0.85
<0.0066	<0.0066	0.0080	<0.0066	0.0076	0.0088	0.50	0.29	0.67
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.014
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0091
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0083	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	0.039	0.12	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	4.2	2.7	4.3
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0068	1.0	0.88	1.1
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0093	0.76	0.76	0.85
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	0.018	<0.0066	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.015	<0.0066	<0.0066	<0.0066



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-1

(Page 1 of 1)

Tank 1204 Cleaning Media Release Investigation
Navajo Refining Company, Lea Refinery
Section 36, T16S, R36E
Lea County, New Mexico
N32° 52' 47.91", W103° 18' 1.36"

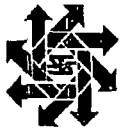
Date, Time Started : 04/04/11, 1230
Date, Time Complete : 04/04/11, 1400
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : David Boyer
Company Rep. :

Depth in Feet	Sample Type	Recovery (ft.)	USCS	GRAPHIC	Sample Type	Lab No.	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Total Naphthalene 8270 (mg/Kg)
					DESCRIPTION							
0					0-5 ft. Caliche rock in tip, sample from cuttings.							
1					0-1 ft. CALICHE, gray, H/C odor							
2	CB/CT	1.2	CA		1-3 ft. CALICHE,							
3					3-5 ft. SAND with sandstone pieces, slight H/C odor	1104143-01	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.075
4			SP									
5												
6	CB	1	SP/SS		5-10 ft. SAND and SANDSTONE, fine grained, brown, slight H/C odor							
7												
8												
9												
10	CB	2.3			10-15 ft. SANDSTONE and SAND, light brown, fine grained, H/C odor	1104143-02	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.180
11												
12												
13												
14												
15	CB	1.5	SS/SP		15-20 ft. SANDSTONE and SAND, light brown, fine grained, slight H/C odor	1104143-03	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.519
16												
17												
18												
19												
20	CB	3			20-25 ft. SAND, brown, very fine to fine grained, uniform, slight H/C odor	1104143-04	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.130
21												
22												
23												
24												
25	CB	1.6	SP		25-30 ft. SAND, brown, very fine grained, uniform, slightly damp, slight H/C odor	1104143-05	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
26					30-31.4 ft. SAND, brown, very fine grained, uniform, damp, slight H/C odor	1104143-06	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
27												
28												
29												
30	CB	3.2			31.4-35 ft. SANDSTONE and SAND, light brown, dry, no H/C odor or staining							
31												
32			SS/SP									
33												
34												
35						1104143-07	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066

Notes:

Boring backfilled with 17 bags bentonite, hydrated
Other semi-volatiles detected; see accompanying table
H/C - Petroleum hydrocarbons



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-2

(Page 1 of 1)

Tank 1204 Cleaning Media Release Investigation
Navajo Refining Company, Lea Refinery
Section 36, T16S, R36E
Lea County, New Mexico
N32° 52' 48.27", W103° 18' 0.93"

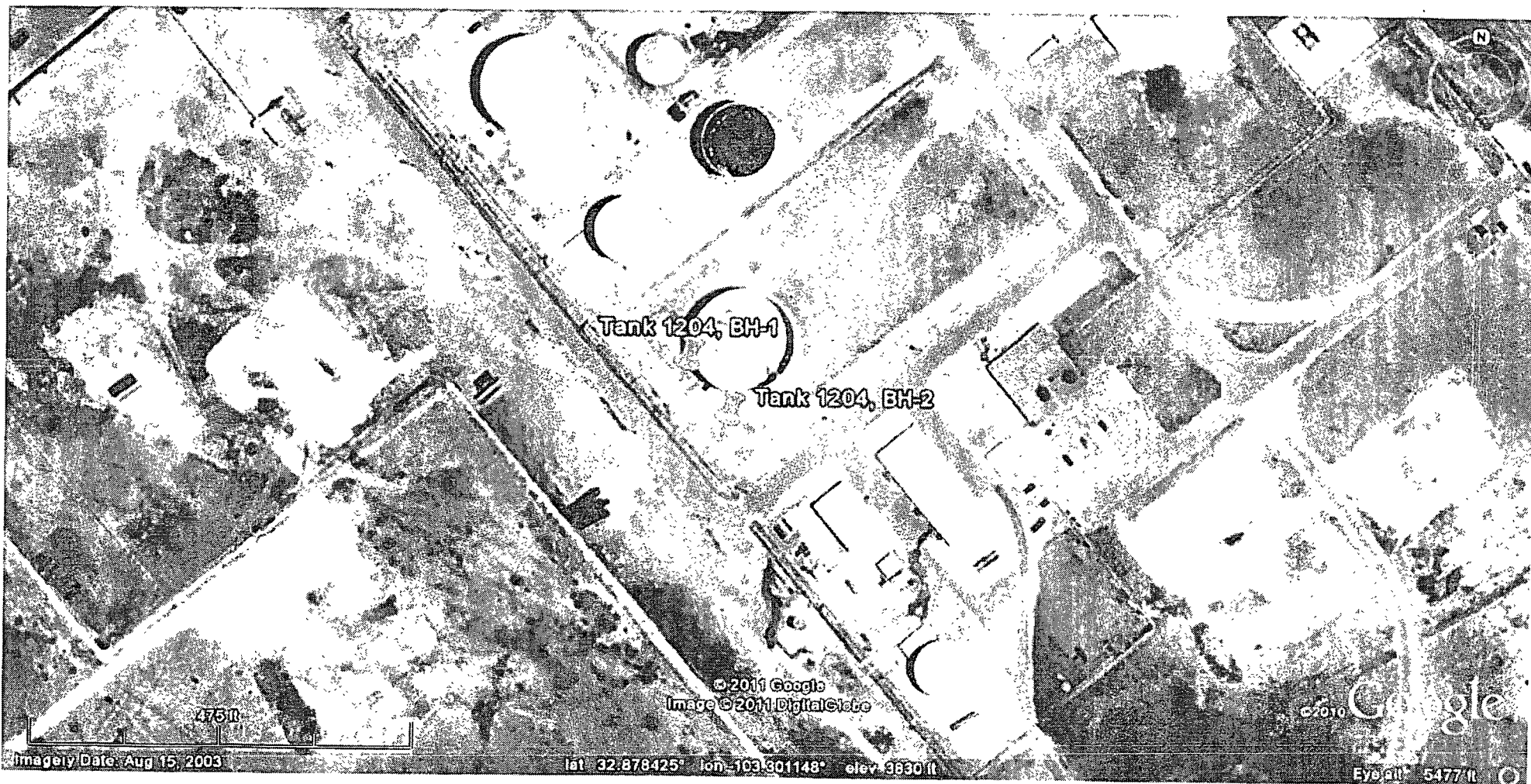
Date, Time Started : 04/04/11, 1415
Date, Time Complete : 04/04/11, 1530
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : David Boyer
Company Rep. :

Depth in Feet	Sample Type	Recovery (ft.)	USCS	GRAPHIC	Sample Type SS Split Spoon (18" or 24") CB Core Barrel (2.5' or 5') CT Auger Cuttings NR No recovery	DESCRIPTION	Lab No.	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Total Naphthalene 8270 (mg/Kg)
0						0-1 ft. CALICHE rock, gray-black staining							
1						1-3 ft. CALICHE							
2	CB	1.4	CA										
3													
4			SP/CA			3-5 ft. SAND and CALICHE rock, light brown, no H/C odor on cuttings	1104143-08	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
5													
6													
7	CB	1.4	SP/SS			5-10 ft. SAND and SANDSTONE, light brown, dry, slight H/C odor							
8													
9													
10							1104143-09	<0.0050	<0.0050	<0.015	<0.010	0.033	5.78
11													
12	CB	3.8				10-15 ft. SAND, light brown, very fine grained, minor sandstone, slight H/C odor							
13													
14													
15			SP				1104143-10	<0.0050	<0.0050	<0.015	<0.010	0.024	1.04
16													
17	CB	1.6				15-20 ft. SAND, light brown and white, some minor sandstone/caliche, slight H/C odor							
18													
19													
20							1104143-11	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.32
21													
22	CB	1.7				20-25 ft. SAND, light brown, very fine to fine grained, uniform, slight H/C odor							
23													
24													
25													
26			SP				1104143-12	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
27													
28	CB	1.7				25-30 ft. SAND, brown, very fine to fine grained, uniform, slightly damp, slight H/C odor							
29													
30													
31						30-31.6 ft. SAND, brown, very fine to fine grained, uniform, slightly damp, slight H/C odor	1104143-13	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
32													
33	CB	2.3	SS/SP			31.6-35 ft. SANDSTONE and SAND, sandstone pieces cemented, dry, no H/C staining and odor							
34													
35							1104143-14	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066

Notes

Boring backfilled with 17 bags bentonite, hydrated.
Other semi-volatiles detected; see accompanying table
H/C - Petroleum hydrocarbons



Tank 1204, BH-1

Tank 1204, BH-2

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Imagery Date: Aug 15, 2003

lat 32.878425° lon -103.801148° elev 3830 ft

Eye alt 5477 ft

35265

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Lea Plant
 Address 7406 S. Main
 City/State Lovington, N.M. 88260

(575) 396-5821
 Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. NMD360010367

Property Name Lovington
 (Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)		
Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____
DESCRIPTION / NOTES		
<u>Diesel Contaminated Soil 12 yds</u>		

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
 Signature of Generator's Authorized Agent

7-13-10
 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
 Address 4642 W. 180
 City/State Snyder TX. 79549

365-573-5421
 Telephone No.
432
 Truck No

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
 Signature of Transporter's Agent

7-13-10
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

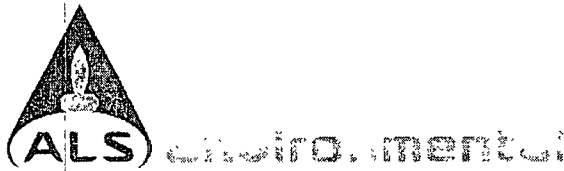
(575) 393-1079
 Telephone No.
www.crihobbs.com
 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

7/13/10
 Date and Time Received



08-Apr-2011

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (575) 746-5281
Fax: (505) 746-5421

Re: Tank 1204 Release

Work Order: **1104143**

Dear Darrell,

ALS Environmental received 15 samples on 06-Apr-2011 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 89.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

JayLynn F Thibault

Electronically approved by Makenzie L. Henderson

JayLynn F Thibault
Project Manager



Certificate No T104704231-09A-TX

Client: Navajo Refining Company
Project: Tank 1204 Release
Work Order: 1104143

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1104143-01	BH-1 5'	Soil		4/4/2011 12:45	4/6/2011	☐
1104143-02	BH-1 10'	Soil		4/4/2011 12:50	4/6/2011	☐
1104143-03	BH-1 15'	Soil		4/4/2011 13:00	4/6/2011	☐
1104143-04	BH-1 20'	Soil		4/4/2011 13:10	4/6/2011	☐
1104143-05	BH-1 25'	Soil		4/4/2011 13:20	4/6/2011	☐
1104143-06	BH-1 30'	Soil		4/4/2011 13:25	4/6/2011	☐
1104143-07	BH-1 35'	Soil		4/4/2011 13:45	4/6/2011	☐
1104143-08	BH-2 5'	Soil		4/4/2011 14:30	4/6/2011	☐
1104143-09	BH-2 10'	Soil		4/4/2011 14:35	4/6/2011	☐
1104143-10	BH-2 15'	Soil		4/4/2011 14:45	4/6/2011	☐
1104143-11	BH-2 20'	Soil		4/4/2011 14:50	4/6/2011	☐
1104143-12	BH-2 25'	Soil		4/4/2011 14:55	4/6/2011	☐
1104143-13	BH-2 30'	Soil		4/4/2011 15:05	4/6/2011	☐
1104143-14	BH-2 35'	Soil		4/4/2011 15:20	4/6/2011	☐
1104143-15	Trip Blank	Trip Blank		4/4/2011 15:20	4/6/2011	☒

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-1 5'
Collection Date: 4/4/2011 12:45 PM

Work Order: 1104143
Lab ID: 1104143-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	0.25		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4,5-Trichlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4,6-Trichlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dichlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dimethylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dinitrophenol	ND		0.33	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dinitrotoluene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,6-Dinitrotoluene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Chloronaphthalene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Chlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Methylnaphthalene	0.075		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Nitroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Nitrophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
3&4-Methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
3,3'-Dichlorobenzidine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
3-Nitroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4,6-Dinitro-2-methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Bromophenyl phenyl ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Chloro-3-methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Chloroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Chlorophenyl phenyl ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Nitroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Nitrophenol	ND		0.33	mg/Kg	10	4/6/2011 10:32 PM
Acenaphthene	0.22		0.066	mg/Kg	10	4/6/2011 10:32 PM
Acenaphthylene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Acetophenone	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Anthracene	0.10		0.066	mg/Kg	10	4/6/2011 10:32 PM
Atrazine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benz(a)anthracene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzaldehyde	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(a)pyrene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(b)fluoranthene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(g,h,i)perylene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(k)fluoranthene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-chloroethoxy)methane	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-chloroethyl)ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-chloroisopropyl)ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-ethylhexyl)phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 5'

Lab ID: 1104143-01

Collection Date: 4/4/2011 12:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Caprolactam	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Carbazole	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Chrysene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Dibenz(a,h)anthracene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Dibenzofuran	0.37		0.066	mg/Kg	10	4/6/2011 10:32 PM
Diethyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Dimethyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Di-n-butyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Di-n-octyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Fluoranthene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Fluorene	0.074		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachlorobenzene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachlorobutadiene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachlorocyclopentadiene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachloroethane	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Indeno(1,2,3-cd)pyrene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Isophorone	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Naphthalene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Nitrobenzene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
N-Nitrosodi-n-propylamine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
N-Nitrosodiphenylamine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Pentachlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Phenanthrene	0.20		0.066	mg/Kg	10	4/6/2011 10:32 PM
Phenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Pyrene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Surr: 2,4,6-Tribromophenol	61.8		36-126	%REC	10	4/6/2011 10:32 PM
Surr: 2-Fluorobiphenyl	74.4		43-125	%REC	10	4/6/2011 10:32 PM
Surr: 2-Fluorophenol	84.2		37-125	%REC	10	4/6/2011 10:32 PM
Surr: 4-Terphenyl-d14	88.5		32-125	%REC	10	4/6/2011 10:32 PM
Surr: Nitrobenzene-d5	99.9		37-125	%REC	10	4/6/2011 10:32 PM
Surr: Phenol-d6	86.9		40-125	%REC	10	4/6/2011 10:32 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 5'

Lab ID: 1104143-01

Collection Date: 4/4/2011 12:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 02:14 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 02:14 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 02:14 PM
Surr: 1,2-Dichloroethane-d4	101		70-128	%REC	1	4/6/2011 02:14 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-1 5'

Collection Date: 4/4/2011 12:45 PM

Work Order: 1104143

Lab ID: 1104143-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	86.7		73-126	%REC	1	4/6/2011 02:14 PM
Surr: Dibromofluoromethane	102		71-128	%REC	1	4/6/2011 02:14 PM
Surr: Toluene-d8	95.6		73-127	%REC	1	4/6/2011 02:14 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-1 10'
Collection Date: 4/4/2011 12:50 PM

Work Order: 1104143
Lab ID: 1104143-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4,5-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4,6-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dimethylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dinitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,6-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Chloronaphthalene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Chlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Methylnaphthalene	0.18		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Nitrophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
3&4-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
3,3'-Dichlorobenzidine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
3-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4,6-Dinitro-2-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Bromophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Chloro-3-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Chloroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Chlorophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Nitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:33 PM
Acenaphthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Acenaphthylene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Acetophenone	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Atrazine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benz(a)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzaldehyde	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(a)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(b)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(g,h,i)perylene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(k)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-chloroethoxy)methane	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-chloroethyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-chloroisopropyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-ethylhexyl)phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 10'

Lab ID: 1104143-02

Collection Date: 4/4/2011 12:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Caprolactam	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Carbazole	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Chrysene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Dibenz(a,h)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Dibenzofuran	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Diethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Dimethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Di-n-butyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Di-n-octyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Fluorene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachlorobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachlorobutadiene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachlorocyclopentadiene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachloroethane	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Indeno(1,2,3-cd)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Isophorone	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Naphthalene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Nitrobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
N-Nitrosodi-n-propylamine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
N-Nitrosodiphenylamine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Pentachlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Phenanthrene	0.24		0.066	mg/Kg	10	4/7/2011 01:33 PM
Phenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Surr: 2,4,6-Tribromophenol	105		36-126	%REC	10	4/7/2011 01:33 PM
Surr: 2-Fluorobiphenyl	99.5		43-125	%REC	10	4/7/2011 01:33 PM
Surr: 2-Fluorophenol	65.6		37-125	%REC	10	4/7/2011 01:33 PM
Surr: 4-Terphenyl-d14	84.5		32-125	%REC	10	4/7/2011 01:33 PM
Surr: Nitrobenzene-d5	76.2		37-125	%REC	10	4/7/2011 01:33 PM
Surr: Phenol-d6	67.6		40-125	%REC	10	4/7/2011 01:33 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-1 10'
Collection Date: 4/4/2011 12:50 PM

Work Order: 1104143
Lab ID: 1104143-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 02:37 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 02:37 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 02:37 PM
Surr: 1,2-Dichloroethane-d4	103		70-128	%REC	1	4/6/2011 02:37 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-1 10'

Collection Date: 4/4/2011 12:50 PM

Work Order: 1104143

Lab ID: 1104143-02

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	99.4		73-126	%REC	1	4/6/2011 02:37 PM
Surr: Dibromofluoromethane	101		71-128	%REC	1	4/6/2011 02:37 PM
Surr: Toluene-d8	103		73-127	%REC	1	4/6/2011 02:37 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 15'

Lab ID: 1104143-03

Collection Date: 4/4/2011 01:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Methylnaphthalene	0.50		0.066	mg/Kg	10	4/7/2011 02:12 PM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 01:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Acetophenone	0.014		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-ethylhexyl)phthalate	0.010		0.0066	mg/Kg	1	4/7/2011 01:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 15'

Lab ID: 1104143-03

Collection Date: 4/4/2011 01:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Dibenzofuran	0.50		0.066	mg/Kg	10	4/7/2011 02:12 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Fluorene	0.49		0.066	mg/Kg	10	4/7/2011 02:12 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Naphthalene	0.019		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Phenanthrene	0.85		0.066	mg/Kg	10	4/7/2011 02:12 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Surr: 2,4,6-Tribromophenol	54.9		36-126	%REC	1	4/7/2011 01:53 AM
Surr: 2,4,6-Tribromophenol	87.9		36-126	%REC	10	4/7/2011 02:12 PM
Surr: 2-Fluorobiphenyl	98.3		43-125	%REC	1	4/7/2011 01:53 AM
Surr: 2-Fluorobiphenyl	77.5		43-125	%REC	10	4/7/2011 02:12 PM
Surr: 2-Fluorophenol	57.8		37-125	%REC	10	4/7/2011 02:12 PM
Surr: 2-Fluorophenol	56.6		37-125	%REC	1	4/7/2011 01:53 AM
Surr: 4-Terphenyl-d14	67.1		32-125	%REC	1	4/7/2011 01:53 AM
Surr: 4-Terphenyl-d14	70.9		32-125	%REC	10	4/7/2011 02:12 PM
Surr: Nitrobenzene-d5	71.5		37-125	%REC	10	4/7/2011 02:12 PM
Surr: Nitrobenzene-d5	57.5		37-125	%REC	1	4/7/2011 01:53 AM
Surr: Phenol-d6	63.0		40-125	%REC	1	4/7/2011 01:53 AM
Surr: Phenol-d6	58.9		40-125	%REC	10	4/7/2011 02:12 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-1 15'
Collection Date: 4/4/2011 01:00 PM

Work Order: 1104143
Lab ID: 1104143-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 03:01 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-1 15'

Collection Date: 4/4/2011 01:00 PM

Work Order: 1104143

Lab ID: 1104143-03

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 03:01 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 03:01 PM
Surr: 1,2-Dichloroethane-d4	99.7		70-128	%REC	1	4/6/2011 03:01 PM
Surr: 4-Bromofluorobenzene	93.1		73-126	%REC	1	4/6/2011 03:01 PM
Surr: Dibromofluoromethane	101		71-128	%REC	1	4/6/2011 03:01 PM
Surr: Toluene-d8	104		73-127	%REC	1	4/6/2011 03:01 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 20'

Lab ID: 1104143-04

Collection Date: 4/4/2011 01:10 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Methylnaphthalene	0.13		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Acetophenone	0.0080		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzaldehyde	0.0076		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-ethylhexyl)phthalate	0.0088		0.0066	mg/Kg	1	4/7/2011 02:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 20'

Lab ID: 1104143-04

Collection Date: 4/4/2011 01:10 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Dibenzofuran	0.50		0.066	mg/Kg	10	4/8/2011 01:54 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Fluorene	0.29		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Phenanthrene	0.67		0.066	mg/Kg	10	4/8/2011 01:54 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Surr: 2,4,6-Tribromophenol	79.3		36-126	%REC	10	4/8/2011 01:54 PM
Surr: 2,4,6-Tribromophenol	66.1		36-126	%REC	1	4/7/2011 02:13 AM
Surr: 2-Fluorobiphenyl	78.2		43-125	%REC	1	4/7/2011 02:13 AM
Surr: 2-Fluorobiphenyl	80.4		43-125	%REC	10	4/8/2011 01:54 PM
Surr: 2-Fluorophenol	49.7		37-125	%REC	1	4/7/2011 02:13 AM
Surr: 2-Fluorophenol	84.2		37-125	%REC	10	4/8/2011 01:54 PM
Surr: 4-Terphenyl-d14	88.3		32-125	%REC	10	4/8/2011 01:54 PM
Surr: 4-Terphenyl-d14	69.8		32-125	%REC	1	4/7/2011 02:13 AM
Surr: Nitrobenzene-d5	87.5		37-125	%REC	10	4/8/2011 01:54 PM
Surr: Nitrobenzene-d5	62.4		37-125	%REC	1	4/7/2011 02:13 AM
Surr: Phenol-d6	89.4		40-125	%REC	10	4/8/2011 01:54 PM
Surr: Phenol-d6	65.3		40-125	%REC	1	4/7/2011 02:13 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-1 20'

Collection Date: 4/4/2011 01:10 PM

Work Order: 1104143

Lab ID: 1104143-04

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 03:25 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-1 20'

Collection Date: 4/4/2011 01:10 PM

Work Order: 1104143

Lab ID: 1104143-04

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 03:25 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 03:25 PM
Surr: 1,2-Dichloroethane-d4	102		70-128	%REC	1	4/6/2011 03:25 PM
Surr: 4-Bromofluorobenzene	97.1		73-126	%REC	1	4/6/2011 03:25 PM
Surr: Dibromofluoromethane	98.8		71-128	%REC	1	4/6/2011 03:25 PM
Surr: Toluene-d8	100		73-127	%REC	1	4/6/2011 03:25 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-1 25'

Collection Date: 4/4/2011 01:20 PM

Work Order: 1104143

Lab ID: 1104143-05

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
3,4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:33 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 25'

Lab ID: 1104143-05

Collection Date: 4/4/2011 01:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Phenanthrene	0.014		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Surr: 2,4,6-Tribromophenol	55.1		36-126	%REC	1	4/7/2011 02:33 AM
Surr: 2-Fluorobiphenyl	56.7		43-125	%REC	1	4/7/2011 02:33 AM
Surr: 2-Fluorophenol	57.9		37-125	%REC	1	4/7/2011 02:33 AM
Surr: 4-Terphenyl-d14	62.5		32-125	%REC	1	4/7/2011 02:33 AM
Surr: Nitrobenzene-d5	57.1		37-125	%REC	1	4/7/2011 02:33 AM
Surr: Phenol-d6	60.1		40-125	%REC	1	4/7/2011 02:33 AM
VOLATILES			SW8260	Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 25'

Lab ID: 1104143-05

Collection Date: 4/4/2011 01:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 03:48 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 03:48 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 03:48 PM
Surr: 1,2-Dichloroethane-d4	99.6		70-128	%REC	1	4/6/2011 03:48 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 25'

Lab ID: 1104143-05

Collection Date: 4/4/2011 01:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	100		73-126	%REC	1	4/6/2011 03:48 PM
Surr: Dibromofluoromethane	95.4		71-128	%REC	1	4/6/2011 03:48 PM
Surr: Toluene-d8	102		73-127	%REC	1	4/6/2011 03:48 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 30'

Lab ID: 1104143-06

Collection Date: 4/4/2011 01:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 30'

Lab ID: 1104143-06

Collection Date: 4/4/2011 01:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Phenanthrene	0.0091		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Surr: 2,4,6-Tribromophenol	74.5		36-126	%REC	1	4/7/2011 02:53 AM
Surr: 2-Fluorobiphenyl	66.1		43-125	%REC	1	4/7/2011 02:53 AM
Surr: 2-Fluorophenol	70.8		37-125	%REC	1	4/7/2011 02:53 AM
Surr: 4-Terphenyl-d14	83.1		32-125	%REC	1	4/7/2011 02:53 AM
Surr: Nitrobenzene-d5	65.4		37-125	%REC	1	4/7/2011 02:53 AM
Surr: Phenol-d6	68.1		40-125	%REC	1	4/7/2011 02:53 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 30'
 Collection Date: 4/4/2011 01:25 PM

Work Order: 1104143
 Lab ID: 1104143-06
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 04:12 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 04:12 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 04:12 PM
Surr: 1,2-Dichloroethane-d4	100		70-128	%REC	1	4/6/2011 04:12 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 30'

Lab ID: 1104143-06

Collection Date: 4/4/2011 01:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	109		73-126	%REC	1	4/6/2011 04:12 PM
Surr: Dibromofluoromethane	98.2		71-128	%REC	1	4/6/2011 04:12 PM
Surr: Toluene-d8	100		73-127	%REC	1	4/6/2011 04:12 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 35'

Lab ID: 1104143-07

Collection Date: 4/4/2011 01:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-ethylhexyl)phthalate	0.0083		0.0066	mg/Kg	1	4/7/2011 03:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 35'

Lab ID: 1104143-07

Collection Date: 4/4/2011 01:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Surr: 2,4,6-Tribromophenol	73.7		36-126	%REC	1	4/7/2011 03:13 AM
Surr: 2-Fluorobiphenyl	79.3		43-125	%REC	1	4/7/2011 03:13 AM
Surr: 2-Fluorophenol	62.5		37-125	%REC	1	4/7/2011 03:13 AM
Surr: 4-Terphenyl-d14	87.2		32-125	%REC	1	4/7/2011 03:13 AM
Surr: Nitrobenzene-d5	79.0		37-125	%REC	1	4/7/2011 03:13 AM
Surr: Phenol-d6	75.3		40-125	%REC	1	4/7/2011 03:13 AM
VOLATILES			SW8260		Analyst: WLR	
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 35'

Lab ID: 1104143-07

Collection Date: 4/4/2011 01:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 04:35 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 04:35 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 04:35 PM
Surr: 1,2-Dichloroethane-d4	97.0		70-128	%REC	1	4/6/2011 04:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-1 35'

Collection Date: 4/4/2011 01:45 PM

Work Order: 1104143

Lab ID: 1104143-07

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	101		73-126	%REC	1	4/6/2011 04:35 PM
Surr: Dibromofluoromethane	92.9		71-128	%REC	1	4/6/2011 04:35 PM
Surr: Toluene-d8	94.2		73-127	%REC	1	4/6/2011 04:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-2 5'
Collection Date: 4/4/2011 02:30 PM

Work Order: 1104143
Lab ID: 1104143-08
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4,5-Trichlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4,6-Trichlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dichlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dimethylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dinitrophenol	ND		0.16	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dinitrotoluene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,6-Dinitrotoluene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Chloronaphthalene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Chlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Methylnaphthalene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Nitroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Nitrophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
3&4-Methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
3,3'-Dichlorobenzidine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
3-Nitroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4,6-Dinitro-2-methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Bromophenyl phenyl ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Chloro-3-methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Chloroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Chlorophenyl phenyl ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Nitroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Nitrophenol	ND		0.16	mg/Kg	5	4/7/2011 05:33 AM
Acenaphthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Acenaphthylene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Acetophenone	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Anthracene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Atrazine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benz(a)anthracene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzaldehyde	0.039		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(a)pyrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(b)fluoranthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(g,h,i)perylene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(k)fluoranthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-chloroethoxy)methane	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-chloroethyl)ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-chloroisopropyl)ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-ethylhexyl)phthalate	0.12		0.033	mg/Kg	5	4/7/2011 05:33 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 5'

Lab ID: 1104143-08

Collection Date: 4/4/2011 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Caprolactam	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Carbazole	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Chrysene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Dibenz(a,h)anthracene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Dibenzofuran	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Diethyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Dimethyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Di-n-butyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Di-n-octyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Fluoranthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Fluorene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachlorobenzene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachlorobutadiene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachlorocyclopentadiene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachloroethane	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Indeno(1,2,3-cd)pyrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Isophorone	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Naphthalene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Nitrobenzene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
N-Nitrosodi-n-propylamine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
N-Nitrosodiphenylamine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Pentachlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Phenanthrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Phenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Pyrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Surr: 2,4,6-Tribromophenol	65.3		36-126	%REC	5	4/7/2011 05:33 AM
Surr: 2-Fluorobiphenyl	69.0		43-125	%REC	5	4/7/2011 05:33 AM
Surr: 2-Fluorophenol	93.6		37-125	%REC	5	4/7/2011 05:33 AM
Surr: 4-Terphenyl-d14	88.9		32-125	%REC	5	4/7/2011 05:33 AM
Surr: Nitrobenzene-d5	86.2		37-125	%REC	5	4/7/2011 05:33 AM
Surr: Phenol-d6	98.1		40-125	%REC	5	4/7/2011 05:33 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 5'

Lab ID: 1104143-08

Collection Date: 4/4/2011 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 04:59 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 04:59 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 04:59 PM
Surr: 1,2-Dichloroethane-d4	103		70-128	%REC	1	4/6/2011 04:59 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-2 5'

Collection Date: 4/4/2011 02:30 PM

Work Order: 1104143

Lab ID: 1104143-08

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	93.1		73-126	%REC	1	4/6/2011 04:59 PM
Surr: Dibromofluoromethane	101		71-128	%REC	1	4/6/2011 04:59 PM
Surr: Toluene-d8	103		73-127	%REC	1	4/6/2011 04:59 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4,5-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4,6-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dimethylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dinitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,6-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Chloronaphthalene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Chlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Methylnaphthalene	5.2		0.66	mg/Kg	100	4/7/2011 04:12 PM
2-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Nitrophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
3&4-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
3,3'-Dichlorobenzidine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
3-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4,6-Dinitro-2-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Bromophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Chloro-3-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Chloroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Chlorophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Nitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:53 PM
Acenaphthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Acenaphthylene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Acetophenone	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Atrazine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benz(a)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzaldehyde	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(a)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(b)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(g,h,i)perylene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(k)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-chloroethoxy)methane	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-chloroethyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-chloroisopropyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-ethylhexyl)phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Caprolactam	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Carbazole	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Chrysene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Dibenz(a,h)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Dibenzofuran	4.2		0.66	mg/Kg	100	4/7/2011 04:12 PM
Diethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Dimethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Di-n-butyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Di-n-octyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Fluorene	2.7		0.66	mg/Kg	100	4/7/2011 04:12 PM
Hexachlorobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Hexachlorobutadiene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Hexachlorocyclopentadiene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Hexachloroethane	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Indeno(1,2,3-cd)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Isophorone	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Naphthalene	0.58		0.066	mg/Kg	10	4/7/2011 01:53 PM
Nitrobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
N-Nitrosodi-n-propylamine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
N-Nitrosodiphenylamine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Pentachlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Phenanthrene	4.3		0.66	mg/Kg	100	4/7/2011 04:12 PM
Phenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Surr: 2,4,6-Tribromophenol	103		36-126	%REC	10	4/7/2011 01:53 PM
Surr: 2,4,6-Tribromophenol	0	S	36-126	%REC	100	4/7/2011 04:12 PM
Surr: 2-Fluorobiphenyl	117		43-125	%REC	100	4/7/2011 04:12 PM
Surr: 2-Fluorobiphenyl	60.7		43-125	%REC	10	4/7/2011 01:53 PM
Surr: 2-Fluorophenol	72.0		37-125	%REC	10	4/7/2011 01:53 PM
Surr: 2-Fluorophenol	0	S	37-125	%REC	100	4/7/2011 04:12 PM
Surr: 4-Terphenyl-d14	84.8		32-125	%REC	10	4/7/2011 01:53 PM
Surr: 4-Terphenyl-d14	0	S	32-125	%REC	100	4/7/2011 04:12 PM
Surr: Nitrobenzene-d5	59.7		37-125	%REC	10	4/7/2011 01:53 PM
Surr: Nitrobenzene-d5	118		37-125	%REC	100	4/7/2011 04:12 PM
Surr: Phenol-d6	0	S	40-125	%REC	100	4/7/2011 04:12 PM
Surr: Phenol-d6	69.8		40-125	%REC	10	4/7/2011 01:53 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 05:22 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Naphthalene	0.033		0.0050	mg/Kg	1	4/6/2011 05:22 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 05:22 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 05:22 PM
Surr: 1,2-Dichloroethane-d4	105		70-128	%REC	1	4/6/2011 05:22 PM
Surr: 4-Bromofluorobenzene	102		73-126	%REC	1	4/6/2011 05:22 PM
Surr: Dibromofluoromethane	102		71-128	%REC	1	4/6/2011 05:22 PM
Surr: Toluene-d8	102		73-127	%REC	1	4/6/2011 05:22 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 15'

Lab ID: 1104143-10

Collection Date: 4/4/2011 02:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Methylnaphthalene	0.93		0.13	mg/Kg	20	4/8/2011 12:58 PM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
3,4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-ethylhexyl)phthalate	0.0068		0.0066	mg/Kg	1	4/7/2011 03:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 15'

Lab ID: 1104143-10

Collection Date: 4/4/2011 02:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Dibenzofuran	1.0		0.13	mg/Kg	20	4/8/2011 12:58 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Fluorene	0.88		0.13	mg/Kg	20	4/8/2011 12:58 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Naphthalene	0.11		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Phenanthrene	1.1		0.13	mg/Kg	20	4/8/2011 12:58 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Surr: 2,4,6-Tribromophenol	37.0		36-126	%REC	1	4/7/2011 03:53 AM
Surr: 2,4,6-Tribromophenol	67.2		36-126	%REC	20	4/8/2011 12:58 PM
Surr: 2-Fluorobiphenyl	68.5		43-125	%REC	20	4/8/2011 12:58 PM
Surr: 2-Fluorobiphenyl	89.1		43-125	%REC	1	4/7/2011 03:53 AM
Surr: 2-Fluorophenol	92.1		37-125	%REC	1	4/7/2011 03:53 AM
Surr: 2-Fluorophenol	86.4		37-125	%REC	20	4/8/2011 12:58 PM
Surr: 4-Terphenyl-d14	85.6		32-125	%REC	1	4/7/2011 03:53 AM
Surr: 4-Terphenyl-d14	82.0		32-125	%REC	20	4/8/2011 12:58 PM
Surr: Nitrobenzene-d5	109		37-125	%REC	1	4/7/2011 03:53 AM
Surr: Nitrobenzene-d5	91.6		37-125	%REC	20	4/8/2011 12:58 PM
Surr: Phenol-d6	87.2		40-125	%REC	20	4/8/2011 12:58 PM
Surr: Phenol-d6	103		40-125	%REC	1	4/7/2011 03:53 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 15'

Lab ID: 1104143-10

Collection Date: 4/4/2011 02:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 05:46 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Naphthalene	0.024		0.0050	mg/Kg	1	4/6/2011 05:46 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 15'

Lab ID: 1104143-10

Collection Date: 4/4/2011 02:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 05:46 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 05:46 PM
Surr: 1,2-Dichloroethane-d4	105		70-128	%REC	1	4/6/2011 05:46 PM
Surr: 4-Bromofluorobenzene	87.1		73-126	%REC	1	4/6/2011 05:46 PM
Surr: Dibromofluoromethane	100		71-128	%REC	1	4/6/2011 05:46 PM
Surr: Toluene-d8	94.9		73-127	%REC	1	4/6/2011 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-2 20'
Collection Date: 4/4/2011 02:50 PM

Work Order: 1104143
Lab ID: 1104143-11
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Methylnaphthalene	0.32		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-ethylhexyl)phthalate	0.0093		0.0066	mg/Kg	1	4/7/2011 04:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 20'

Lab ID: 1104143-11

Collection Date: 4/4/2011 02:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Cartazole	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Dibenzofuran	0.76		0.066	mg/Kg	10	4/8/2011 01:18 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Fluorene	0.76		0.066	mg/Kg	10	4/8/2011 01:18 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Phenanthrene	0.85		0.066	mg/Kg	10	4/8/2011 01:18 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Surr: 2,4,6-Tribromophenol	46.8		36-126	%REC	1	4/7/2011 04:13 AM
Surr: 2,4,6-Tribromophenol	75.4		36-126	%REC	10	4/8/2011 01:18 PM
Surr: 2-Fluorobiphenyl	75.2		43-125	%REC	10	4/8/2011 01:18 PM
Surr: 2-Fluorobiphenyl	104		43-125	%REC	1	4/7/2011 04:13 AM
Surr: 2-Fluorophenol	68.8		37-125	%REC	1	4/7/2011 04:13 AM
Surr: 2-Fluorophenol	80.8		37-125	%REC	10	4/8/2011 01:18 PM
Surr: 4-Terphenyl-d14	79.3		32-125	%REC	1	4/7/2011 04:13 AM
Surr: 4-Terphenyl-d14	94.5		32-125	%REC	10	4/8/2011 01:18 PM
Surr: Nitrobenzene-d5	80.9		37-125	%REC	1	4/7/2011 04:13 AM
Surr: Nitrobenzene-d5	91.3		37-125	%REC	10	4/8/2011 01:18 PM
Surr: Phenol-d6	83.5		40-125	%REC	10	4/8/2011 01:18 PM
Surr: Phenol-d6	81.5		40-125	%REC	1	4/7/2011 04:13 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 20'

Lab ID: 1104143-11

Collection Date: 4/4/2011 02:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 06:09 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 20'

Lab ID: 1104143-11

Collection Date: 4/4/2011 02:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 06:09 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 06:09 PM
Surr: 1,2-Dichloroethane-d4	96.7		70-128	%REC	1	4/6/2011 06:09 PM
Surr: 4-Bromofluorobenzene	95.0		73-126	%REC	1	4/6/2011 06:09 PM
Surr: Dibromofluoromethane	93.9		71-128	%REC	1	4/6/2011 06:09 PM
Surr: Toluene-d8	104		73-127	%REC	1	4/6/2011 06:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 25'

Lab ID: 1104143-12

Collection Date: 4/4/2011 02:55 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:33 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Sample ID: BH-2 25'

Collection Date: 4/4/2011 02:55 PM

Work Order: 1104143

Lab ID: 1104143-12

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Surr: 2,4,6-Tribromophenol	70.6		36-126	%REC	1	4/7/2011 04:33 AM
Surr: 2-Fluorobiphenyl	72.2		43-125	%REC	1	4/7/2011 04:33 AM
Surr: 2-Fluorophenol	69.5		37-125	%REC	1	4/7/2011 04:33 AM
Surr: 4-Terphenyl-d14	87.2		32-125	%REC	1	4/7/2011 04:33 AM
Surr: Nitrobenzene-d5	70.4		37-125	%REC	1	4/7/2011 04:33 AM
Surr: Phenol-d6	71.2		40-125	%REC	1	4/7/2011 04:33 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-2 25'
Collection Date: 4/4/2011 02:55 PM

Work Order: 1104143
Lab ID: 1104143-12
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 10:58 AM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 10:58 AM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 10:58 AM
Surr. 1,2-Dichloroethane-d4	99.6		70-128	%REC	1	4/7/2011 10:58 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 25'

Lab ID: 1104143-12

Collection Date: 4/4/2011 02:55 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	98.3		73-126	%REC	1	4/7/2011 10:58 AM
Surr: Dibromofluoromethane	96.4		71-128	%REC	1	4/7/2011 10:58 AM
Surr: Toluene-d8	108		73-127	%REC	1	4/7/2011 10:58 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-2 30'
Collection Date: 4/4/2011 03:05 PM

Work Order: 1104143
Lab ID: 1104143-13
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzaldehyde	0.018		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 30'

Lab ID: 1104143-13

Collection Date: 4/4/2011 03:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Surr: 2,4,6-Tribromophenol	71.2		36-126	%REC	1	4/7/2011 04:53 AM
Surr: 2-Fluorobiphenyl	75.8		43-125	%REC	1	4/7/2011 04:53 AM
Surr: 2-Fluorophenol	75.5		37-125	%REC	1	4/7/2011 04:53 AM
Surr: 4-Terphenyl-d14	88.3		32-125	%REC	1	4/7/2011 04:53 AM
Surr: Nitrobenzene-d5	74.5		37-125	%REC	1	4/7/2011 04:53 AM
Surr: Phenol-d6	78.1		40-125	%REC	1	4/7/2011 04:53 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 30'

Lab ID: 1104143-13

Collection Date: 4/4/2011 03:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 11:22 AM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 11:22 AM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 11:22 AM
Surr. 1,2-Dichloroethane-d4	97.6		70-128	%REC	1	4/7/2011 11:22 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 30'

Lab ID: 1104143-13

Collection Date: 4/4/2011 03:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	91.9		73-126	%REC	1	4/7/2011 11:22 AM
Surr: Dibromofluoromethane	95.9		71-128	%REC	1	4/7/2011 11:22 AM
Surr: Toluene-d8	94.7		73-127	%REC	1	4/7/2011 11:22 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-2 35'
Collection Date: 4/4/2011 03:20 PM

Work Order: 1104143
Lab ID: 1104143-14
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 05:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-ethylhexyl)phthalate	0.015		0.0066	mg/Kg	1	4/7/2011 05:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 35'

Lab ID: 1104143-14

Collection Date: 4/4/2011 03:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Surr: 2,4,6-Tribromophenol	71.2		36-126	%REC	1	4/7/2011 05:13 AM
Surr: 2-Fluorobiphenyl	81.3		43-125	%REC	1	4/7/2011 05:13 AM
Surr: 2-Fluorophenol	76.3		37-125	%REC	1	4/7/2011 05:13 AM
Surr: 4-Terphenyl-d14	85.9		32-125	%REC	1	4/7/2011 05:13 AM
Surr: Nitrobenzene-d5	74.9		37-125	%REC	1	4/7/2011 05:13 AM
Surr: Phenol-d6	79.3		40-125	%REC	1	4/7/2011 05:13 AM
VOLATILES			SW8260	Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-2 35'
 Collection Date: 4/4/2011 03:20 PM

Work Order: 1104143
 Lab ID: 1104143-14
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 11:45 AM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 11:45 AM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 11:45 AM
Surr: 1,2-Dichloroethane-d4	98.2		70-128	%REC	1	4/7/2011 11:45 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 35'

Lab ID: 1104143-14

Collection Date: 4/4/2011 03:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	87.9		73-126	%REC	1	4/7/2011 11:45 AM
Surr: Dibromofluoromethane	98.2		71-128	%REC	1	4/7/2011 11:45 AM
Surr: Toluene-d8	90.1		73-127	%REC	1	4/7/2011 11:45 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Page 2 of 2

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ALS Project Manager: ALS Work Order #: 10443

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	Tank 1224 Release	Project Name	Navajo Lea Refinery Semi-Annual	A	VOC (8260) Select
Work Order		Project Number	NAV-11-005	B	LL SVOC (8270) TCL
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	Total Metals (6020/7000) Hg
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	Dissolved Metals (6020/7000) Select
Address	PO Box 159	Address	PO Box 159	E	Anions (300) Cl, F, SO4
				F	Alkalinity
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	pH
Phone	(575) 748-6733	Phone	(575) 748-6733	H	Specific Conductivity
Fax	(575) 746-5421	Fax	(575) 746-5421	I	TDS
e-Mail Address		e-Mail Address		J	Nitrate/Nitrite (300)

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	BH-2, 20'	4/4/11	1450	Soil	B	2	X	X									
2	BH-2, 25'		1455														
3	BH-2, 30'		1505														
4	BH-2, 35'	4/4/11	1520	Soil	B	1		X									
5	Trip Blank 012111-58			H2O	1,8	2	X										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
D. Boyer		Fed Ex		☒ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour			
Relinquished by:	Date:	Time:	Received by:	Notes:			
D. Boyer	4/5/11	1700		10 Day TAT. Cg Dave Boyer			
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp	QC Package: (Check One Box Below)	
	4/6/11	0910	RW ALS			☒ Level II Std QC ☐ TRRP Checklist	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			☐ Level III Std QC/Raw Data ☐ TRRP Level IV	
						☐ Level IV SW846/CLP	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4°C 9-5035						☐ Other / EDD	

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

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2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.

3. The Chain of Custody is a legal document. All information must be completed accurately.

Sample Receipt Checklist

Client Name. NAVAJO REFINING

Date/Time Received. 06-Apr-11 00:00

Work Order 1104143

Received by. RDN

Checklist completed by Jay Lynn F Thibault 06-Apr-11
eSignature Date

Reviewed by. Jay Lynn F Thibault 06-Apr-11
eSignature Date

Matrices: soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☒	Not Present ☐
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>1.9</u>		<u>002</u>
Cooler(s)/Kit(s)	<u>3586</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:	<u></u>		

Login Notes:

Client Contacted.

Date Contacted:

Person Contacted:

Contacted By

Regarding:

Comments:

Corrective Action:

Client: Navajo Refining Company
Project: Tank 1204 Release
WorkOrder: 1104143

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram



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Chain of Custody Form

Page 1 of 2

1104143

NAVAJO REFINING: Holly Energy Partners

Project: Tank 1204 Release



ALS Project Manager:

Customer Information		Project Information	
Purchase Order	Tank 1204 Release	Project Name	Navajo Lea Refinery Semi-Annual
Work Order		Project Number	NAV-11-003
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore
Address	PO Box 159	Address	PO Box 159
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211
Phone	(505) 748-6733	Phone	(505) 748-6733
Fax	(505) 746-5421	Fax	(505) 746-5421
e-Mail Address		e-Mail Address	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	BH-1, 5'	4/4/11	1245	Soil	8	2	X	X									
2	10'		1250														
3	15'		1300														
4	20'		1310														
5	25'		1320														
6	30'		1325														
7	BH-1, 35'		1345														
8	BH-2, 5'		1430														
9	BH-2, 10'		1435														
10	BH-2, 15'	4/4/11	1445	Soil	8	2	X	X									

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check-Box)		Results Due Date:	
D. Boyer		FedEx		☒ Std 10 WK Days ☐ 5 WK Days ☐ Other			
Relinquished by:	Date:	Time:	Received by:	Notes:			
D. Boyer	4/4/11	1700		10 Day TAT Cc Dave Boyer			
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)	
	4/6/11	0910	ALS			☒ Level II Std QC ☐ TRRP Checklist	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			☐ Level III Std QC/Raw Data ☐ TRRP Level IV	
						☐ Level IV SW846/CLP	
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035						☐ Other / EDD	

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.

3. The Chain of Custody is a legal document. All information must be completed accurately.

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 ALS Environmental 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By: RA Date: 4/16/00
	Date: 4/5/00	Time: 1700	
	Name: E. ROYER		
	Company: SESS		

 ALS Environmental 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By: RA Date: 4/16/00
	Date: 4/5/00	Time: 1700	
	Name: E. ROYER		
	Company: SESS		

This portion can be removed for Recipient's records
 e **4/5/00** FedEx Tracking Number **874196688692**

Order's name **E. ROYER** Phone **579-7167**

Company **SESS**

Address **100 E. Clinton** Dept./Rm./Suite/Room

Holt State **MD** ZIP **21240**

or Internal Billing Reference



New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division



July 26, 2011

Mr. Darrell Moore
Environmental Manager for Water & Waste
Navajo Refining Company- Lovington Refinery
PO Box 159
Artesia, New Mexico 88211-0159

Dear Mr. Moore:

**Re: NAVAJO REFINING COMPANY- LOVINGTON REFINERY DISCHARGE PERMIT
(GW-014) ANNUAL REPORT REVIEW 2011 & CORRECTIVE ACTIONS**

The New Mexico Oil Conservation Division (OCD) has completed its review of the above subject report received under Navajo Refining Company's cover letter dated April 15, 2011.

The OCD requires the following:

Tank Areas 1202 and Tank 1204:

Corrective actions associated with the tank investigations are required. Please provide documentation that corrective actions have been performed and verify that cleanup of environmental contamination at these locations have been adequately completed within 60 days of the date of this letter.

Please contact me at (505) 476-3490 if you have questions. Thank you.

Sincerely,

Carl J. Chavez
Environmental Engineer

CJC/cjc

xc: OCD District Office

File: GW-014 ("Annual Reports" Thumbnail)





REFINING COMPANY, LLC

FAX

(575) 746-5283 DIV. ORDERS
(575) 746-5481 TRUCKING
(575) 746-5458 PERSONNEL

501 EAST MAIN STREET • P. O. BOX 159
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(575) 746-5451 ENV/PURCH/MKTG
(575) 746-5421 ENGINEERING

April 15, 2011

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr.,
Santa Fe, New Mexico 87505

**RE: 2011 ANNUAL DISCHARGE PERMIT REPORT
NAVAJO REFINING COMPANY-Lea Refinery
LOVINGTON, NM GW-014**

Dear Carl

Enclosed, please find the above referenced report. If you have any questions concerning this submission, please contact me at 575-746-5281 or at Darrell.moore@hollycorp.com.

Sincerely,
NAVAJO REFINING COMPANY, LLC

Darrell Moore
Environmental Manager for Water and Waste

Encl:

RECEIVED OGD
2011 APR 18 A 11:51

**2010 ANNUAL REPORT
NAVAJO REFINING COMPANY- LEA REFINERY
DISCHARGE PERMIT GW-014**

EXECUTIVE SUMMARY

This report is being written as a requirement of Lea Refining Company's Discharge Permit GW-014 which states that an Annual Report will be written by April 15 of each year and will include at a minimum :

- A. A summary of all major refinery activities or events.
- B. Results of all sampling or monitoring events.
- C. Summary of all waste and wastewater disposed of, sold or treated on-site.
- D. Summary of the sump and underground wastewater lines tested.
- E. Summary of all leaks, spills, and releases and or contamination or threat to the City of Lovington Well Head Protection Area.
- F. Summary of discovery of new groundwater contamination.
- G. Summary and copy of all City of Lovington and OCD Activity.

In 2010, Lea Refining had a relatively quite year compared to 2009. We built a new hazardous waste pad on the northeast corner of the plant and that is the only new construction we did at the facility.

In response to a December 10, 2009 letter from OCD, Navajo installed 15 additional monitor wells at the site in May and June 2010 bringing the total number of monitor wells to 29. All wells were sampled and analysed and those results along with maps and figures were submitted to OCD in November 2010 as an Environmental Status Report (ESR). Included in this ESR were figures showing the location of the City of Lovington water wells, other wells on file with the New Mexico Office of the State Engineer, and plots of all pipelines entering and leaving the facility. This ESR showed no instances of hydrocarbon or even a sheen in any well at the facility and showed the hydraulic gradient toward a cone of depression centered at the refinery's water wells. Based on this information, groundwater is moving towards the refinery and its water wells and not away from the refinery to the City water wells as had been previously thought.

Lovington shipped a total of 726 yards of non hazardous waste to CRI. This included trash and debris, blast sand, asphalt, charcoal filter, and contaminated soil. We also shipped 9 tanker loads of Spent Caustic to Lotus LTD.

As part of our ongoing work, we test 100% of the sumps and underground wastewater lines every 5 years. A spreadsheet and analysis is included later in this report that summarizes those test results and any repairs that were necessary.

During 2010, Lea Refining had four (4) recordable spills and one (1) fire. The spills were as follows:

On April 21, 2010 we discovered a leaking line that comes from Tk-1202. We released 12-15 bbls of crude/naptha mix.

On June 22, 2010 we spilled 680 barrels of a tank cleaning mixture consisting of 2-3 bbls diesel, 3 bbls of soap and the rest water;

On August 9, 2010 we spilled 10-12 bbls of soft water from D-70 when a butterfly stuck open.

On August 10, 2010 we spilled 10 bbls of crude oil and oily waste water when the sewer system overflowed during a heavy rainstorm.

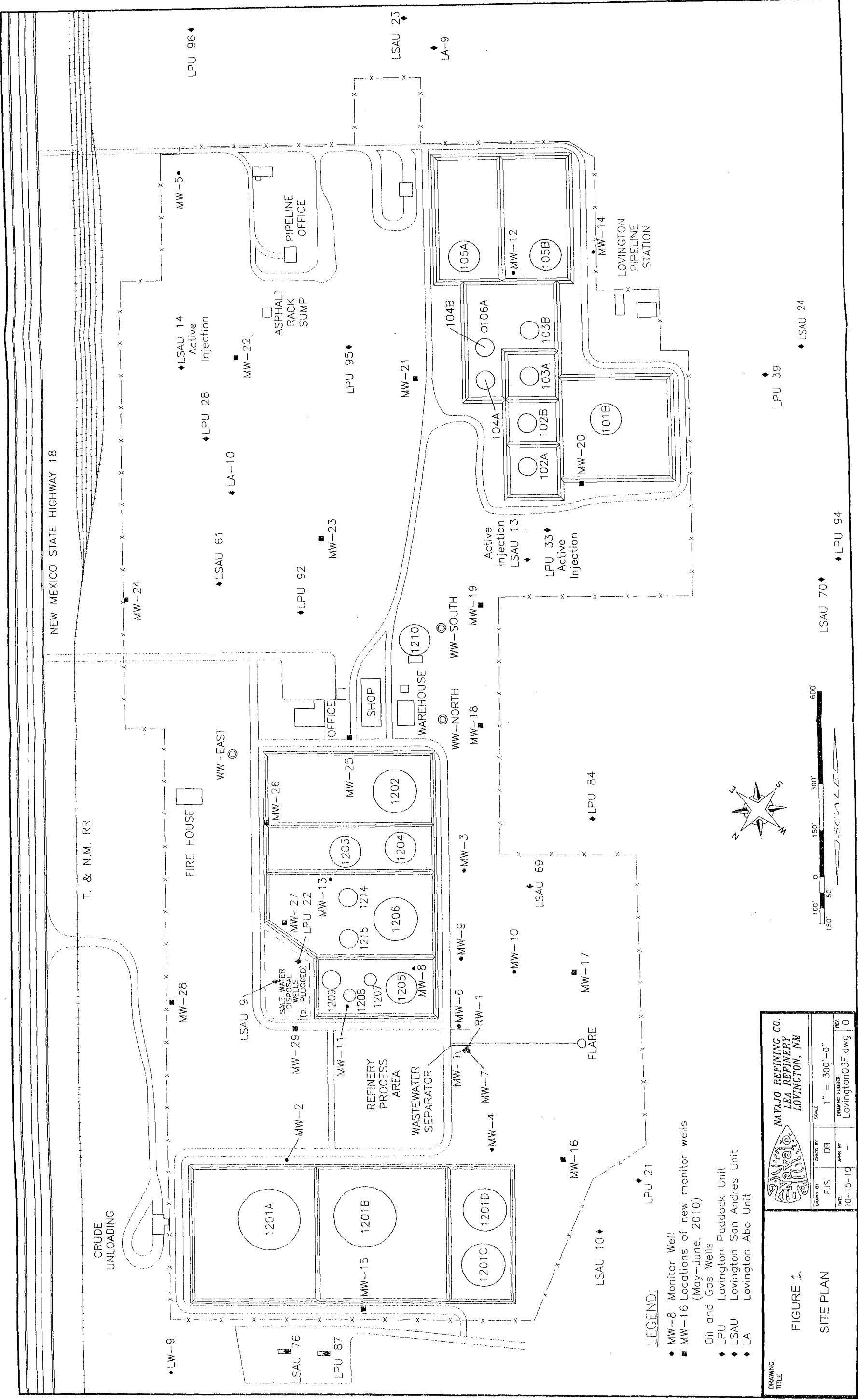
As far as new contamination is concerned, in our February-March 2011 sampling we found elevated concentrations of chromium in MW-25 which is just north of the office building and in MW-29 which is just east of the refinery process units and south of the cooling tower. These concentrations exceed the New Mexico groundwater standard (WQCC) of 0.05 mg/l but are below the EPA drinking water standard of 0.1 mg/l. Also, benzene at very low levels was detected in MW-13 during the February-March 2011 sampling.

MAJOR REFINERY ACTIVITIES

In 2010, Lea Refining had very few activities other than normal operations. We built a new hazardous waste pad on the northeast corner of the refinery. Drawings for this pad were sent to the OCD and the City of Lovington for approval. The pad holds all of our hazardous roll-off bins and allows us to contain any spills that may happen from one of these roll-off bins. We have included a facility map (Figure 1)

RESULTS OF SAMPLING AND MONITORING EVENTS

Included in Supplement 1 of this submittal is a report titled "*Ground Water and Treatment System Annual Monitoring Report – Navajo Refining Company, Lea Refinery*". This report details the analysis and sampling that was done at our Lovington facility in 2010. It also includes the results of sampling done on February-March 2011.



SUMMARY OF WASTE DISPOSAL

Lovington shipped 726 yards of non hazardous waste to CRI in 2010. This included contaminated soil from spills, construction debris, charcoal filter media, asphalt, and trash. Lea Refining also shipped 9 tanker loads of spent caustic from the Caustic Scrubber. This caustic is sent to Lotus Limited (Lotus) which is a facility in Andrews County, Texas that sends the caustic down injection wells.

SUMMARY OF SUMP AND UNDERGROUND WASTEWATER LINES TESTED

As part of Lovington's Discharge Permit, we are required to test all sumps and underground process/wastewater lines. It is Navajo's policy to fill the sump or line with water, mark a level, and then wait 4 hours and note any drop in water level. Enclosed, is a spreadsheet, titled **NAVAJO REFINING COMPANY LOVINGTON REFINERY SEWER TESTING (Table 1)**. Also enclosed is a spread sheet titled **NAVAJO REFINING COMPANY LOVINGTON REFINERY LISTING OF ALL SUMPS (Table 2)**. These spreadsheets detail test date, test method, pass/fail, tested by, and any repairs that were needed or made to the applicable sump or sewer. These spreadsheets are just the summary of the testing we do. The actual test pages, sign off sheets, etc. are kept in a file at the refinery for inspection by OCD as our permit requires.

SUMMARY OF ALL LEAKS, SPILLS, FIRES AND RELEASES

Lovington had four spills in 2010. They are as follows:

On April 21, 2010 we discovered a leaking line that comes from Tk-1202. We released 12-15 bbls of crude/naptha mix. The line was shut in and isolated and repaired. The C-141, TCLP analysis, waste manifests and delineation report from SESI is included in Supplement 2.

On June 22, 2010 we spilled 680 barrels of a tank cleaning mixture consisting of 2-3 bbls diesel, 3 bbls of soap and the rest water. Approximately 680 bbls of liquid were released with 475 bbls being recovered by vacuum truck. This spill occurred when a discharge hose broke on the pump that was being used to circulate the cleaning solution in Tk-1204. The C-141, Bottom Hole sample analysis and waste manifest along with the delineation report from Safety and Environmental Solutions Inc (SESI) are included in Supplement 2.

NAVAJO REFINING COMPANY
LOVINGTON REFINERY
SEWER TESTING

TABLE 1

Note: Notify Darrell Moore so he can contact OCD's District Office and Santa Fe Office to witness testing (72 hrs notice required)

UNIT #	DWG #	LINE, BOX OR HUB #	TEST MEDIUM	TEST DATE	TEST METHOD	TESTED BY	TEST PASS/FAIL	COMMENTS / REPAIR METHOD
83	PLOT PLAN	PSB#01 TO LPS#8809	WATER	4/21/2010	HYDRO	GILES	PASS	
83	PLOT PLAN	LML 8800 - LPS 8811 - LPS 8812	WATER	4/21/2010	HYDRO	GILES	PASS	
83	PLOT PLAN	LML 8800 - PSB 01 - PSB 02	WATER	4/29/2010	HYDRO	GILES	FAIL	
83	PLOT PLAN	LML 8800 - PSB 01 - PSB 02	WATER	6/10/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
83	PLOT PLAN	PSB 01 - PSB 02 - LPS 8812 - LML 8800	WATER	4/29/2010	HYDRO	GILES	PASS	
83	PLOT PLAN	LPS 8815 - LPS 8816 - LPS 8817 - PSB 06 - PSB 07 - PSB 08	WATER	5/6/2010	HYDRO	GILES	PASS	
83	PLOT PLAN	LPS 8814 - LML 8801 - PSB 02 - PSB 05	WATER	5/6/2010	HYDRO	GILES	FAIL	
83	PLOT PLAN	LPS 8814 - LML 8801 - PSB 02 - PSB 05	WATER	5/27/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
83	PLOT PLAN	LPS 8818 - LPS 8819 - PSB 03 - PSB 09 - PSB 10	WATER	5/13/2010	HYDRO	GILES	PASS	
83	PLOT PLAN	LML 8802 - PSB 03 - PSB 04	WATER	5/13/2010	HYDRO	GILES	PASS	
83	PLOT PLAN	LPS 8820 - LPS 8821 - PSB 04 - PSB 11 - PSB 12	WATER	5/13/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	LPS 8823 - LPS 8827	WATER	5/18/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	LML 8803 - PSB 13 - PSB 04	WATER	5/19/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	LML 8805 - LPS 8838	WATER	9/16/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	LML 8806 - PSB 15 - LML 8805 - PSB 14	WATER	9/16/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	LML 8805 - LPS 8839 - LPS 8840 - LPS 8841	WATER	9/16/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	PSB 14 - LPS 8835 - LPS 8830 - LPS 8837 - PSB 16	WATER	9/16/2010	HYDRO	GILES	FAIL	
82	PLOT PLAN	PSB 14 - LPS 8835 - LPS 8830 - LPS 8837 - PSB 16	WATER	9/24/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
82	PLOT PLAN	LML 8806 - LPS 8844 - PSB 18	WATER	10/6/2010	HYDRO	GILES	FAIL	
82	PLOT PLAN	LML 8806 - LPS 8848 - LPS 8849	WATER	10/13/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
82	PLOT PLAN	LML 8806 - LPS 8848 - LPS 8849	WATER	10/13/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
82	PLOT PLAN	LML 8806 - LPS 8847	WATER	10/6/2010	HYDRO	GILES	FAIL	
82	PLOT PLAN	LML 8806 - LPS 8847	WATER	10/13/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
82	PLOT PLAN	PSB 15 - LML 8806 - PSB 17	WATER	10/6/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	LML 8806 - LPS 8842	WATER	10/6/2010	HYDRO	GILES	PASS	
82	PLOT PLAN	LML 8806 - LPS 8843	WATER	10/6/2010	HYDRO	GILES	PASS	
86	PLOT PLAN	LML 8807 - LPS 8793	WATER	11/16/2010	HYDRO	GILES	FAIL	
86	PLOT PLAN	LML 8807 - LPS 8793	WATER	11/22/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
86	PLOT PLAN	LML 8807 - LPS 8850 - LPS 8790	WATER	11/16/2010	HYDRO	GILES	FAIL	
86	PLOT PLAN	LML 8807 - LPS 8850 - LPS 8790	WATER	12/13/2010	HYDRO	GILES	PASS	MADE REPAIRS/RETEST
86	PLOT PLAN	PSB 17 - PSB 19 - LML 8807 - LPS 8794	WATER	11/16/2010	HYDRO	GILES	PASS	

JANUARY 10, 2011

No. of sumps	SUMP ID #	LOCATION	DESCRIPTION	APPROX DIMENSIONS	LAST TEST DATE	NEXT TEST DUE	TEST PASS / FAIL	TESTED BY	TEST METHOD	REPAIR METHOD	COMMENT
	83SUMP01	EAST OF COOLING TOWER, NORTH OF RACK @ E-436	CONCRETE BOX	CONCRETE CAP	N/A	N/A	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) OLD HDU SEWER HUB OR LIFT STATION, SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
	83SUMP02	AT OLD BRIDGE CLEANING PAD	CONCRETE BOX	4' X 4' X 4', 3' X 3' X 2' X 4'	11/18/2008	N/A	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) 2 SUMPS, SUMPS FILLED WITH CONCRETE, CLOSED 10/22/09
1	83SUMP03	AT CHEMICAL STORAGE PAD	CONCRETE BOX	4' X 4' X 4'	6/6/2006	6/6/2014	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP NEW IN 2004
2	83SUMP04	(NAPHTHA SUMP) NORTH OF CONTROL ROOM	CONCRETE BOX	4' DIAMETER	11/21/2007	11/20/2012	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
3	83SUMP04	(NAPHTHA SUMP) NORTH OF CONTROL ROOM	CONCRETE BOX	4' DIAMETER	5/6/2010	5/6/2015	PASS	GILES, INC.	HYDROCHECK LEVEL		
3	83SUMP05	SOUTH OF 400 & 401 CAUSTIC TANKS	CONCRETE BOX	4' X 4' X 4'	11/21/2007	11/20/2012	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
	83SUMP05	SOUTH OF 400 & 401 CAUSTIC TANKS	CONCRETE BOX	4' X 4' X 4'	11/16/2010	11/16/2015	PASS	GILES, INC.	HYDROCHECK LEVEL		
4	83SUMP06	AT NON-HAZ PAD	CONCRETE BOX	4' X 4' X 4'	11/21/2007	11/20/2012	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
5	83SUMP07	AT BRIDGE CLEANING PAD	FIBERGLASS DRUM	ROUND DRUM	11/21/2007	11/20/2012	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
	83SUMP08	WEST OF AIR SEPARATOR	CONCRETE BOX	10' X 20' X 3'	3/12/2006	3/1/202013	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
	83SUMP10	SOUTH OF TANK 1206	METAL BOX	6' X 6' X 6'	11/22/2008	11/22/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
	83SUMP11	NORTH OF TANK 1215	METAL BOX	3' X 3' X 3'	11/24/2008	11/24/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
	83SUMP13	WEST OF MAIN OFFICE BUILDING (OLD AG CONDENSATE SUMP)	CONCRETE BOX	CONCRETE CAP	11/24/2008	11/24/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP REMOVED DURING SEPTIC SYSTEM CAPITAL PROJECT, 2008
6	83SUMP14	NW CORNER OF MAIN BUILDING (OLD AG CONDENSATE SUMP)	CONCRETE BOX	3' X 5' X 2'	11/25/2008	11/25/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
7	83SUMP15	TRUCK UNLOADING EAST OF TANK 1201A	CONCRETE BOX	4' X 4' X 3'-10" H	6/6/2009	6/6/2014	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
8	83SUMP16	SOUTH OF TANK 1201D, CRUDE METERS STA.	CONCRETE BOX	3' DIAMETER	11/25/2008	11/25/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
9	83SUMP17	SOUTH AND WEST OF TANK 1201D, BEESON SUMP	METAL BOX	6' DIA X 6' D	6/6/2009	6/6/2014	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
	83SUMP18	AT RAILROAD LOADING SPIR ALONG HIGHWAY	CONCRETE BOX	36' X 36' X 5'	6/6/2009	6/6/2014	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
10	83SUMP19	SUMP LOCATED NORTH OF TRUCK RACK, COVERED	CONCRETE BOX	3' X 3' X 5'	6/6/2008	6/6/2014	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
11	83SUMP20	AT TRUCK LOADING RACK	CONCRETE BOX	5' X 5' X 4' & 3' X 2' X 2'	11/25/2008	11/25/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
12	83SUMP21	OLD JET-A LOADING RACK	CONCRETE BOX	5' X 5' X 4' & 3' X 2' X 2'	11/25/2008	11/25/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
	83SUMP22	LEA 8710/PAL SUMP	METAL BOX	4' X 4' X 8'	6/6/2009	6/6/2015	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
13	83SUMP23	LEA 8710/PAL SUMP	METAL BOX	4' X 4' X 4'	6/6/2006	6/6/2014	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
	83SUMP23	AT PROVER MAN-HOLD SOUTH AND EAST OF TANK 1201A, RUSSELL STA.	CONCRETE BOX	6' X 6' X 6'	11/25/2008	11/25/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
	83SUMP25	Abandoned Phillips blend area	CONCRETE BOX	6' X 6' X 6'	11/25/2008	11/25/2013	PASS	GILES, INC.	HYDROCHECK LEVEL		(OUT OF SERVICE) SUMP FILLED WITH CONCRETE, CLOSED 10/22/09
14	83SUMP26	South of 1201D at meters (has electric sump pump in hole)	METAL BOX	3' DIAMETER	5/7/2010	5/7/2015	PASS	GILES, INC.	HYDROCHECK LEVEL		TEST - SUMP
15	83SUMP27	Sump at spent caustic loading pumps	CONCRETE BOX	8' X 2' X 3'	MAR 2012						INSTALL NEW IN MARCH 2007
16	83SUMP28	LOWARI CRUDE PL SUMP	METAL BOX	6' DIA X 6' D	5/7/2015						TEST - SUMP
17	83SUMP30	NORTH CHEMICAL STORAGE PAD	CONCRETE BOX	4' X 4' X 4'	MAY 2013						INSTALL NEW IN MAY 2008
					Test in 2011						

On August 9, 2010 we spilled 10-12 bbls of soft water from D-70 when a butterfly valve stuck open. This area has several old foundations, piping, and conduit that was hampering any cleanup efforts. As this is being written, we are removing the old foundations, piping and conduit. We will then be able to clean the area of any contamination, if any is there. We will then bore the area to delineate the spill. The C-141 from this spill is included in Supplement 2.

On August 10, 2010 we spilled 10 bbls of crude oil and oily waste water when the sewer system overflowed during a heavy rainstorm. Six bbls of the liquid was recovered using a vacuum truck. This spill occurred during a lightening storm when the plant lost power. This knocked out all the pumps and we were unable to pump wastewater. It overran the sewers and released to the ground. The C-141, waste manifest, and delineation report from Safety and Environmental Solutions (SESI) is included in Supplement 2.

We had one fire at Lovington. On October 3, 2010, a fire in H-102 was discovered. A leaking tube released naptha which ignited inside the box. There were no injuries and no damages. The C-141 for this fire is included in Supplement 2

SUMMARY OF NEW GROUNDWATER CONTAMINATION

New contamination at the facility was found during the February-March 2011 sampling event. We found elevated concentrations of chromium in MW-25 which is just north of the office building and in MW-29 which is just east of the refinery process units and south of the cooling tower. Chromate was used in years past in cooling towers. The chromium in MW-25 is puzzling since it is not near any sources. These concentrations exceed the New Mexico groundwater standard (WQCC) of 0.05 mg/l but are below the EPA drinking water standard of 0.1 mg/l.

Also, benzene at very low levels was detected in MW-13 during the February-March 2011 sampling. Previously we had seen benzene in MW-11 which is north of MW -13. The value of benzene in MW-13 is 0.0057 mg/l is below the WQCC standard of 0.01 mg/l. The benzene in this area is probably due to past releases in the refinery process area.

SUMMARY AND COPY OF ALL CITY OF LOVINGTON AND OCD ACTIVITY

Though not required by any permit, Navajo samples our wastewater to the City of Lovington POTW monthly. Those 12 monthly sampling analysis' are included in Supplement 3. The C-141's from all spills and the one fire were forwarded to the City along with OCD. Finally, Navajo sends a representative to most Lovington City Council meetings.

RECOMMENDATIONS

Navajo recommends that the three water supply wells be monitored on a quarterly basis for selected WQCC constituents including BTEX, chloride, and TDS. These few parameters will provide Navajo with enough information to detect an unanticipated excursion of contaminants from an unexpected source.

SUPPLEMENT 1

**Ground Water and Treatment System
Annual Monitoring Report
Volume I, Report Text, Tables, Figures, Appendices**

**Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

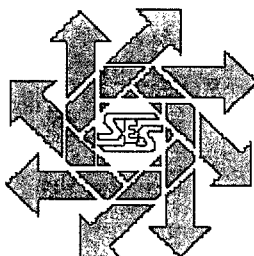
April 15, 2011

Prepared for:



**Navajo Refining Company
501 East Main Street
Artesia, New Mexico 88210**

By:



***Safety & Environmental Solutions, Inc.
703 E. Clinton
Hobbs, New Mexico 88240
(575) 397-0510***

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VOLUME II

Copies of January 2010, August 2010 and February-March 2011 Water Quality
Sampling Analytical Reports

1. Introduction

The Navajo Refining Company, Lea Refinery is located approximately five miles south of Lovington in Lea County, New Mexico. The location of the refinery is shown in Figure 1. A 2009 aerial view of the refinery and a site plan are shown in Figures 2 and 3. The refinery operates under a Groundwater Discharge Plan (GW-014) issued by the New Mexico Oil Conservation Division (OCD). The discharge plan addresses water and fluid discharges to the subsurface; spills and leaks to the ground surface; pits, ponds and below grade tanks and sumps; waste handling and other activities that have the potential to contaminate groundwater or adversely impact public health and the environment.

A condition of the discharge plan is that an annual monitoring report be submitted to the OCD by April 15th of each year. A copy of the report is also to be submitted to the City of Lovington. The information that is to be submitted with the report includes:

1. A description of the monitoring and remediation activities that occurred during the year including conclusions and recommendations.
2. Summary tables listing laboratory analytical results of all water quality sampling for each monitoring point and plots of concentration vs. time for contaminants of concern from each monitoring point*. Any WQCC constituent found to exceed the groundwater standard shall be highlighted. Copies of the most recent year's laboratory data sheets supporting plots shall also be submitted.
3. Water table (piezometric) and/or potentiometric surface elevation iso-concentration maps utilizing static water level data shall be included in the annual report to assess local and/or regional ground water flow direction(s). A corrected water table elevation shall be determined from all wells containing phase-separated hydrocarbons. Map shall show all monitoring, recovery, PSH and City of Lovington water supply wells, pertinent site features (i.e., pipelines, effluent lines, etc.) and the direction and magnitude of the hydraulic gradient. All maps shall be to scale. Chemical iso-concentration maps of any contaminants exceeding water quality standards are required.
4. Plots of water table elevation vs. time for each ground water monitoring point from monitoring data is required to assess water table fluctuations and potential for PSH smear zone development or dormancy*.
5. Monthly and cumulative flow rates and volumes from PSH and recovery wells and the total recovered to date.
6. Product thickness maps from monitoring based on the thickness of Phases-Separated Hydrocarbons (PSH) or product on ground water in all refinery recovery and monitoring wells shall be included in the report. Maps shall include isopleths to the nearest 0.5 feet or iso-concentration lines to the nearest 10 ppb for organics, 10-100 ppm for metals, TDS, etc., for product and contaminants of concern detected during monitoring.

* Plots of concentration versus time and groundwater elevation versus time are not included with this report as there are only two points of information for the newly installed wells. However the information is shown in Table 1.

7. File this report in an acceptable electronic format along with hard copies to the City of Lovington and OCD Santa Fe.

The current report is organized to first generally describe activities that occurred during the past year. This is followed by is presentation of the results of water level measurements and changes during the past year, including a graph of water level declines for the two wells for which continuous water level measurements are available. Then summary tables of water quality sampling are presented together with concentration maps of constituents exceeding water quality standards. The results of investigation of spills and releases that occurred in 2010 (or earlier if not previously submitted) are presented. Finally a discussion of ongoing investigation activities is presented together with report conclusions and recommendations.

2. Previous Submittals

A condition of the discharge plan was that a separate monitoring and remediation Environmental Status Report (ESR) be provided the agency within 9 months of permit issuance to provide an update on contaminate hydrogeology with emphasis on threats to the City of Lovington water supply from the facility. A 2009 monitoring report was presented to the agency and the City of Lovington in a meeting on October 8, 2009. The agency in an email dated October 22, 2009 evaluated the report as deficient in satisfying the permit conditions. Further communication with the agency extended the date for resubmittal of required information to November 6, 2009. Accordingly, on that date Navajo resubmitted the ESR together with separate information required by the agency.

The ESR report documented site lithology, proximity to City of Lovington and other water wells, groundwater conditions and the results of sampling conducted at the site during June 2009. The report also includes information on the area hydrogeology, the replacement of the original monitoring wells, lack of hydrocarbon product detected and possible reasons for such. Sections of that report on area hydrogeology and details of the monitor well replacement are not included in the current monitoring report.

The OCD responded to the submitted reports with a letter dated December 10, 2009, listing deficiencies with the submitted material and requiring additional investigation including further investigatory borings, installation of additional monitoring wells, mapping of pipelines and additional actions required to be taken to protect groundwater.

The annual report dated April 15, 2010 was submitted to the OCD and contained water level and water quality information from the 14 monitor wells previously installed at the refinery and summarized investigation work performed to that date.

The December 2009 letter required additional monitor well installation and such drilling was completed on June 6, 2010. Exploratory borings in the vicinity of the crude tank manifold area and the wastewater separator were drilled in mid-June. In late June several follow-up borings were drilled in the area of the wastewater separator. The monitor wells were developed to remove sand and turbidity in July and sampled in August. In July they

were surveyed by a professional registered surveyor who provided locations and surface and top of casing elevations. This information was compiled and submitted with the Environmental Status Report (ESR) dated November 15, 2010. Copies of the lithologic and well completion logs are included in Appendix A.

City of Lovington water wells in the vicinity of the refinery were located and plotted on Plate 1 which was previously provided to the agency. Information on other wells on file with the NM Office of the State Engineer was also included on Plate 1. A copy of this plate is included with this report.

The city water wells surround the refinery to the southwest, west, northwest and to the east on the east side of NM Highway 18. The closest water well to the Refinery is LW-9 approximately 200 feet upgradient from the refinery's north east property boundary. Wells to the west of the refinery are located 2,400 feet (LW-12, 0.45 miles) or greater from the property fence. The distances to the west range from 2,400 feet to 4,600 feet (0.9 miles). To the east, the closest well (LW-3) is about 1,100 feet (0.2 miles) and the distance from the refinery ranges from 1,100 feet to 4,000 feet.

Also during the summer of 2010, mapping of pipelines entering and exiting the refinery was completed and the information plotted on Plate 2 submitted with the November ESR. A copy of the plate is included with this report together with the table presenting pipeline information.

3. 2010 Monitoring and Remediation Activities, and Hydraulic Gradient

In addition to the investigation work described above, activities performed in 2010 concentrated on better defining groundwater movement and water quality at the refinery. As a result, the fifteen new monitor wells installed around the periphery and interior of the refinery assist in providing additional data in pursuit of those objectives. These wells bring the total number of wells monitoring groundwater to 29 plus one recovery well which also provides water quality information. Water quality from the three water supply wells is also monitored.

Water Level Measurements

Water levels of all wells were measured on January 13 and August 11, 2010, and February 23, 2011. A detailed site plan showing the location of the existing and recently installed refinery monitoring wells is provided in Figure 3. The monitoring wells at the Lea Refinery were gauged for depth to groundwater and total depth using a Solinst Model 101 water level meter. Monitor wells where phase-separated hydrocarbons may have been present were measured using an oil/water interface probe (Solinst Model 122).

Groundwater Sampling

The following activities were conducted to measure groundwater levels and document the groundwater quality conditions in accordance with the OCD Groundwater Discharge Plan. The locations of the referenced wells are shown on Figure 3.

- Measured depth to groundwater in monitoring wells MW-1 through MW-29 and RW-1 prior to sampling. This was in addition to single-day measurements performed on the dates shown above.
- Measured free product thickness in monitoring wells RW-1, MW-1 and MW-7. No free product or even a hydrocarbon sheen was noted.
- Collected semi-annual groundwater samples from all monitor wells plus RW-1.
- Collected groundwater samples from the refinery's North, South and East water wells.

Either a Proactive model SS-Monsoon stainless steel pump or a Geotech SS Geosub 12V DC Sampling Pump was utilized to enable low flow sampling pursuant to guidelines published by the New Mexico Environment Department. These included measuring drawdown while purging until measured parameters stabilize.

Low flow purging was performed using the above described pump dedicated vinyl tubing. The pump was decontaminated with Alconox detergent and clean water between samples. Groundwater parameters of conductivity, temperature and pH were measured during purging operations.

Samples taken for benzene, toluene, ethylbenzene, and total xylene (BTEX) and other volatiles analyses were transferred into air-tight, septum-sealed, 40-milliliter (ml) glass volatile organic analyte (VOA) sample vials with zero head space and preserved with HCl. Samples were placed in an ice-filled cooler immediately after collection and shipped to ALS Laboratory Group in Houston, Texas. The samples were analyzed for BTEX using EPA method SW8260. Chain of custody (COC) forms documenting sample identification numbers, collection times, and delivery times to the laboratory were completed for each set of samples.

Samples collected for semi-volatiles analysis were placed in one-liter amber glass bottles, placed on ice and shipped to the laboratory for analysis by EPA method SW8270.

Samples collected for metals and anion/Total Dissolved Solids (TDS) analyses were collected in separate containers. Samples were collected as total metals and shipped to the laboratory overnight for laboratory filtration with a 0.45 micron filter and then preserved with HNO₃. Samples for mercury were not field filtered. Samples for anion/TDS analysis were collected in liter plastic bottles and placed on ice. The samples were analyzed using methods EPA methods SW6020 for metals, and methods E300, SM2320B, and M2540C, respectively, for anions, alkalinity and TDS.

4. Groundwater Elevations, Flow Direction, and Hydraulic Gradient

Water levels in the vicinity of the refinery are declining due to withdrawal of water for refinery use from wells on the property and from the City's water wells. The water level declines at two of the original monitoring well locations are shown on Figure 4. Both of

these wells have been replaced and deepened.* The average yearly water level decline through 2004-05 for monitor wells in the refinery process area was about -1.2 feet per year. That increased during the time period 2005-2008 to -1.3 to -1.4 feet per year. Measurements of the replacement wells from April to September 2009 show a possible loss of up to 2.4 feet per year. However, comparison of summer 2009 to summer 2010 water levels show an average decline of -1.5 feet per year.

Groundwater elevations for 2009 through February 2011 are summarized in Table 1. Water table elevation maps (potentiometric surface) and directions of groundwater flow for January and August 2010, and February 2011 are shown in Figures 5 through 7.

The additional monitor wells installed in May and June 2010 provide much expanded groundwater elevation coverage at the refinery. It shows that contrary to the assumed general direction of groundwater flow to the southeast, groundwater movement is toward a very large groundwater cone of depression centered at the North, South and East water wells. Based on the water level data, water is moving to the refinery from all four directions and not moving from the refinery to the City of Lovington water wells as has been previously postulated.

Comparison was made of water levels taken in January 2010 and February 2011. Comparing the 15 monitor wells in use in January 2010, the average annual decline was -0.80 feet. The smallest change occurred in MW-13 (-0.46 feet) and the largest was in MW-5 (-1.65).

The average semi-annual change (August 2010 to February 2011) for the 30 wells was +0.25 feet. The two largest changes were +8.52 feet in MW-18 and +4.03 in MW-19. However, MW-26 dropped -2.22 and MW-5 -1.00 during the same time period. The likely reason for the change is a change in pumping regimen from the North and South water wells to the East water well. Comparison of the water level contour maps for August 2010 (Figure 6) and February 2011 (Figure 7) clearly shows the shift in groundwater flow directions.

Groundwater flow direction and gradient vary within the refinery boundaries. Figure 7 most clearly shows the rather large cone of depression centering on the three water supply wells with resultant change in flow direction depending on monitor well location. The upgradient steepening of the hydraulic gradient from 0.0038 ft/ft in the vicinity of MW-15 to 0.0063 at MW-13 clearly shows the impact of the pumping wells. Likewise the near-flat gradient southeast of the wells provides a classic illustration of the effect of groundwater pumping on water level contours.

* MW-4 was dry from 2005 until a replacement well was installed in April 2009. MW-6 was replaced twice most recently in April 2009.

5. Water Quality Sampling Results

Distribution of Hydrocarbons in Groundwater

Phase Separated Hydrocarbon (PSH) was previously present in the vicinity of the wastewater separator (Figure 3). In 2008 measurable free product was measured at 0.62 feet in RW-1 prior to plugging and drilling a replacement well adjacent to it. Drilling of the three replacement wells in the spring of 2009, on the northwest side of the separator detected free-phase hydrocarbons in rotary cuttings and in the mud tank. Measurements made subsequent to installation of the new monitor wells at that location show no PSH and no hydrocarbon sheen. These measurements were made in June, July, September and October 2009; January, February, April and August 2010; and February 2011. Drilling of the 15 new monitor wells in May and June 2010 did not detect free phase hydrocarbons in either drill core samples or in water quality samples taken subsequent to drilling. Some dissolved-phase hydrocarbons are present in the existing wells as discussed below. No dissolved-phase volatiles have been found in the 15 new wells.

Analytical results for BETX and other SW 8260 volatiles in groundwater from 2009 to present are summarized in Table 2. SW-8260 naphthalene and 8270 total naphthalenes are also shown. Constituents having detectable concentrations are shown in yellow with concentrations above the New Mexico Water Quality Control Commission (WQCC) standards highlighted in boldface type. The laboratory reports and COC documentation for samples obtained by SESI are included in Volume II.

Based on the most recent analytical data for samples collected by SESI in February-March 2011 and shown in Table 2, the distribution of volatile hydrocarbons at the Lea Refinery is described below:

- Volatile hydrocarbon concentrations for BTEX and naphthalene were below the laboratory detection limit and below WQCC standards in 11 of the 15 pre-existing monitoring wells (includes RW-1 as a monitor well) and all 15 of the new monitor wells. Volatile hydrocarbons were also absent from the three refinery water wells. The method reporting limit for BTEX and most other volatile constituents is 0.0050 mg/L; the reporting limit for total xylenes is 0.015 mg/L. The reporting limit for 8270 naphthalene is 0.00020 mg/L.
- In February 2011 volatile hydrocarbons were detected only in wells MW-6 (downgradient from the wastewater separator), in MW-13 and in the recovery well at the wastewater separator, RW-1. No concentrations exceeded applicable WQCC standards.
- Benzene was not detected in MW-11 in February 2011. Previously, MW-11, located directly downgradient from the refinery process area, had measurable benzene concentrations which exceeded the groundwater standard of 0.010 mg/L. Benzene in

MW-11 decreased from 0.10 mg/L in June 2009 and 0.20 mg/L in January 2010 to 0.078 mg/L in August 2010. However in August benzene was detected in MW-13 for the first time at a concentration of 0.016 mg/L. This decreased to 0.0057 mg/L in February 2011. Benzene concentration maps for the reporting period are shown in Figures 8 through 10.

- In February 2011 ethylbenzene was reported in MW-6 and RW-1 but at levels much lower than their respective WQCC standards. Maps of BTEX volatiles are provided in Figures 11 to 13.
- Naphthalene and/or methyl-naphthalene were detected in February 2011 in wells MW-6, the well directly downgradient from the wastewater separator, and in MW-10. Both concentrations are below the standard of 0.03 mg/L. The detection in MW-10, located offgradient from the wastewater separator is only slightly above the method 8270 reporting limit of 0.00020 mg/L. Maps showing locations of BTEX and naphthalene detections are shown in Figures 11 to 13.
- Other semi-volatiles detected in MW-6 included acetophenone; there is not a listed water quality standard for this constituent or the various phenols and phthalates. Phenol was not detected in MW-1, MW-6 and RW-1; however various phenolic derivatives were detected in MW-6.
- Various semi-volatile phthalates were seen in all samples including those from the water wells except for MW-15, MW-19, MW-22, MW-25 and the south water well. The likely source in the monitor wells was the PVC casing or the dedicated tubing. The low levels in the water wells were likely laboratory contamination. Phthalates or phthalate esters, are esters of phthalic acid and are mainly used as plasticizers (substances added to plastics to increase their flexibility, transparency, durability, and longevity). The earlier detection of the semi-volatile caprolactam in several samples was not repeated with the current results; the only detection was in MW-28 located on the northern periphery of the refinery. Caprolactam is the precursor to Nylon-6, a widely used synthetic polymer. Though the source is unknown, the fact it was not detected in other wells in the most recent sampling leads to the conclusion that it maybe a laboratory artifact and not present in the refinery groundwater.

Sampling Results for Inorganic Constituents

Sampling was conducted for major cations and anions, total dissolved solids (TDS) and WQCC metals. The results of the sampling are shown in Table 3. The results are highlighted below:

- Results of major anion and TDS sampling in February 2011 showed exceedances of the chloride and/or TDS standards in four existing wells (MW-2, MW-6, MW-11, and MW-13), five new monitor wells (MW-17, MW-18, MW-19, MW-23 and MW-25), and the south water well. Figures 14 through 16 present chloride concentration maps

for January 2010, August 2011 and February-March 2011 samplings. Figures 17 to 19 provide TDS concentrations for the same periods.

The most recent chloride concentration map of the refinery (Figure 16) shows chloride concentrations exceeding the standard of 250 mg/L in the vicinity of the refinery process area. MW-11 is adjacent to the refinery process area and MW-13 is downgradient from MW-11. Within the process area, Navajo has replaced and tested the wastewater sewer system and the oil desalter sumps. However, wells MW-2 and MW-15 with concentrations approaching 250 mg/L are upgradient of the process area but downgradient from several older oil and gas production areas located just to the northwest and outside the refinery boundary.

Chloride and total dissolved solids concentrations at MW-6 remain elevated. This well is located downgradient of the wastewater separator. Initial sampling in June 2009 following development and pumping in excess of 50 gallons showed low concentrations of both constituents. Sampling in January 2010, August 2010 and March 1, 2011 show elevated but declining values for both. Groundwater temperatures which were elevated in the past due to proximity to hot water from the now-eliminated leak are currently nominal for the area. Therefore, it is likely that the concentrations are artifacts from the former wastewater leak. However, future sampling temperatures and concentrations will be examined to confirm this explanation.

Monitor wells MW-17, MW-18 and MW-19 have elevated chloride and/or TDS concentrations. The February 2011 levels in MW-18 have increased since last August while MW-19 levels have decreased and MW-17 values have remained about the same. A possible reason for this is the decline in pumping from the south water well. It is postulated that concentrations in MW-19 are from a pit and/or injection well activity in the area of LSAU 13 or LPU 33. In any event, groundwater flow maps show that elevated concentrations for all three monitor wells likely originate offsite.

Elevated levels of chloride and/or TDS are also found in new monitor wells MW-23 and MW-25. The source or sources at MW-23 may be one or more of the several oil and gas locations in the area. The source of the elevated chloride level at MW-25 is unknown.

In all groundwater samplings the south water well has shown elevated levels of both chloride and total dissolved solids. The refinery itself is not believed to be the source of the chlorides detected. There are numerous oil and gas wells on and in the vicinity of the refinery. Though the OCD has banned pits in the area since at least 1967 older discharges to unlined impoundments had the potential to migrate to groundwater and cause elevated levels of chloride and TDS. Therefore the source of these constituents may be either or a combination of releases from the area of the active injection wells to the south or the former production wells to the east (Figures 16 and 19).

- Fluoride concentration maps are shown in Figures 20 to 22. Three monitor wells (MW-3, MW-9 and MW-24) exceed the WQCC standard of 1.6 mg/L. The values have been consistent during the three sampling event and are considered natural.
- Chromium concentration maps (Figures 23-25) are included with this report as elevated concentrations exceeding the NM groundwater standard of 0.05 mg/L were observed at MW-25 and MW-29 in the February-March 2011 sampling. The source at MW-29 may be the result of former chromate use at the upgradient water cooling tower. The source at MW-25 is unknown. Although concentrations exceed the WQCC standard, they are less than the EPA drinking water standard of 0.1 mg/L.
- Other than chromium discussed above, analytical results of sampling for WQCC metals showed no detections in excess of WQCC standards except for manganese and iron, which are usually indicators of a reducing chemical environment due to lack of oxygen the groundwater in the vicinity of the wells. The iron and manganese concentrations are shown in Figure 26 to 28. In February 2011 manganese exceeded the groundwater standard of 0.20 mg/L in existing wells MW-1, MW-6, MW-7, MW-8 and MW-13. This is the second incidence in MW-13 of manganese exceeding the groundwater standard and it is coincident with the two low-level detections of benzene in August 2010 and February 2011. Iron does not exceed the WQCC standard in any well although it previously exceeded the standard in MW-6 in January and August 2010. Which have or had dissolved phase hydrocarbon impacts most likely have changed the groundwater environment in the immediate proximity of the wells from aerated to anoxic conditions. Manganese and iron in the environment commonly become soluble in the absence of oxygen.

6. Groundwater Temperature

Measurement of groundwater temperature in the vicinity of the wastewater separator has shown elevated levels as high as 28.4° centigrade (83.1° Fahrenheit) in MW-9 in August 2001. The elevated temperatures compared to normal summer temperatures of 20-22° C (68-72° F) were considered evidence of a leak in the wastewater system as the separator contained hot water.

Navajo completed emptying, cleaning and sealing the wastewater separator system in 2003. The sumps were sandblasted and coated with oil and waterproof sealants and static tested. Sampling subsequent to that time showed a decline in temperatures though measurement was difficult as water levels declined and wells dried up.

Sampling of the new wells conducted in June 2009, in January and August 2010 and on March 1, 2011 showed no significant difference in temperatures between monitor wells. These results lead to the conclusion that the retrofitting of the wastewater separator performed by Navajo has stopped leakage of fluids from the unit. Temperatures will be monitored in future samplings to detect any significant changes at this location.

7. Oil Recovery

Hydrocarbon product had been detected in groundwater in the vicinity of the wastewater separator at the Lea Refinery since installation of the first monitor wells in September 1995. A recovery well and an air sparge/soil vapor extraction system was installed at the facility in November 1996. The system included seven air sparge/vapor extraction wells and a Xitech oil recovery pump in RW-1 to remove the source of contamination. A total of 160 gallons of free product was recovered along with 8,870 lbs of TVHC (Total volatile hydrocarbons). The system was shut down in September 1999 because the most recent BTEX and TVHC samplings showed concentrations below detection limits and product had been mostly removed from the monitor wells.

However in 2000-2001 product again increased in the two nearby monitor wells (located within 15-20 feet of the recovery well). The Xitech pump recovered product from the RW-1 which was transferred to a storage container for further recycling to the refinery. The total volume recovered is somewhat in excess of 250 gallons (6 barrels).

In 2001 the depth to product varied depending on pump operation. Product thickness varied from less than 0.01 feet to 4.5 feet. Depth to water was 96.5 feet. However, a downgradient monitor well about 50 feet away on the other side of the wastewater separator did not detect measurable hydrocarbon and very little dissolved phase hydrocarbon.

By 2007 the water table in the vicinity of the recovery well had declined so that product and water in the two monitor wells (MW-1 and MW-7) was not detected (i.e. they were dry). In 2008 the water and product levels in the recovery well (RW-1) had declined so that the installed recovery pump could no longer recover product. At the time of the last measurements of the old wells on March 17, 2009, MW-1 and MW-7 remained dry and in recovery well RW-1 product was 0.6 feet thick and there was slightly over 3 feet of fluid in the well.

Groundwater measurements made in April, June, July, September and October 2009; January, February, April and August 2010; and February 2011 have not shown any hydrocarbon product in any of the three replacement wells. These measurements are shown Table 1.

A plausible reason for the absence of product in the wells is that the leak had been stopped and what was seen in the old wells was oil from the leak seeping through the intervening sandy material to the water table. By drilling new wells adjacent to the old ones, oil in the formation was removed in the drilling process and what is left there is mainly held by capillary forces and little or none will drain by gravity. The design of the wells is such that any further leaks will be detected during quarterly measurements to allow early remedial action and product recovery.

8. Spill Report Investigation

Several releases of hydrocarbons requiring subsurface investigation are summarized with this status report. The detailed results of the investigations are to be provided in Appendix B submitted with this report.

A run-over from Tank 1214 in July 2009 resulted in a release of 25 barrels of gas oil with 15 barrels recovered. SESI drilled three borings from 10 to 20 feet below the surface. Impacts were limited to the top several feet with the exception of minor toluene (0.0033 mg/Kg) at 20 feet in one sample. The contaminated soil was dug out and taken to CRI for disposal. No benzene was detected in any of the subsurface samples.

A release of crude-naphtha mix from a leak in a pipeline under a refinery road crossing occurred in April 2010. An estimated 12 to 15 barrels was released with 7 to 9 barrels recovered. The liquid flowed about 200 feet southeast on the northeast side of the ground-level pipe run to a low area near the water well pump house where it ponded. SESI drilled one boring to a depth of 34 feet. No contamination was found at a depth of 14 feet or below. To the extent possible given the adjacent in-plant pipelines, the area was dug out to remove the contamination with the material transported to CRI for disposal.

On June 16, 2010, the discharge hose broke on the pump from Tank 1204 that was being used to circulate cleaning media. An estimated 680 barrels fluid was released with 3 ½ drums being the cleaning media (soap) and H₂S scavenger, 2-3 barrels of diesel fuel and the remainder water. Approximately 475 barrels of fluid was recovered and placed back in the tank and contaminated soil put in roll-off bins for disposal at an OCD approved facility. On April 4, 2011 two borings were drilled inside the tank berm in the vicinity of the release. The borings detected low levels of semi-volatile hydrocarbons but no volatile hydrocarbons from the surface to a depth of 30 feet. Below 30 feet the retrieved samples were clean. The results of the soil testing were compared with NMED soil screening levels and they are at least several orders of magnitude below applicable exposure levels. It is concluded that the residual material is not a threat to the groundwater or the environment.

On August 9, 2010 the soft water regeneration tank (D-70) overflowed an unknown volume of water with elevated total dissolved solids. The water soaked in and none was recovered. The area affected is about 15 feet wide by 20 feet long. Additional borings will be taken as the piping is being relocated. The tank is scheduled to receive secondary containment later this year.

During a severe thunderstorm with lightening and heavy rainfall, the refinery lost power and the wastewater system overflowed due to flooding of remaining uncovered process areas. The water flowed from northwest to south east a distance of about 600 yards and ponded on the northwest side of the fire house. Vacuum trucks picked up rainwater and any floating hydrocarbons. On April 4, 2011 two borings were drilled to a maximum depth of 20 feet in the vicinity of the now dry ponded area. The borings did not detect

volatile or semi-volatile petroleum hydrocarbons with the exception of a minor detection of fluorethene in one borehole at a depth of ten feet. No threat to groundwater exists from this release.

9. Status of Nearby Oil and Gas Wells

The status of nearby oil and gas wells is shown on Figure 29. The conditions shown are active producing, injection (active injection or injection - plugged and abandoned), temporary abandoned, and plugged and abandoned.

10. Potential Receptors

Neither hydrocarbon product nor a dissolved phase hydrocarbon plume has been detected from the wastewater separator area during the current investigation. However, if a plume was detected, the nearest receptors are the refinery's North and East water supply wells located about 1,000 feet downgradient of the release previously described in Section 7 above. The water supply wells are monitored semi-annually for WQCC constituents (which include many drinking water parameters) but the water supply is used for refinery makeup water and non-drinking water uses such as restrooms.

Previously, locations of the City of Lovington water supply wells were supplied with the November 2009 ESR (Plate 1). The nearest well, Lovington #9 is about 1,330 feet from MW-11 and 1,430 feet from the area of the wastewater separator release. This well was not considered a potential receptor as localized groundwater flow is southeast toward the Navajo pumping water wells. The other identified water supply wells were not presently considered potential receptors based on their distance from the refinery and current information on groundwater flow direction. This information and the conclusion that conditions at the refinery are not impacting city water wells was reinforced when the expanded groundwater map was prepared following installation of the new monitor wells at the refinery.

11. Conclusions

- With the exception of MW-13, sampling conducted February 24-March 3, 2011 showed benzene concentrations in all wells were below EPA method 8260 reporting limits (0.0050 mg/L). At MW-13 the concentration of 0.0057 mg/L is below the NM WQCC standard of 0.010 mg/L. Previously benzene was also detected in MW-11. The previous detection in MW-11 and probably MW-13 is likely due to past releases in the refinery process area. As discussed above, Navajo is retrofitting the process units during refinery expansion and to comply with other provisions of the discharge plan to prevent spills and leaks.
- No hydrocarbon product has been found or hydrocarbon sheens detected in the replacement monitor wells adjacent to the wastewater separator. Groundwater temperatures in these wells are comparable to temperatures in monitor wells away from the area. This leads to the conclusion that the retrofitting completed by Navajo at

the separator seven years ago has solved the problem of wastewater fluids and oil leaking to the groundwater.

- Minor dissolved concentrations of ethylbenzene and various naphthalene compounds were found in the three replacement wells located adjacent to the northwest side of the wastewater separator, and in the downgradient monitor well on the southeast side MW-6. However concentrations of these constituents are well below WQCC standards.
- No volatile organic compounds were found in the refinery water supply wells. Chloride and TDS in the south water well exceed WQCC standards. Because water from the wells is used by the refinery for hand washing, showering, etc., the wells are now monitored for BTEX on at least a semi-annual basis.
- With the possible exception of elevated chlorides and total dissolved solids found in MW-6, MW-11 and MW-13, elevated levels found in other monitor wells and the south water well are from non-refinery sources. The elevated level in MW-6 is likely an artifact of the previous release at the wastewater separator. Possible sources of chlorides in the process area are previous releases from the process area or migration from upgradient oil production areas northwest of the refinery boundary. As discussed above, modification of the wastewater system in process area should prevent future releases. The likely source of chlorides in the south water well is from oil production areas to the south and southwest of the refinery boundary.

12. Status of Investigatory Work

1. Mapping and identification of 23 active, inactive and plugged and abandoned oil and gas production and injection wells within the refinery and on the periphery. This work has been completed and a map showing the location and status of these wells is included with this report (Figures 3 and 29).
2. Mapping and identification of all Navajo and Holly pipelines entering and leaving the refinery and on the periphery including crude lines, product lines and effluent lines operated by Navajo, Holly or other entities. Work to locate and identify pipelines entering and leaving the refinery has been completed. The results are shown on Plate 2.
3. Mapping and identification of all Navajo and Holly Energy Partners incoming and outgoing crude and product lines through the City of Lovington's well field. This work has been completed and the results are shown on Plate 2.
4. Obtaining and reviewing City of Lovington water well records for drilling and well completion information. This work is partially complete. Records of most water wells to the north and west of the refinery have been located. Records of the three water supply wells at the refinery were located and were included with the annual report submitted in April 2010. As a result of water levels from the newly added monitor wells showing a cone of depression centered on the refinery water

wells and no current groundwater movement outside of the refinery boundaries (Figures 6 and 7), no additional work on this OCD request is to be performed.

5. Obtaining and reviewing pumping volumes, rates and pumping schedules for all pumping water wells previously identified. This work has not yet been performed. As a result of water levels from the newly added monitor wells showing a cone of depression centered on the refinery water wells and no current groundwater movement outside of the refinery boundaries, the requested work will be limited to the three refinery water wells. Also aquifer testing of the aquifer at the refinery has been rescheduled for May 2011.
6. Field checking of non-City of Lovington water wells shown on Plate 1 of the Environmental Status Report. This work has not yet been performed and as a result of the conclusion in #5 above it will be dropped.
7. Locating and drilling the additional monitor wells requested by OCD in the December 10, 2009 letter. This work has been completed and the work presented in the November 15, 2010 Environmental Status Report. Similarly, work to define possible contamination at the crude manifold and wastewater separator areas has been completed and the results discussed in the ESR.
8. The next semi-annual monitoring event will be scheduled for July 2011. OCD and the City of Lovington will be notified two weeks in advance of the date of the sampling.

13. Recommendations

In addition to semi-annual sampling Navajo recommends that the three water supply wells be monitored on a quarterly basis for selected WQCC constituents including BTEX, chloride, and total dissolved solids. These few parameters will provide the refinery with sufficient information to detect an unanticipated excursion of contaminants from an unexpected source.

14. Report Tables and Figures

Table 1. Water Level Summary, Navajo Refining Company, Lea Refinery

Monitor Well, Depth Below TOC (feet)	Elevation Top of Casing (TOC, feet)	Measure- ment Date	Depth to Product (feet)	Depth to Water Below TOC (feet)	Product Thickness (feet)	Corrected Depth to Water (feet)	Corrected Water Level Elev. (feet)	Change from previous reading (ft)
MW-1	3,838.40	04/30/09	--	106.35	0	106.35	3,732.05	--
129.14		06/10/09	--	106.49	0	106.49	3,731.91	-0.14
		06/19/09	--	106.57	0	106.57	3,731.83	-0.08
		07/02/09	--	106.74	0	106.74	3,731.66	-0.17
		07/24/09	--	106.83	0	106.83	3,731.57	-0.09
		09/24/09	--	107.31	0	107.31	3,731.09	-0.48
		10/27/09	--	107.44	0	107.44	3,730.96	-0.13
		01/13/10	--	107.57	0	107.57	3,730.83	-0.13
		04/01/10	--	107.51	0	107.51	3,730.89	0.06
		08/11/10	--	108.09	0	108.09	3,730.31	-0.58
		02/23/11	--	108.12	0	108.12	3,730.28	-0.03
Note: Replacement well, drilled April 2009.								
MW-2	3,837.35	06/22/09	--	104.32	0	104.32	3,733.03	--
126.46		01/13/10	--	105.44	0	105.44	3,731.91	-1.12
		08/11/10	--	105.97	0	105.97	3,731.38	-0.53
		02/23/11	--	105.92	0	105.92	3,731.43	0.05
Note: Replacement well, drilled April 2009.								
MW-3	3,831.65	06/18/09	--	102.65	0	102.65	3,729.00	--
130.47		01/13/10	--	103.29	0	103.29	3,728.36	-0.64
		08/11/10	--	104.82	0	104.82	3,726.83	-1.53
		09/28/10	--	104.70	0	104.70	3,726.95	0.12
		02/23/11	--	104.11	0	104.11	3,727.54	0.59
Note: Replacement well, drilled April 2009.								
MW-4	3,839.89	06/16/09	--	106.79	0	106.79	3,733.10	--
127.82		01/13/10	--	107.72	0	107.72	3,732.17	-0.93
		08/11/10	--	108.19	0	108.19	3,731.70	-0.47
		09/28/10	--	108.47	0	108.47	3,731.42	-0.28
		02/23/11	--	108.31	0	108.31	3,731.58	0.16
Note: Replacement well, drilled April 2009.								
MW-5	3,819.15	06/16/09	--	90.84	0	90.84	3,728.31	--
118.00		01/13/10	--	92.02	0	92.02	3,727.13	-1.18
		08/11/10	--	92.67	0	92.67	3,726.48	-0.65
		02/23/11	--	92.68	0	93.67	3,725.48	-1.00
Note: Replacement well, drilled April 2009.								
MW-6	3,838.16	06/18/09	--	106.64	0	106.64	3,731.52	--
129.72		07/24/09	--	106.92	0	106.92	3,731.24	-0.28
		09/24/09	--	107.44	0	107.44	3,730.72	-0.52
		10/27/09	--	107.55	0	107.55	3,730.61	-0.11
		01/13/10	--	107.64	0	107.64	3,730.52	-0.09
		02/02/10	--	107.69	0	107.69	3,730.47	-0.05
		04/01/10	--	107.65	0	107.65	3,730.51	0.04
		08/11/10	--	108.00	0	108.00	3,730.16	-0.35
		02/23/11	--	108.22	0	108.22	3,729.94	-0.22
Note: Replacement well, drilled April 2009.								

Table 1. Water Level Summary, Navajo Refining Company, Lea Refinery

Monitor Well, Depth Below TOC (feet)	Elevation Top of Casing (TOC, feet)	Measure- ment Date	Depth to Product (feet)	Depth to Water Below TOC (feet)	Product Thickness (feet)	Corrected Depth to Water (feet)	Corrected Water Level Elev. (feet)	Change from previous reading (ft)
MW-7	3,838.42	04/30/09	--	106.37	0	106.37	3,732.05	--
129.52		06/10/09	--	106.48	0	106.48	3,731.94	-0.11
		06/19/09	--	106.68	0	106.68	3,731.74	-0.20
		07/02/09	--	106.75	0	106.75	3,731.67	-0.07
		07/24/09	--	106.84	0	106.84	3,731.58	-0.09
		09/24/09	--	107.33	0	107.33	3,731.09	-0.49
		10/27/09	--	107.46	0	107.46	3,730.96	-0.13
		01/13/10	--	107.60	0	107.60	3,730.82	-0.14
		02/02/10	--	107.61	0	107.61	3,730.81	-0.01
		04/01/10	--	107.52	0	107.52	3,730.90	0.09
		08/11/10	--	108.10	0	108.10	3,730.32	-0.58
		02/23/11	--	108.13	0	108.13	3,730.29	-0.03
Note: Replacement well, drilled April 2009.								
MW-8	3,839.98	06/18/09	--	109.37	0	109.37	3,730.61	--
132.34		01/13/10	--	110.47	0	110.47	3,729.51	-1.10
		08/11/10	--	111.05	0	111.05	3,728.93	-0.58
		02/23/11	--	111.07	0	111.07	3,728.91	-0.02
Note: Replacement well, drilled April 2009.								
MW-9	3,835.22	06/16/09	--	104.58	0	104.58	3,730.64	--
129.24		01/13/10	--	105.61	0	105.61	3,729.61	-1.03
		08/11/10	--	106.37	0	106.37	3,728.85	-0.76
		02/23/11	--	106.28	0	106.28	3,728.94	0.09
Note: Replacement well, drilled April 2009.								
MW-10	3,833.66	06/18/09	--	102.57	0	102.57	3,731.09	--
128.54		01/13/10	--	103.51	0	103.51	3,730.15	-0.94
		08/11/10	--	104.31	0	104.31	3,729.35	-0.80
		02/23/11	--	104.26	0	104.26	3,729.40	0.05
Note: Replacement well, drilled April 2009.								
MW-11	3,839.56	06/20/02	--	99.93	0	99.93	3,739.63	--
117.70		09/17/02	--	100.63	0	100.63	3,738.93	-0.70
		12/19/02	--	100.50	0	100.50	3,739.06	0.13
		03/28/03	--	99.74	0	99.74	3,739.82	0.76
		06/20/03	--	100.76	0	100.76	3,738.80	-1.02
		09/15/03	--	101.51	0	101.51	3,738.05	-0.75
		04/30/04	--	102.31	0	102.31	3,737.25	-0.80
		02/21/05	--	103.80	0	103.80	3,735.76	-1.49
		06/28/05	--	104.33	0	104.33	3,735.23	-0.53
		09/30/05	--	104.60	0	104.60	3,734.96	-0.27
		12/29/05	--	104.81	0	104.81	3,734.75	-0.21
		04/10/06	--	105.12	0	105.12	3,734.44	-0.31
		07/06/06	--	105.61	0	105.61	3,733.95	-0.49
		01/26/07	--	106.63	0	106.63	3,732.93	-1.02
		03/27/07	--	106.80	0	106.80	3,732.76	-0.17
		07/13/07	--	106.94	0	106.94	3,732.62	-0.14
		09/12/07	--	107.22	0	107.22	3,732.34	-0.28
		12/31/07	--	106.74	0	106.74	3,732.82	0.48
		03/26/08	--	106.81	0	106.81	3,732.75	-0.07
		06/13/08	--	107.40	0	107.40	3,732.16	-0.59

Table 1. Water Level Summary, Navajo Refining Company, Lea Refinery

Monitor Well, Depth Below TOC (feet)	Elevation Top of Casing (TOC, feet)	Measure- ment Date	Depth to Product (feet)	Depth to Water Below TOC (feet)	Product Thickness (feet)	Corrected Depth to Water (feet)	Corrected Water Level Elev. (feet)	Change from previous reading (ft)
MW-11		09/24/08	--	108.76	0	108.76	3,730.80	-1.36
		12/29/08	--	108.57	0	108.57	3,730.99	0.19
		03/17/09	--	107.91	0	107.91	3,731.65	0.66
		06/18/09	--	108.65	0	108.65	3,730.91	-0.74
		01/13/10	--	109.81	0	109.81	3,729.75	-1.16
		08/11/10	--	110.16	0	110.16	3,729.40	-0.35
		02/23/11	--	110.32	0	110.32	3,729.24	-0.16
MW-12	3,822.73	06/20/02	--	84.20	0	84.20	3,738.53	--
100.56		12/21/02	--	85.21	0	85.21	3,737.52	-1.01
		03/28/03	--	85.35	0	85.35	3,737.38	-0.14
		06/20/03	--	85.51	0	85.51	3,737.22	-0.16
		09/15/03	--	86.13	0	86.13	3,736.60	-0.62
		11/02/03	--	86.57	0	86.57	3,736.16	-0.44
		04/30/04	--	87.40	0	87.40	3,735.33	-0.83
		02/21/05	--	88.42	0	88.42	3,734.31	-1.02
		06/28/05	--	88.76	0	88.76	3,733.97	-0.34
		09/30/05	--	89.12	0	89.12	3,733.61	-0.36
		12/29/05	--	89.31	0	89.31	3,733.42	-0.19
		04/10/06	--	89.55	0	89.55	3,733.18	-0.24
		07/06/06	--	90.03	0	90.03	3,732.70	-0.48
		01/26/07	--	90.06	0	90.06	3,732.67	-0.03
		03/27/07	--	90.10	0	90.10	3,732.63	-0.04
		07/13/07	--	91.66	0	91.66	3,731.07	-1.56
		09/12/07	--	92.01	0	92.01	3,730.72	-0.35
		12/31/07	--	92.17	0	92.17	3,730.56	-0.16
		03/26/08	--	92.39	0	92.39	3,730.34	-0.22
		06/13/08	--	92.59	0	92.59	3,730.14	-0.20
		09/24/08	--	93.21	0	93.21	3,729.52	-0.62
		12/29/08	--	93.59	0	93.59	3,729.14	-0.38
		03/17/09	--	93.75	0	93.75	3,728.98	-0.16
		06/16/09	--	93.83	0	93.83	3,728.90	-0.08
		01/13/10	--	94.78	0	94.78	3,727.95	-0.95
		08/11/10	--	95.67	0	95.67	3,727.06	-0.89
		02/23/11	--	95.85	0	95.85	3,726.88	-0.18
MW-13	3,837.06	04/30/04	--	101.41	0	101.41	3,735.65	--
119.69		02/21/05	--	103.09	0	103.09	3,733.97	-1.68
		06/28/05	--	103.48	0	103.48	3,733.58	-0.39
		09/30/05	--	103.80	0	103.80	3,733.26	-0.32
		12/29/05	--	104.41	0	104.41	3,732.65	-0.61
		04/10/06	--	104.59	0	104.59	3,732.47	-0.18
		07/06/06	--	104.94	0	104.94	3,732.12	-0.35
		01/26/07	--	106.41	0	106.41	3,730.65	-1.47
		03/27/07	--	106.47	0	106.47	3,730.59	-0.06
		07/13/07	--	106.93	0	106.93	3,730.13	-0.46
		09/12/07	--	107.19	0	107.19	3,729.87	-0.26
		12/31/07	--	106.71	0	106.71	3,730.35	0.48
		03/26/08	--	107.02	0	107.02	3,730.04	-0.31
		06/13/08	--	107.19	0	107.19	3,729.87	-0.17
		09/24/08	--	108.56	0	108.56	3,728.50	-1.37
		12/29/08	--	108.71	0	108.71	3,728.35	-0.15
		03/17/09	--	108.36	0	108.36	3,728.70	0.35

Table 1. Water Level Summary, Navajo Refining Company, Lea Refinery

Monitor Well, Depth Below TOC (feet)	Elevation Top of Casing (TOC, feet)	Measure- ment Date	Depth to Product (feet)	Depth to Water Below TOC (feet)	Product Thickness (feet)	Corrected Depth to Water (feet)	Corrected Water Level Elev. (feet)	Change from previous reading (ft)
MW-13		06/16/09	--	108.58	0	108.58	3,728.48	-0.22
		01/13/10	--	109.68	0	109.68	3,727.38	-1.10
		08/11/10	--	109.72	0	109.72	3,727.34	-0.04
		02/23/11	--	110.14	0	110.14	3,726.92	-0.42
MW-14	3,823.03	04/30/04	--	87.46	0	87.46	3,735.57	--
105.05		02/21/05	--	88.48	0	88.48	3,734.55	-1.02
		06/28/05	--	88.80	0	88.80	3,734.23	-0.32
		09/30/05	--	89.14	0	89.14	3,733.89	-0.34
		12/29/05	--	89.34	0	89.34	3,733.69	-0.20
		04/10/06	--	89.63	0	89.63	3,733.40	-0.29
		07/06/06	--	90.08	0	90.08	3,732.95	-0.45
		01/26/07	--	91.02	0	91.02	3,732.01	-0.94
		03/27/07	--	91.18	0	91.18	3,731.85	-0.16
		07/13/07	--	91.68	0	91.68	3,731.35	-0.50
		09/12/07	--	92.02	0	92.02	3,731.01	-0.34
		12/31/07	--	92.25	0	92.25	3,730.78	-0.23
		03/26/08	--	92.43	0	92.43	3,730.60	-0.18
		06/13/08	--	92.64	0	92.64	3,730.39	-0.21
		12/29/08	--	93.60	0	93.60	3,729.43	-0.96
		03/17/09	--	93.84	0	93.84	3,729.19	-0.24
		06/16/09	--	93.92	0	93.92	3,729.11	-0.08
		01/13/10	--	94.80	0	94.80	3,728.23	-0.88
		08/11/10	--	95.67	0	95.67	3,727.36	-0.87
		02/23/11	--	95.99	0	95.99	3,727.04	-0.32
MW-15	3,840.19	08/11/10	--	106.94	0	106.94	3,733.25	--
121.67		02/23/11	--	107.01	0	107.01	3,733.18	-0.07
MW-16	3,838.20	08/11/10	--	106.18	0	106.18	3,732.02	--
119.67		02/23/11	--	106.34	0	106.34	3,731.86	-0.16
MW-17	3,831.43	08/11/10	--	101.65	0	101.65	3,729.78	--
115.69		02/23/11	--	101.71	0	101.71	3,729.72	-0.06
MW-18	3,825.05	08/11/10	--	108.54	0	108.54	3,716.51	--
119.38		09/30/10	--	104.47	0	104.47	3,720.58	4.07
		02/23/11	--	100.02	0	100.02	3,725.03	4.45
MW-19	3,823.97	08/11/10	--	102.35	0	102.35	3,721.62	--
113.57		09/30/10	--	98.70	0	98.70	3,725.27	3.65
		02/23/11	--	98.32	0	98.32	3,725.65	0.38
MW-20	3,824.58	08/11/10	--	97.75	0	97.75	3,726.83	--
111.82		02/23/11	--	97.42	0	97.42	3,727.16	0.33
MW-21	3,820.26	08/11/10	--	94.06	0	94.06	3,726.20	--
108.27		02/23/11	--	93.84	0	93.84	3,726.42	0.22
MW-22	3,821.82	08/11/10	--	95.62	0	95.62	3,726.20	--
110.78		02/23/11	--	95.36	0	95.36	3,726.46	0.26

Table 1. Water Level Summary, Navajo Refining Company, Lea Refinery

Monitor Well, Depth Below TOC (feet)	Elevation Top of Casing (TOC, feet)	Measure- ment Date	Depth to Product (feet)	Depth to Water Below TOC (feet)	Product Thickness (feet)	Corrected Depth to Water (feet)	Corrected Water Level Elev. (feet)	Change from previous reading (ft)
MW-23	3,825.58	08/11/10	--	100.49	0	100.49	3,725.09	--
115.12		02/23/11	--	99.80	0	99.80	3,725.78	0.69
MW-24	3,830.50	08/11/10	--	104.04	0	104.04	3,726.46	--
118.09		02/23/11	--	104.26	0	104.26	3,726.24	-0.22
MW-25	3,830.77	08/11/10	--	106.46	0	106.46	3,724.31	--
121.60		02/23/11	--	105.72	0	105.72	3,725.05	0.74
MW-26	3,833.18	08/11/10	--	106.22	0	106.22	3,726.96	--
121.31		02/23/11	--	108.44	0	108.44	3,724.74	-2.22
MW-27	3,837.27	08/11/10	--	109.00	0	109.00	3,728.27	--
123.96		02/23/11	--	109.58	0	109.58	3,727.69	-0.58
MW-28	3,833.44	08/11/10	--	103.72	0	103.72	3,729.72	--
118.42		02/23/11	--	104.03	0	104.03	3,729.41	-0.31
MW-29	3,835.55	08/11/10	--	105.80	0	105.80	3,729.75	--
120.35		02/23/11	--	105.97	0	105.97	3,729.58	-0.17
RW-1	3,838.48	04/30/09	--	106.45	0	106.45	3,732.03	--
129.31		06/10/09	--	106.59	0	106.59	3,731.89	-0.14
		06/19/09	--	106.61	0	106.61	3,731.87	-0.02
		07/02/09	--	106.82	0	106.82	3,731.66	-0.21
		07/24/09	--	106.92	0	106.92	3,731.56	-0.10
		09/24/09	--	107.42	0	107.42	3,731.06	-0.50
		10/27/09	--	107.53	0	107.53	3,730.95	-0.11
		01/13/10	--	107.67	0	107.67	3,730.81	-0.14
		02/02/10	--	107.69	0	107.69	3,730.79	-0.02
		04/01/10	--	107.60	0	107.60	3,730.88	0.09
		08/11/10	--	108.18	0	108.18	3,730.30	-0.58
		02/23/11	--	108.22	0	108.22	3,730.26	-0.04
Note: Replacement well, drilled April 2009.								
Notes:								
1. Monitoring wells MW-1 through MW-7 installed September 1995; plugged and redrilled April 2009.								
2. Monitoring wells MW-8 through MW-10 installed March and April 1996; plugged and redrilled April 2009.								
3. Monitoring wells MW-6R, MW-11, MW-12 installed April and May 2002; MW-6R plugged April 2009.								
4. Monitoring wells MW-13 and MW-14 installed January 2004.								
5. Elevation survey of new and existing wells August 7, 2009. Earlier water level information corrected to current survey.								
6. Monitoring wells MW-15 through MW-29 installed May-June 2010.								
7. Elevation survey of wells MW-15 through MW-29 July 13, 2010.								

Table 2. Organic Constituent Concentrations in Groundwater, Navajo Refining Company, Lea Refinery, Lovington, NM

Monitor Well	Sample Date	WQCC Volatiles						Other volatiles? (see notes)	WQCC Semi-Volatiles				Other semi-volatiles? (see notes)
		Benzene (mg/L)	Ethyl-benzene (mg/L)	Toluene (mg/L)	Total Xylenes (mg/L)	Total Naphthalene (8260, mg/L)	MTBE (mg/L)		Total Naphthalenes (8270, mg/L)	Naphthalene (8270, mg/L)	2-Methylnaphthalene (mg/L)		
NM WQCC Groundwater Standards:													
MW-1	06/19/09	0.010	0.75	0.62	0.03	--	0.03	--	--	--	--	--	
	01/19/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	03/01/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-2	06/22/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/19/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/16/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	03/03/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-3 (duplicate)	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/14/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/14/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/19/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/24/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-4	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/13/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/19/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-5	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/20/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes

Table 2. Organic Constituent Concentrations in Groundwater, Navajo Refining Company, Lea Refinery, Lovington, NM

Monitor Well	Sample Date	WQCC Volatiles						Other volatiles? (see notes)	WQCC Semi-Volatiles				Other semi-volatiles? (see notes)
		Benzene (mg/L)	Ethyl-benzene (mg/L)	Toluene (mg/L)	Total Xylenes (mg/L)	Total Naphthalene (8260, mg/L)	MTBE (mg/L)		Total Naphthalenes (8270, mg/L)	Naphthalene (8270, mg/L)	2-Methylnaphthalene (mg/L)		
NM WQCC Groundwater Standards:													
MW-6 (duplicate)	06/18/09	0.010	0.75	0.75	0.62	0.03	--		0.03	--	--		
		<0.0050	<0.0050	<0.0050	<0.015	0.0075	<0.0050	Yes	<0.00020	<0.00020	<0.00020	Yes	
	06/18/09	<0.0050	<0.0050	<0.0050	<0.015	0.0074	<0.0050	Yes	<0.00020	<0.00020	<0.00020	Yes	
	02/02/10	<0.0050	0.013	<0.0050	<0.015	0.0099	<0.0050	Yes	<0.00020	<0.00020	<0.00020	Yes	
	08/19/10	<0.0050	0.015	<0.0050	<0.015	<0.0050	<0.0050	Yes	0.0034	0.0017	0.0017	Yes	
	03/01/11	<0.0050	0.018	<0.0050	<0.015	0.013	<0.0050	Yes	0.0094	0.0062	0.0032	Yes	
MW-7	06/19/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	Yes	<0.00020	<0.00020	<0.00020	Yes	
	02/02/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	08/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	03/01/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
MW-8	06/18/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	01/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	08/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	02/25/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
MW-9	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	01/14/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	08/19/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	03/01/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
MW-10	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No				Yes	
	01/13/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	08/19/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	03/03/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	0.00028	0.00028	<0.00020	Yes	

Table 2. Organic Constituent Concentrations in Groundwater, Navajo Refining Company, Lea Refinery, Lovington, NM

Monitor Well	Sample Date	WQCC Volatiles						MTBE (mg/L)	Other volatiles? (see notes)	WQCC Semi-Volatiles				Other semi-volatiles? (see notes)
		Benzene (mg/L)	Ethyl-benzene (mg/L)	Toluene (mg/L)	Total Xylenes (mg/L)	Total Naphthalene (8260, mg/L)				Total Naphthalenes (8270, mg/L)	Naphthalene (8270, mg/L)	2-Methylnaphthalene (mg/L)		
NM WQCC Groundwater Standards:														
MW-11	06/18/09	0.010	0.75	0.75	0.62	0.03	-		0.03	-	-			
	01/18/10	0.20 E	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/18/10	0.078	0.021	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	0.00036	<0.00020	<0.00020	<0.00020	Yes
	02/25/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-12	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/20/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/25/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-13	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/18/10	0.016	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/25/11	0.0057	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-14	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/20/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/25/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-15	06/16/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	01/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	08/20/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/25/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-16	08/20/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	Yes	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/24/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	Yes	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	No
MW-16	08/20/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/24/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	Yes

Table 2. Organic Constituent Concentrations in Groundwater, Navajo Refining Company, Lea Refinery, Lovington, NM

Monitor Well	Sample Date	WQCC Volatiles						Other volatiles? (see notes)	WQCC Semi-Volatiles				Other semi-volatiles? (see notes)
		Benzene (mg/L)	Ethyl-benzene (mg/L)	Toluene (mg/L)	Total Xylenes (mg/L)	Total Naphthalene (8260, mg/L)	MTBE (mg/L)		Total Naphthalenes (8270, mg/L)	Naphthalene (8270, mg/L)	2-Methylnaphthalene (mg/L)		
NM WQCC Groundwater Standards:													
MW-17	08/20/10	0.010	0.75	0.75	0.62	0.03	-		0.03	-	-		
	02/24/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-18	08/23/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/24/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-19	08/23/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/24/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	No
MW-20	08/23/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/25/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-21	08/23/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-22	08/23/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	No
MW-23	08/23/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
MW-24	08/24/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	<0.00020	Yes

Table 2. Organic Constituent Concentrations in Groundwater, Navajo Refining Company, Lea Refinery, Lovington, NM

Monitor Well	Sample Date	WQCC Volatiles						Other volatiles? (see notes)	WQCC Semi-Volatiles			Other semi-volatiles? (see notes)
		Benzene (mg/L)	Ethyl-benzene (mg/L)	Toluene (mg/L)	Total Xylenes (mg/L)	Total Naphthalene (8260, mg/L)	MTBE (mg/L)		Total Naphthalenes (8270, mg/L)	Naphthalene (8270, mg/L)	2-Methylnaphthalene (mg/L)	
NM WQCC Groundwater Standards:		0.010	0.75	0.75	0.62	0.03	--		0.03	--	--	
MW-25	08/23/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	No
MW-26	08/24/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
MW-27	08/18/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	02/25/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
MW-28	08/28/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	02/23/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
MW-29 (Dupl #1)	08/24/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	02/28/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
RW-1	06/19/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	Yes	<0.00020	<0.00020	<0.00020	Yes
	02/02/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	08/19/10	<0.0050	<0.0050	<0.0050	0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	03/01/11	<0.0050	<0.0050	<0.0050	0.0054 [#]	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
North Well	06/18/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	01/14/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	08/24/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes
	03/03/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes

Table 2. Organic Constituent Concentrations in Groundwater, Navajo Refining Company, Lea Refinery, Lovington, NM

		WQCC Volatiles						WQCC Semi-Volatiles					
Monitor Well	Sample Date	Benzene (mg/L)	Ethyl-benzene (mg/L)	Toluene (mg/L)	Total Xylenes (mg/L)	Total Naphthalene (8260, mg/L)	MTBE (mg/L)	Other volatiles? (see notes)	Total Naphthalenes (8270, mg/L)	Naphthalene (8270, mg/L)	2-Methylnaphthalene (mg/L)	Other semi-volatiles? (see notes)	
NM WQCC Groundwater Standards:		0.010	0.75	0.75	0.62	0.03	--		0.03	--	--		
South Well	06/22/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	01/14/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	No	
	08/24/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	No	
	03/03/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	No	
East Well		<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	01/14/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	08/25/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
	03/03/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	<0.00020	<0.00020	<0.00020	Yes	
Trip Blanks	6, 06/09	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	--	--	--	--	
Trip Blanks	8, 01-02/10	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	--	--	--	--	
Trip Blanks	4, 02/11	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0050	No	--	--	--	--	
NM WQCC Groundwater Standards (mg/L):		0.010	0.75	0.75	0.62	0.03	--		0.03	--	--		
Notes:													
Yellow, constituent detected. Bold , exceeds NM WQCC standard													
E - Value above quantitation range													
Other Volatiles - See analytical results, Volume II													
Other Semi-volatiles - Bis(2-ethylhexyl)phthalate seen in most every sample; for others see analytical results, Volume II													
Complete analytical results shown in the Appendix													
Analyses performed by ALS Laboratory Group, Houston, Texas													

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)
NM WQCC Groundwater Standards:														
		250	1.6	10	600	1,000	5.0	0.1	1.0	0.75	0.01	0.05	0.05	1.0
MW-1	06/19/09	131	0.827	3.75	123	694	<0.0100	0.00914	0.147	0.175	<0.00200	<0.00500	<0.00500	<0.00500
	01/19/10	266	0.249	5.84	145	1,240	0.0202	0.00634	0.164	0.236	<0.00200	<0.00500	<0.00500	<0.00500
	08/18/10	126	0.623	2.59	111	694	<0.0100	0.00841	0.117	0.182	<0.00200	<0.00500	<0.00500	<0.00500
	03/01/11	100	0.502	1.84	83.4	580	<0.0100	0.00821	0.0984	0.189	<0.00200	<0.00500	<0.00500	<0.00500
MW-2	06/22/09	252	0.765	2.69	66.8	988	0.0657	0.0386	0.0803	0.190	<0.00200	<0.00500	<0.00500	0.00621
	01/19/10	246	0.672	3.39	55.1	966	<0.0100	<0.00500	0.00500	0.191	<0.00200	<0.00500	<0.00500	<0.00500
	08/16/10	276	0.824	3.23	55.9	1,180	0.1367	<0.00500	0.193	0.155	<0.00200	<0.00500	<0.00500	<0.00500
	03/03/11	221	0.763	3.49	57.6	1,010	<0.0100	<0.00500	0.176	0.171	<0.00200	<0.00500	<0.00500	<0.00500
MW-3 (duplicate)	06/16/09	29.1	3.38	2.19	64.6	504	0.308	0.00815	0.115	0.160	<0.00200	0.00709	<0.00500	<0.00500
	01/14/10	49.9	3.18	2.11	76.5	540	0.144	0.00703	0.119	0.148	<0.00200	0.00977	<0.00500	0.121
	01/14/10	49.8	3.18	2.11	75.0	552	0.142	0.00798	0.125	0.167	<0.00200	0.0105	<0.00500	0.148
	08/19/10	72.7	2.99	1.52	77.7	518	0.0767	0.00935	0.127	0.151	<0.00200	<0.00500	<0.00500	<0.00500
MW-4	02/24/11	88.2	2.58	<0.500	80.5	566	<0.0100	0.00892	0.124	0.178	<0.00200	<0.00500	<0.00500	<0.00500
	06/16/09	28.9	0.841	1.84	61.5	422	0.180	<0.00500	0.174	0.160	<0.00200	0.00534	<0.00500	<0.00500
	01/13/10	29.3	1.10	1.67	66.7	416	0.0345	<0.00500	0.0932	0.177	<0.00200	<0.00500	<0.00500	<0.00500
	08/19/10	26.1	1.10	1.10	65.8	324	0.0607	<0.00500	0.0862	0.136	<0.00200	<0.00500	<0.00500	<0.00500
MW-5	02/28/11	27.1	1.02	1.91	64.4	378	0.0131	<0.00500	0.0951	0.163	<0.00200	<0.00500	<0.00500	<0.00500
	06/16/09	186	1.39	3.31	131	952	0.796	0.0233	0.0639	0.116	<0.00200	<0.00500	<0.00500	<0.00500
	01/18/10	26.4	0.781	4.91	80.6	508	<0.0100	<0.00500	0.0966	0.135	<0.00200	<0.00500	<0.00500	<0.00500
	08/20/10	18.5	1.13	3.43	77.7	440	0.0814	<0.00500	0.0967	0.0986	<0.00200	<0.00500	<0.00500	<0.00500
MW-6 (duplicate)	02/28/11	29.8	1.03	2.91	70.5	570	0.123	<0.00500	0.100	0.085	<0.00200	<0.00500	<0.00500	<0.00500
	06/18/09	188	0.113	0.678	101	844	<0.0100	0.0201	0.186	0.175	<0.00200	<0.00500	<0.00500	<0.00500
	06/18/09	168	<0.100	0.682	90.4	812	<0.0100	0.0221	0.200	0.192	<0.00200	<0.00500	<0.00500	<0.00500
	02/02/10	334	<0.100	0.822	90.2	1,400	<0.0200	0.0250	0.499	0.234	<0.00200	<0.00500	<0.00500	<0.00500
MW-7	08/19/10	285	<0.100	<1.00	111	1,350	0.0152	0.0456	0.376	0.244	<0.00200	<0.00500	<0.00500	<0.00500
	03/01/11	282	<0.100	0.75	80.7	1,340	<0.0100	0.039	0.404	0.271	<0.00200	<0.00500	<0.00500	<0.00500
	06/19/09	30.6	1.12	1.66	67.2	384	<0.0100	0.00923	0.169	0.161	<0.00200	<0.00500	<0.00500	<0.00500
	02/02/10	28.0	0.854	1.72	62.2	350	<0.0200	0.00869	0.199	0.169	<0.00200	<0.00500	<0.00500	<0.00500
	08/18/10	27.2	0.570	1.12	60.2	370	0.0223	0.00532	0.252	0.161	<0.00200	<0.00500	<0.00500	<0.00500
	03/01/11	26.5	0.599	1.91	58.2	376	<0.0100	0.00525	0.237	0.161	<0.00200	<0.00500	<0.00500	<0.00500

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)
MW-8	06/18/09	219	0.730	3.46	73.3	798	<0.0100	0.00501	0.181	0.228	<0.00200	<0.00500	<0.00500	<0.00500
	01/18/10	151	0.493	3.80	67.6	742	<0.0100	0.00726	0.157	0.215	<0.00200	<0.00500	<0.00500	<0.00500
	08/18/10	279	0.560	7.08	65.3	1,260	0.0377	0.00676	0.204	0.170	<0.00200	<0.00500	<0.00500	<0.00500
	02/25/11	144	0.820	<0.500	87.5	694	<0.0100	<0.00500	0.106	0.175	<0.00200	<0.00500	<0.00500	<0.00500
MW-9	06/16/09	23.0	1.69	0.748	73.2	380	0.0468	0.0373	0.0911	0.122	<0.00200	<0.00500	<0.00500	<0.00500
	01/14/10	23.9	1.78	1.72	74.4	450	0.0164	0.0351	0.0676	0.139	<0.00200	<0.00500	<0.00500	<0.00500
	08/19/10	21.8	1.64	1.32	75.2	412	0.115	0.0358	0.0649	0.121	<0.00200	<0.00500	<0.00500	<0.00500
	03/01/11	24.1	1.63	2.01	74.6	414	0.0112	0.0382	0.0586	0.131	<0.00200	<0.00500	<0.00500	<0.00500
MW-10	06/16/09	32.2	0.878	1.83	76.5	378	<0.0200	<0.00500	0.113	0.138	<0.00200	<0.00500	<0.00500	<0.00500
	01/13/10	33.4	1.05	1.84	77.9	436	<0.0100	<0.00500	0.0815	0.162	<0.00200	<0.00500	<0.00500	<0.00500
	08/19/10	31.7	1.07	1.91	79.8	508	0.0556	<0.00500	0.0798	0.129	<0.00200	<0.00500	<0.00500	<0.00500
	03/03/11	32.8	0.945	2.06	79.1	422	<0.0100	<0.00500	0.0772	0.159	<0.00200	<0.00500	<0.00500	<0.00500
MW-11	06/18/09	204	0.579	1.23	43.1	994	<0.0100	<0.00500	0.194	0.199	<0.00200	<0.00500	<0.00500	<0.00500
	01/18/10	164	0.527	1.37	71.4	842	<0.0100	<0.00500	0.147	0.238	<0.00200	<0.00500	<0.00500	<0.00500
	08/18/10	146	0.616	2.38	50.6	802	0.0125	<0.00500	0.471	0.255	<0.00200	<0.00500	<0.00500	<0.00500
	02/25/11	415	0.549	<0.500	82.3	1,510	<0.0100	<0.00500	0.241	0.244	<0.00200	<0.00500	<0.00500	<0.00500
MW-12	06/16/09	23.0	1.16	1.98	49.6	354	<0.0200	0.00516	0.0775	0.200	<0.00200	<0.00500	<0.00500	<0.00500
	01/18/10	26.1	1.05	2.31	49.8	398	<0.0100	<0.00500	0.0755	0.235	<0.00200	<0.00500	<0.00500	<0.00500
	08/20/10	25.8	1.22	2.00	50.3	340	0.115	0.00550	0.0756	0.176	<0.00200	<0.00500	<0.00500	<0.00500
	02/25/11	28.5	1.14	<0.500	50.8	402	<0.0100	0.00504	0.076	0.198	<0.00200	<0.00500	<0.00500	<0.00500
MW-13	06/16/09	425	0.220	2.65	138	1,790	<0.0200	<0.00500	0.0692	0.253	<0.00200	<0.00500	0.0285	<0.00500
	01/18/10	604	0.170	1.08	79.8	2,210	<0.0100	<0.00500	0.111	0.231	<0.00200	Table	0.00624	<0.00500
	08/18/10	390	0.278	<1.00	144	1,720	0.0196	<0.00500	0.106	0.221	<0.00200	<0.00500	<0.00500	<0.00500
	02/25/11	340	0.281	<0.500	235	1,540	<0.0100	<0.00500	0.0692	0.242	<0.00200	<0.00500	<0.00500	<0.00500
MW-14	06/16/09	93.0	0.851	5.16	60.9	540	<0.0200	<0.00500	0.0770	0.132	<0.00200	<0.00500	<0.00500	<0.00500
	01/18/10	103	0.810	6.03	59.0	598	<0.0100	<0.00500	<0.00500	<0.0200	<0.00200	<0.00500	<0.00500	<0.00500
	08/20/10	74.1	0.986	2.76	61.3	340	0.103	<0.00500	0.0774	0.131	<0.00200	0.0119	<0.00500	<0.00500
	02/25/11	58.2	0.918	<0.500	58.7	440	0.0101	<0.00500	0.0778	0.151	<0.00200	<0.00500	<0.00500	<0.00500
MW-15	08/20/10	221	0.921	3.22	77.6	776	0.079	<0.00500	0.145	0.175	<0.00200	<0.00500	<0.00500	<0.00500
	02/24/11	190	0.885	<0.500	67.0	738	<0.0100	<0.00500	0.127	0.165	<0.00200	0.0102	<0.00500	<0.00500
MW-16	08/20/10	25.3	0.930	1.13	73.7	406	0.0746	<0.00500	0.109	0.156	<0.00200	<0.00500	<0.00500	<0.00500
	02/24/11	28.1	0.928	<0.500	73.7	412	<0.0100	<0.00500	0.107	0.162	<0.00200	<0.00500	<0.00500	<0.00500

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)
MW-17	08/20/10	426	0.517	4.27	72.6	1,650	0.146	<0.00500	0.180	0.157	<0.00200	<0.00500	<0.00500	<0.00500
	02/24/11	412	0.435	<0.500	80.0	1,634	<0.0100	<0.00500	0.152	0.162	<0.00200	<0.00500	<0.00500	<0.00500
MW-18	08/23/10	176	0.456	0.733	287	1,080	0.0787	<0.00500	0.0575	0.334	<0.00200	<0.00500	<0.00500	<0.00500
	02/24/11	286	0.514	<0.500	298	1,240	0.0157	<0.00500	0.0766	0.330	<0.00200	0.0186	<0.00500	<0.00500
MW-19	08/23/10	469	0.536	2.94	178	1,650	0.101	0.0476	0.229	<0.0200	<0.00200	<0.00500	<0.00500	<0.00500
	02/24/11	235	0.713	<0.500	90.7	828	<0.0100	<0.00500	0.0764	0.180	<0.00200	<0.00500	<0.00500	<0.00500
MW-20	08/23/10	169	0.570	1.74	65.1	868	0.0891	<0.00500	0.122	0.143	<0.00200	<0.00500	<0.00500	<0.00500
	02/25/11	187	0.603	<0.500	66.3	840	<0.0100	<0.00500	0.120	0.150	<0.00200	<0.00500	<0.00500	<0.00500
MW-21 (duplicate)	08/23/10	115	0.250	2.12	52.7	966	0.195	<0.00500	0.232	0.208	<0.00200	<0.00500	<0.00500	<0.00500
	02/28/11	182	0.257	3.02	56.7	1,050	<0.0100	<0.00500	0.258	0.257	<0.00200	0.00620	<0.00500	<0.00500
	02/28/11	183	0.249	2.99	56.3	1,000	<0.0100	<0.00500	0.256	0.252	<0.00200	<0.00500	<0.00500	<0.00500
MW-22	08/23/10	115	0.552	1.76	62.3	726	0.121	<0.00500	0.165	0.174	<0.00200	<0.00500	<0.00500	<0.00500
	02/28/11	117	0.587	2.36	68.6	678	<0.0100	<0.00500	0.146	0.173	<0.00200	<0.00500	<0.00500	<0.00500
MW-23	08/23/10	645	0.782	2.92	121	2,260	0.237	<0.00500	0.245	0.157	<0.00200	<0.00500	<0.00500	<0.00500
	02/28/11	511	0.676	3.47	81.9	1,540	<0.0100	<0.00500	0.164	0.151	<0.00200	<0.00500	<0.00500	<0.00500
MW-24	08/24/10	34.6	2.31	2.40	53.9	422	0.187	<0.00500	0.0867	0.140	<0.00200	<0.00500	<0.00500	<0.00500
	02/28/11	39.6	2.16	2.94	55.3	414	<0.0100	<0.00500	0.0878	0.154	<0.00200	<0.00500	<0.00500	<0.00500
MW-25	08/23/10	178	0.871	2.42	182	946	0.244	<0.00500	0.246	0.174	<0.00200	0.0476	<0.00500	<0.00500
	02/28/11	256	0.729	2.83	93.9	998	<0.0100	<0.00500	0.205	0.198	<0.00200	0.0537	<0.00500	<0.00500
MW-26	08/24/10	217	0.484	2.88	98.5	958	0.115	<0.00500	0.131	0.169	<0.00200	<0.00500	<0.00500	<0.00500
	02/28/11	202	0.517	3.86	125	940	<0.0100	<0.00500	0.110	0.187	<0.00200	<0.00500	<0.00500	<0.00500
MW-27	08/18/10	115	0.644	5.10	118	752	0.218	<0.00500	0.100	0.152	<0.00200	<0.00500	<0.00500	<0.00500
	02/25/11	144	0.595	<0.500	78.5	746	<0.0100	<0.00500	0.0985	0.139	<0.00200	<0.00500	<0.00500	<0.00500
MW-28	08/24/10	71.2	1.66	1.70	60.3	440	0.129	<0.00500	0.0846	0.153	<0.00200	<0.00500	<0.00500	<0.00500
	02/23/11	106	1.57	<0.500	67.4	540	<0.0100	<0.00500	0.0923	0.147	<0.00200	<0.00500	<0.00500	<0.00500
MW-29 Dupl. #1	08/24/10	456	0.753	2.18	167	726	0.0261	<0.00500	0.0644	0.189	<0.00200	0.0317	<0.00500	<0.00500
	08/24/10	132	0.741	2.15	100	742	<0.0100	<0.00500	0.0652	0.186	<0.00200	0.0321	<0.00500	<0.00500
	02/28/11	119	0.819	3.05	101	670	<0.0100	<0.00500	0.0630	0.195	<0.00200	0.0694	<0.00500	<0.00500

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-Nitrite (as N, mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Aluminum (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Boron (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)
RW-1	06/19/09	34.8	1.21	--	70.8	398	<0.0100	0.010	0.160	0.161	<0.00200	<0.00500	<0.00500	<0.00500
	02/02/10	34.2	0.913	1.52	66.0	388	<0.0200	0.00857	0.190	0.166	<0.00200	<0.00500	<0.00500	<0.00500
	08/19/10	27.8	0.991	1.42	72.3	380	0.0202	0.0104	0.162	0.154	<0.00200	<0.00500	<0.00500	<0.00500
	03/01/11	28.9	1.03	1.74	74.3	380	<0.0100	0.0121	0.148	0.153	<0.00200	<0.00500	<0.00500	<0.00500
North Well	06/18/09	140	0.933	2.72	80.6	664	<0.0100	0.00536	0.0997	0.151	<0.00200	0.0104	<0.00500	<0.00500
	01/14/10	143	0.793	2.90	74.2	638	<0.0100	<0.00500	0.107	0.172	<0.00200	<0.00500	<0.00500	<0.00500
	08/24/10	127	0.932	1.81	80.4	594	<0.0100	0.00552	0.100	0.147	<0.00200	<0.00500	<0.00500	0.00856
	03/03/11	137	0.932	2.76	75.2	804	<0.0100	0.00503	0.0968	0.159	<0.00200	0.0199	<0.00500	<0.00500
South Well	06/22/09	497	0.665	3.02	106	1,450	<0.0100	<0.00500	0.154	0.189	<0.00200	<0.00500	<0.00500	<0.00500
	01/14/10	498	0.686	3.27	113	1,520	0.0176	<0.00500	0.138	0.229	<0.00200	<0.00500	<0.00500	<0.00500
	08/24/10	477	0.651	2.18	101	1,760	<0.0100	<0.00500	0.172	0.186	<0.00200	<0.00500	<0.00500	<0.00500
	03/03/11	549	0.647	3.24	122	1,840	<0.0100	<0.00500	0.147	0.261	<0.00200	<0.00500	<0.00500	<0.00500
East Well	06/18/09	107	0.980	2.59	84.0	554	0.0131	<0.00500	0.0820	0.143	<0.00200	<0.00500	<0.00500	<0.00500
	01/14/10	138	0.991	2.70	72.7	676	<0.0100	<0.00500	0.0941	0.154	<0.00200	0.0119	<0.00500	0.00953
	08/25/10	106	1.00	0.523	74.5	522	<0.0100	<0.00500	0.0873	0.136	<0.00200	0.0145	<0.00500	0.00745
	03/03/11	135	0.905	2.68	75.6	644	<0.0100	<0.00500	0.0970	0.152	<0.00200	0.0189	<0.00500	<0.00500
NM WQCC Groundwater Standards:		250	1.6	10	600	1,000	5.0	0.1	1.0	0.750	0.01	0.05	0.05	1.0
		Notes:												
		Bold highlighted, exceeds NM WQCC standard												
		Samples field filtered except for Total Mercury												
		Uranium not analyzed for 06/09 sample set												
		Analyses performed by ALS Laboratory Group, Houston, Texas												

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium (mg/L)	Zinc (mg/L)
NM WQCC Groundwater Standards:											
MW-1	06/19/09	1.0	0.05	0.20	0.002	1.0	0.2	0.05	0.05	0.03	10.0
	01/19/10	<0.200	<0.00500	0.974	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0124
	08/18/10	<0.200	<0.00500	2.72	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00615	0.00989
	03/01/11	<0.200	<0.00500	1.62	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00538
MW-2	06/22/09	<0.200	<0.00500	0.0583	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.110
	01/19/10	<0.200	<0.00500	0.00538	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0166
	08/16/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0204
	03/03/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0117
MW-3	06/16/09	<0.200	<0.00500	<0.00500	<0.000200	0.0151	<0.00500	<0.00500	<0.00500	--	<0.0100
	01/14/10	<0.200	<0.00500	0.00597	<0.000200	0.0200	0.00842	<0.00500	<0.00500	0.000625	0.0195
	01/14/10	<0.200	<0.00500	0.00699	<0.000200	0.0216	0.0096	<0.00500	<0.00500	0.000721	0.0230
	08/19/10	<0.200	<0.00500	<0.00500	<0.000200	0.00790	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
MW-4	02/24/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0524
	06/16/09	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0120
	01/13/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00102	<0.00500
	08/19/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
MW-5	02/28/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00533
	06/16/09	0.399	<0.00500	0.0067	<0.000200	0.0103	<0.00500	<0.00500	<0.00500	--	<0.0100
	01/18/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/20/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
MW-6	02/28/11	<0.200	<0.00500	0.0142	<0.000200	<0.00500	0.0112	<0.00500	<0.00500	<0.00500	0.0368
	06/18/09	0.418	<0.00500	2.86	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.00996
	06/18/09	0.219	<0.00500	2.76	<0.000200	<0.00500	0.00653	<0.00500	<0.00500	--	0.0141
	02/02/10	2.08	<0.00500	4.51	<0.000200	<0.00500	0.00634	<0.00500	<0.00500	0.0113	<0.00500
MW-7	08/19/10	1.86	<0.00500	6.61	<0.000200	<0.00500	0.00766	<0.00500	<0.00500	0.00785	<0.00500
	03/01/11	0.711	<0.00500	5.58	<0.000200	<0.00500	0.00896	<0.00500	<0.00500	0.00659	<0.00500
	06/19/09	<0.200	<0.00500	0.127	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0137
	02/02/10	<0.200	<0.00500	0.125	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/18/10	<0.200	<0.00500	0.343	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	03/01/11	<0.200	<0.00500	0.441	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00593

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium (mg/L)	Zinc (mg/L)
MW-8	06/18/09	<0.200	<0.00500	0.00919	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0458
	01/18/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00545
	08/18/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00501	0.00760
	02/25/11	<0.200	<0.00500	0.281	<0.000200	<0.00500	0.00620	<0.00500	<0.00500	<0.00500	0.0316
MW-9	06/16/09	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.0100
	01/14/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.000656	<0.00500
	08/19/10	<0.200	<0.00500	0.00961	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	03/01/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00662
MW-10	06/16/09	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0127
	01/13/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.000911	0.0133
	08/19/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00569
	03/03/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0133
MW-11	06/18/09	0.571	<0.00500	0.387	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0212
	01/18/10	<0.200	<0.00500	0.0559	<0.000200	<0.00500	0.0126	<0.00500	<0.00500	0.00635	<0.00500
	08/18/10	0.347	<0.00500	0.571	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00718	<0.00500
	02/25/11	<0.200	<0.00500	0.0101	<0.000200	<0.00500	0.00856	<0.00500	<0.00500	0.00878	0.0982
MW-12	06/16/09	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.0100
	01/18/10	<0.200	<0.00500	0.0219	<0.000200	<0.00500	0.0182	<0.00500	<0.00500	<0.00500	<0.00500
	08/20/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/25/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0185
MW-13	06/16/09	<0.200	<0.00500	0.0176	<0.000200	<0.00500	0.0126	<0.00500	<0.00500	--	0.0269
	01/18/10	<0.200	<0.00500	0.0591	<0.000200	<0.00500	0.0110	<0.00500	<0.00500	0.0119	0.00769
	08/18/10	<0.200	<0.00500	0.256	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.0128	0.00618
	02/25/11	<0.200	<0.00500	0.225	<0.000200	<0.00500	0.0144	<0.00500	<0.00500	0.0170	0.0744
MW-14	06/16/09	<0.200	<0.00500	0.0199	<0.000200	0.0215	<0.00501	<0.00500	<0.00500	--	0.0255
	01/18/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/20/10	<0.200	<0.00500	<0.00500	<0.000200	0.00964	0.0480	<0.00500	<0.00500	0.00527	<0.00500
	02/25/11	<0.200	<0.00500	0.0234	<0.000200	0.00903	0.0138	<0.00500	<0.00500	0.00541	0.0532
MW-15	08/20/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0198
	02/24/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0385
MW-16	08/20/10	<0.200	<0.00500	0.00554	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0145
	02/24/11	<0.200	<0.00500	0.00671	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0248

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium (mg/L)	Zinc (mg/L)
MW-17	08/20/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0142
	02/24/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0478
MW-18	08/23/10	<0.200	<0.00500	0.314	<0.000200	0.00561	0.0298	0.00548	<0.00500	0.0123	0.0772
	02/24/11	<0.200	<0.00500	0.00536	<0.000200	<0.00500	0.0144	0.00501	<0.00500	0.00883	0.0439
MW-19	08/23/10	<0.200	<0.00500	0.00666	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0227
	02/24/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0318
MW-20	08/23/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00970
	02/25/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0643
MW-21 (duplicate)	08/23/10	<0.200	<0.00500	0.0567	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00898	0.0307
	02/28/11	<0.200	<0.00500	0.102	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.0101	0.0184
	02/28/11	<0.200	<0.00500	0.101	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00975	0.0213
MW-22	08/23/10	<0.200	<0.00500	0.0306	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00604	0.0916
	02/28/11	<0.200	<0.00500	0.0108	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00616	0.0487
MW-23	08/23/10	<0.200	<0.00500	0.00669	<0.000200	<0.00500	0.00859	<0.00500	<0.00500	<0.00500	0.0570
	02/28/11	<0.200	<0.00500	0.00831	<0.000200	<0.00500	0.00930	<0.00500	<0.00500	<0.00500	0.0463
MW-24	08/24/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00922
	02/28/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.00634	<0.00500	<0.00500	<0.00500	0.0245
MW-25	08/23/10	<0.200	<0.00500	0.0109	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0194
	02/28/11	<0.200	<0.00500	0.00715	<0.000200	<0.00500	0.00516	<0.00500	<0.00500	0.00535	0.0424
MW-26	08/24/10	<0.200	<0.00500	0.0156	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0161
	02/28/11	<0.200	<0.00500	0.00890	<0.000200	<0.00500	0.00734	<0.00500	<0.00500	0.00602	0.0254
MW-27	08/18/10	<0.200	<0.00500	0.0534	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00544	0.0213
	02/25/11	<0.200	<0.00500	0.0336	<0.000200	<0.00500	0.00769	<0.00500	<0.00500	0.00625	0.0453
MW-28	08/24/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	02/23/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
MW-29 Dupl. #1	08/24/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0433
	08/24/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0375
	02/28/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0301

Table 3. Inorganic Constituent Concentrations in Groundwater, Navajo Refining Company, Lovington Refinery

Monitor Well	Sample Date	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Total Mercury (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Uranium (mg/L)	Zinc (mg/L)
RW-1	06/19/09	<0.200	<0.00500	0.0380	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.00548
	02/02/10	<0.200	<0.00500	0.0467	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	08/19/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	03/01/11	<0.200	<0.00500	0.00933	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00854
North Well	06/18/09	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	<0.00500
	01/14/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00134	<0.00500
	08/24/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	0.0161	<0.00500	<0.00500	<0.00500	0.00920
	03/03/11	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
South Well	06/22/09	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0195
	01/14/10	<0.200	<0.00500	0.0224	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00236	<0.00500
	08/24/10	<0.200	<0.00500	0.00576	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0207
	03/03/11	<0.200	<0.00500	0.0226	<0.000200	<0.00500	<0.00500	0.00500	<0.00500	<0.00500	0.0329
East Well	06/18/09	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	--	0.0172
	01/14/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	0.00111	0.0291
	08/25/10	<0.200	<0.00500	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0146
	03/03/11	<0.200	0.00662	<0.00500	<0.000200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0347
NM WQCC Groundwater Standards:		1.0	0.05	0.20	0.002	1.0	0.2	0.05	0.05	0.03	10.0
		Notes:									
		Bold, exceeds NM WQCC standard									
		Samples field filtered except for Total Mercury									
		Uranium not analyzed for this sample set									
		Analyses performed by ALS Laboratory Group, Houston, Texas									
		Complete analytical results shown in the Appendix									

**Figure 1. Location Map, Lea Refinery,
Navajo Refining Company
Lovington, New Mexico**

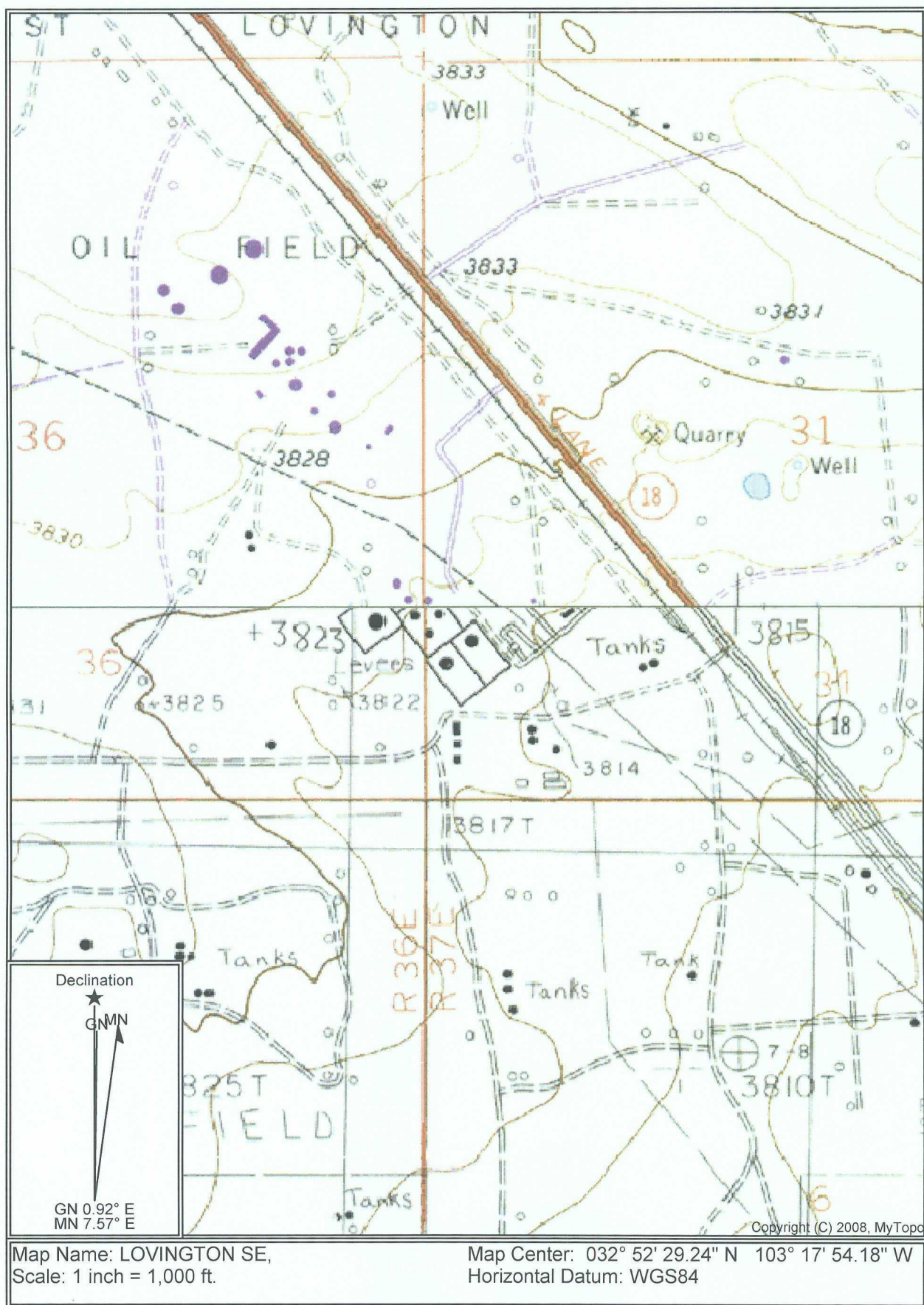


Figure 1. Location Map, Lea Refinery, Navajo Refining Company, Lovington, New Mexico

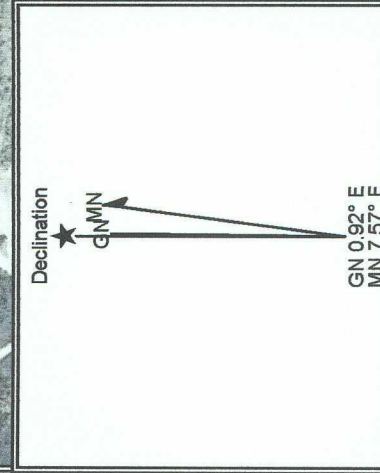
**Figure 2. 2010, Aerial Photograph, Navajo Refining Company,
Lea Refinery, Lovington, New Mexico**



Copyright (C) 2010 MW.Topo

Map Name: SE LOVINGTON, NM
Scale: 1 inch = 500 ft.

Map Center: 032.8773084° N 103.2968117° W
Horizontal Datum: WGS84



**Figure 3. Site Plan, Navajo Refining Company, Lea Refinery,
Lovington, New Mexico**

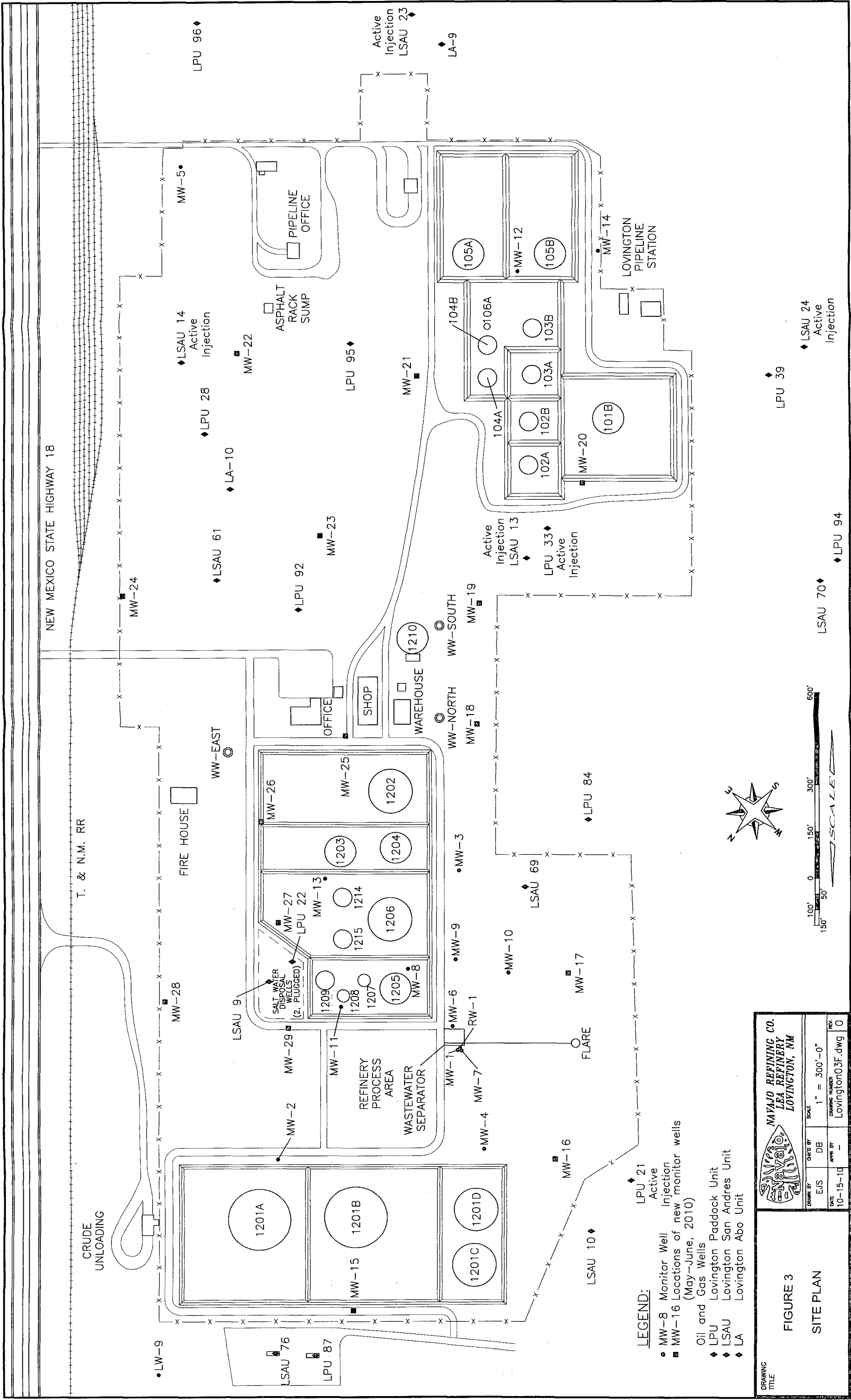
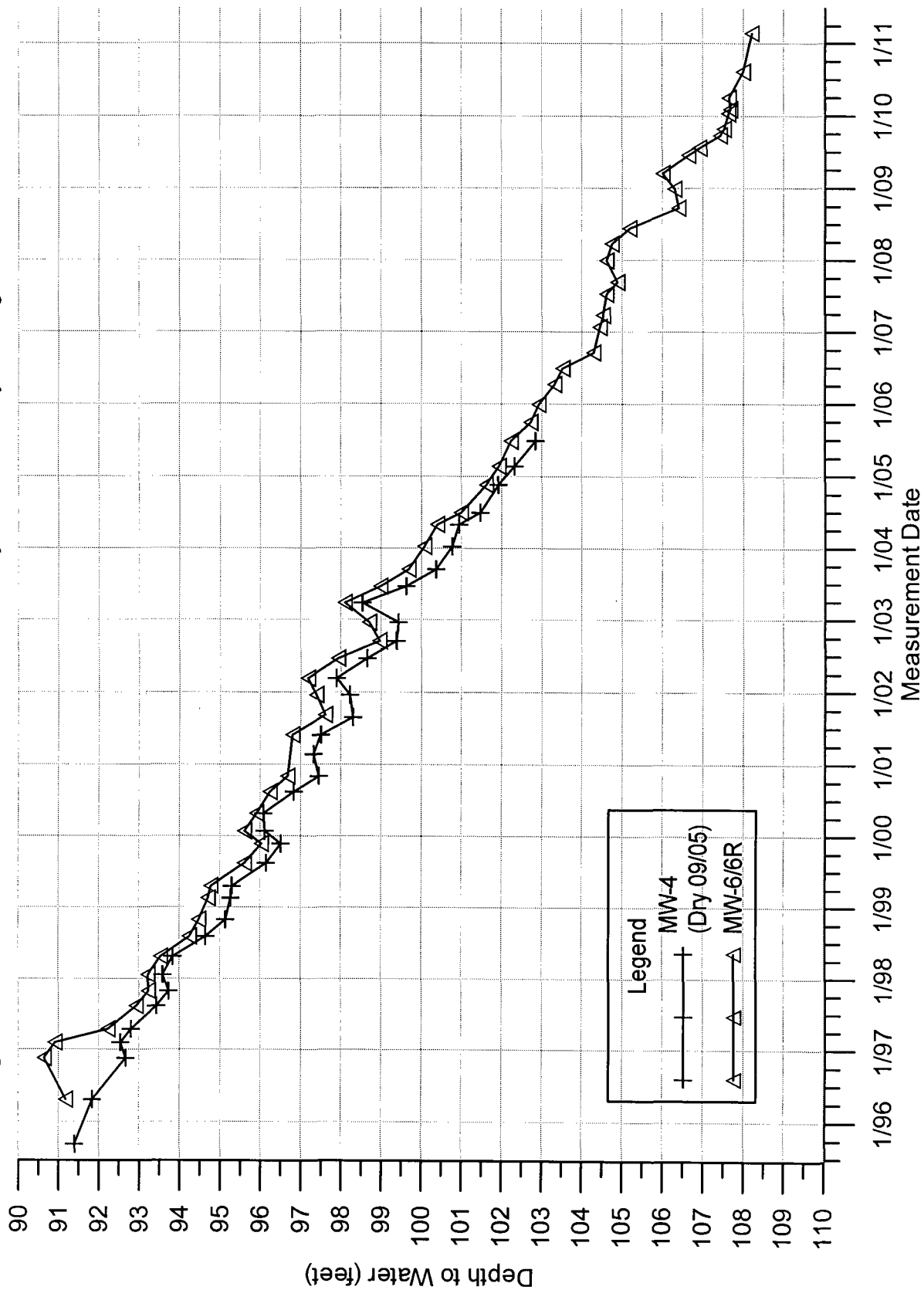


Figure 4. Water Level Decline, 1995-2010, Navajo Lea Refinery, Lovington, NM



**Figure 5. Groundwater Contour Map, January 13, 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

FIRE HOUSE

WW-EAST

MW-22

PIPELINE
OFFICE

3727.5

ASPHALT
RACK
SUMP

MW-23

OFFICE

SHOP

WAREHOUSE

WW-NORTH

WW-SOUTH

MW-18

MW-19

MW-20

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**Figure 6. Groundwater Contour Map, August 11, 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

Water Level Elevation (feet)

Monitor Well Name	Water Level Elevation (feet)
MW-1	3730.31
MW-2	3731.38
MW-3	3726.83
MW-4	3731.70
MW-11	3729.40
MW-12	3727.06
MW-13	3727.34
MW-14	3727.36
MW-21	3726.20
MW-22	3726.20
MW-23	3725.09
MW-24	3726.46

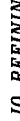
	3729.40	MW-21	3726.20
	3727.06	MW-22	3726.20
	3727.34	MW-23	3725.09
	3727.36	MW-24	3726.46
	3733.25	MW-25	3724.31
	3732.02	MW-26	3726.96
	3729.78	MW-27	3728.27
	3716.51	MW-28	3729.72
	3721.62	MW-29	3729.75
	3726.83	RW-1	3730.30

MW - 11 • MONITOR WELL

GROUNDWATER CONTOUR
WITH ELEVATION
3728.5
(DASHED WHERE APPROXIMATE)
CONTOUR INTERVAL 0.5 FT.
UNLESS NOTED OTHERWISE

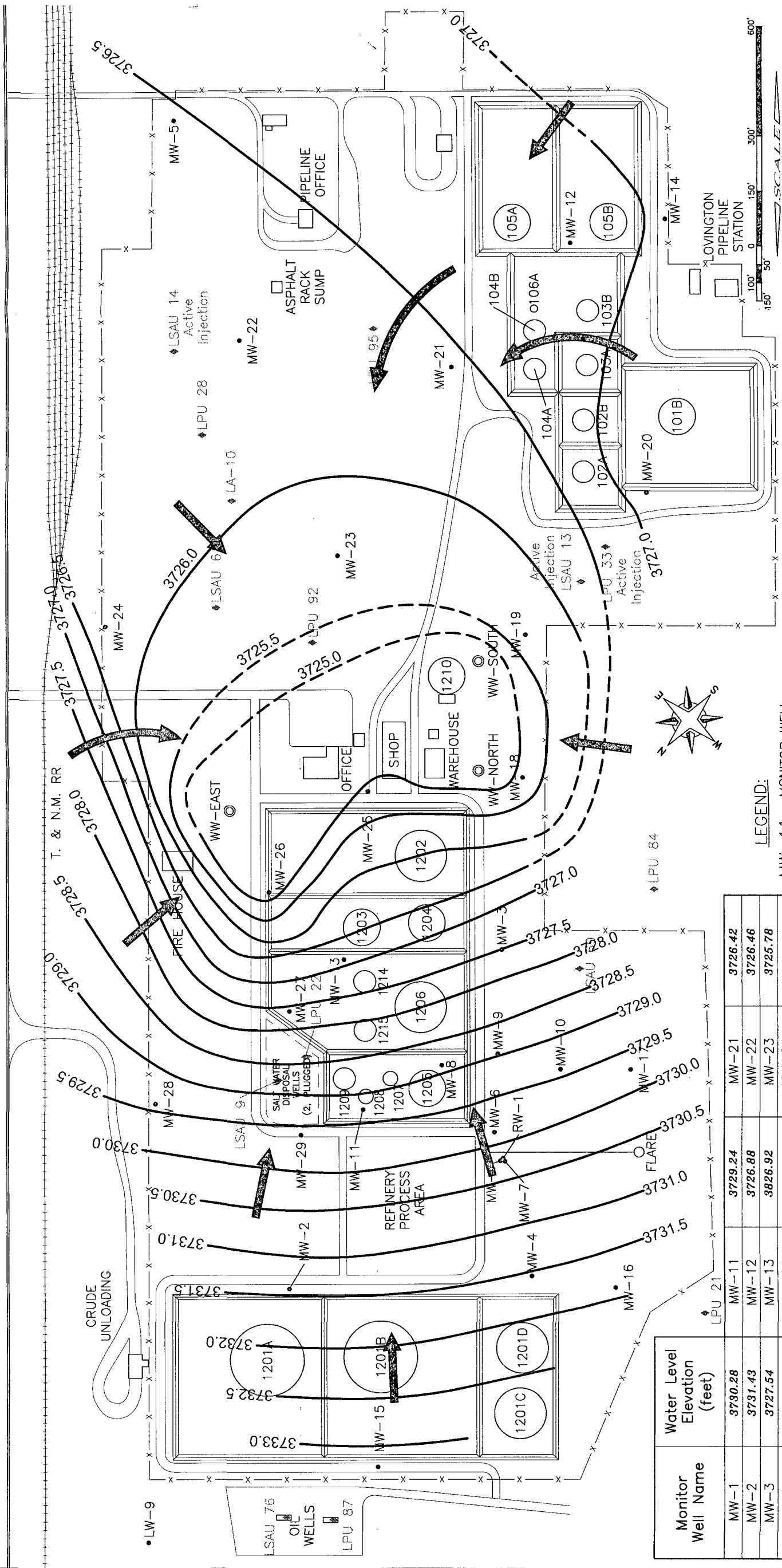
GROUNDWATER FLOW DIRECTION

OIL AND GAS WELLS
◆ LPU LOVINGTON
◆ LSAU LOVINGTON
◆ LA SAN ANDRES UN
LOVINGTON
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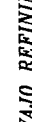
DRAWING TITLE	FIGURE 6 GROUNDWATER CONTOUR MAP AUGUST 11, 2010				NAVAJO REFINING CO. LEA REFINERY LOVINGTON, NM	
						
	DRAWN BY	EJS	CHECK BY	DB	SCALE	1" = 300'-0"
	DATE	4-7-11	APPROV BY	--	DRAWING NUMBER	03M.dwg
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O GAS WELLS
 LOVINGTON
 PADDOCK UNIT
 LOVINGTON
 SAN ANDRES UNIT
 LOVINGTON
 ABO UNIT

**Figure 7. Groundwater Contour Map, February 23, 2011,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



Monitor Well Name	Water Level Elevation (feet)
MW-1	3730.28
MW-2	3731.43
MW-3	3727.54
MW-4	3731.58
MW-5	3726.47
MW-6	3729.94
MW-7	3730.29
MW-8	3728.91
MW-9	3828.94
MW-10	3729.40

DRAWING TITLE	FIGURE 7 GROUNDWATER CONTOUR MAP FEBRUARY 23, 2011			NAVAJO REFINING CO. LEA REFINERY LOVINGTON, NM	
DRAWN BY EJS		CHECKED BY DB	SCALE 1" = 300'-0"		REV. DRAWING NUMBER Lovington03H.dwg 0
DATE 4-7-11		APPROVED BY —			

3728.5

GROUNDWATER CONTOUR
WITH ELEVATION
(DASHED WHERE APPROXIMATE)
CONTOUR INTERVAL 0.5 FT.

GROUNDWATER FLOW DIRECTION

◆ LPU OIL AND GAS WELLS
◆ LSAU LOVINGTON
◆ LA SAN ANDRES UNIT
ABO UNIT

**Figure 8. Benzene Concentration Map, January 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

• LW-9

FIRE HOUSE

ND
WW-EAST

OIL
WELLS

SALT WATER
DISPOSAL
WELLS
(2, PLUGGED)

REFINERY
PROCESS
AREA

MW-13
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**Figure 9. Benzene Concentration Map, August 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE UNLOADING

FIRE HOUSE

REFINERY PROCESS AREA

SALT WATER DISPOSAL WELLS (2, PLUGGED)

OFFICE

WAREHOUSE

SHOP

PIPELINE OFFICE

ASPHALT RACK SUMP



LOVINGTON PIPELINE STATION

NOTE: SAMPLES COLLECTED AUGUST 16-25, 2010.

LEGEND:

MW-11• MONITOR WELL
0.078 WITH TOTAL BENZENE (mg/L)
BOLD - EXCEEDS GROUNDWATER STANDARD OF 0.010 mg/L

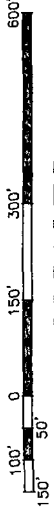
ND NOT DETECTED
REPORTING LIMIT 0.0050 mg/L

0.01 DISSOLVED BENZENE
CONCENTRATION (mg/L)
(DASHED WHERE APPROXIMATE)

♦ OIL AND GAS WELLS

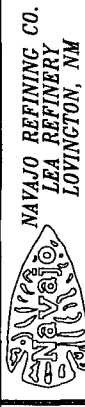


GROUNDWATER FLOW DIRECTION
(AUGUST, 2010)



DRAWING TITLE

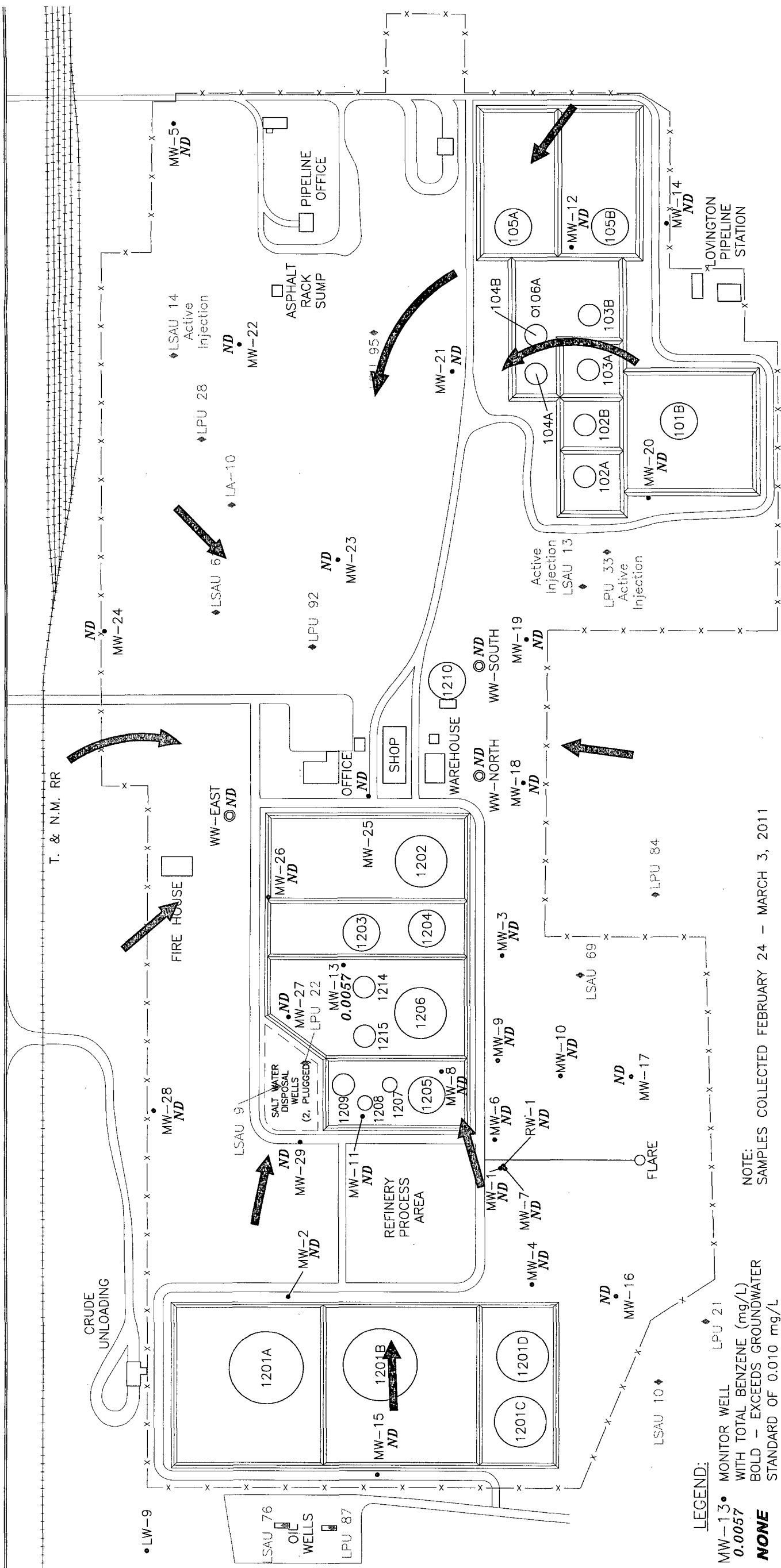
FIGURE 9
BENZENE
CONCENTRATION MAP
AUGUST, 2010



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DATE	4-7-11	APPROVED BY	-	DRAWING NUMBER	Lovington03G2.dwg
REV.	0				

**Figure 10. Benzene Concentration Map, February-March 2011,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18



NOTE: SAMPLES COLLECTED FEBRUARY 24 - MARCH 3, 2011

LEGEND:

MW-13 • MONITOR WELL
0.0057 WITH TOTAL BENZENE (mg/L)
**BOLD - EXCEEDS GROUNDWATER
STANDARD OF 0.010 mg/L**

ND NOT DETECTED
REPORTING LIMIT 0.0050 mg/L

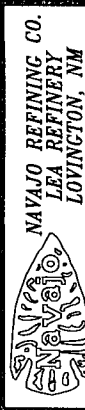
♦ OIL AND GAS WELLS

→ GROUNDWATER FLOW DIRECTION
(FEBRUARY 2011)



DRAWING
TITLE

FIGURE 10
BENZENE
CONCENTRATION MAP
FEBRUARY - MARCH, 2011



DATE	4-14-11	APPROVED	DB	SCALE	1" = 300'-0"	REVISION	0
DRAWN BY	EJS	CHECKED BY	DB	SCALE	1" = 300'-0"	REVISION	0

**Figure 11. BTEX, Naphthalene Concentration Map, January 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE UNLOADING

FIRE HOUSE

WW-EAST

LSAU 9

SALT WATER DISPOSAL WELLS (2, PLUGGED)

MW-27

MW-22

MW-13

MW-25

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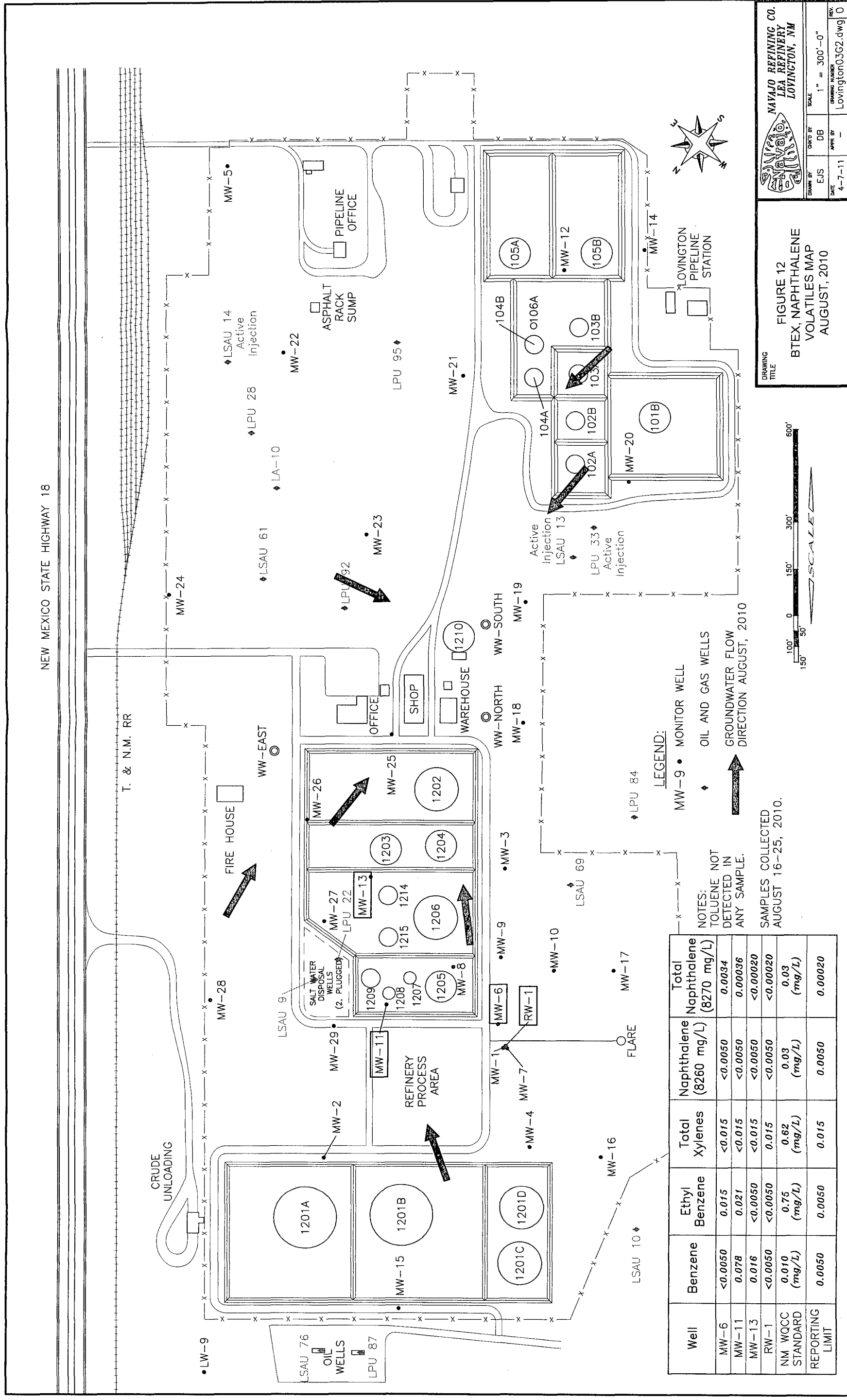
MW-1

MW-1

MW-1

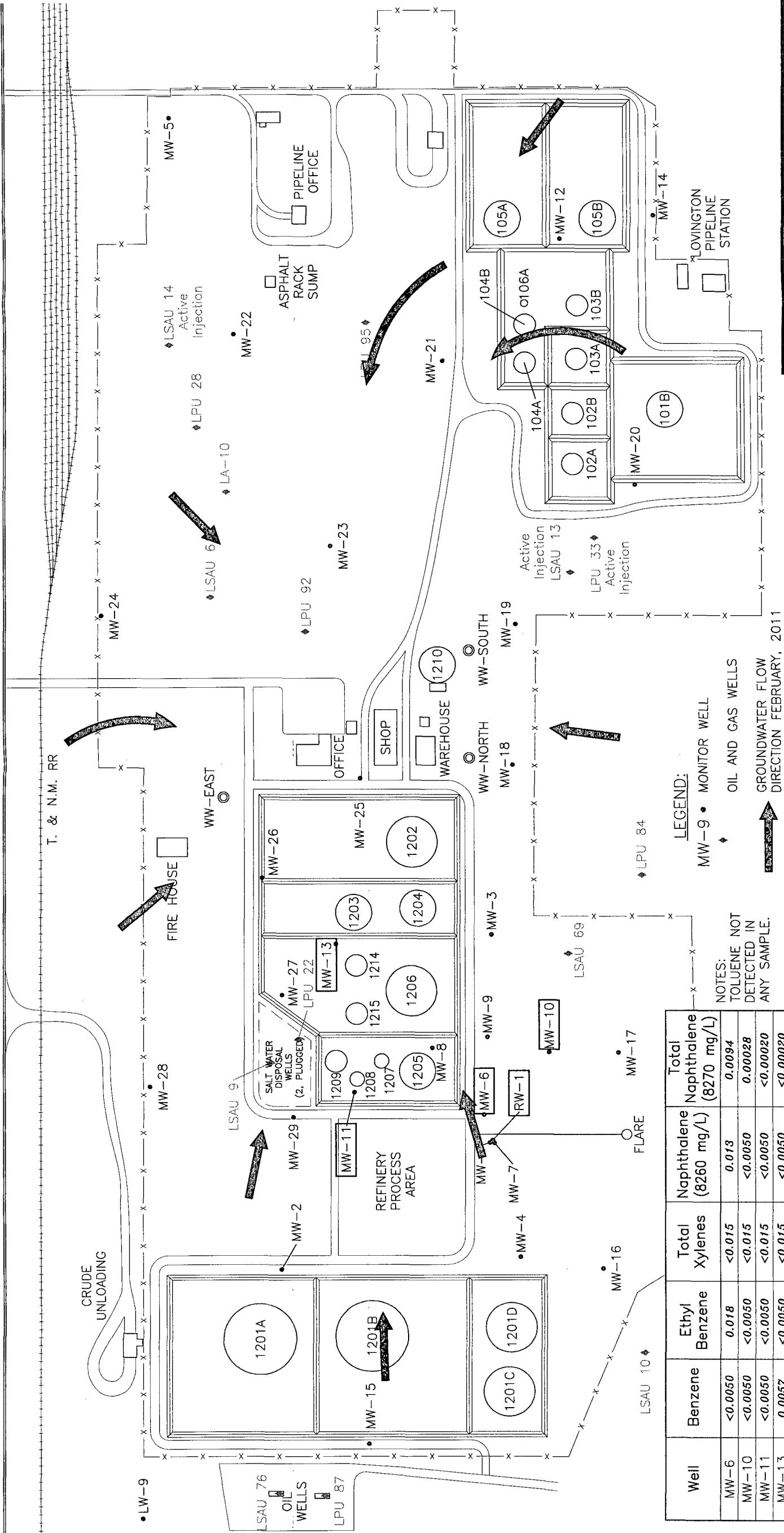
MW-

**Figure 12. BTEX, Naphthalene Concentration Map, August 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



**Figure 13. BTEX, Naphthalene Concentration Map,
February-March 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18



Well	Benzene	Ethyl Benzene	Total Xylenes	Naphthalene (8260 mg/L)	Total Naphthalene (8270 mg/L)
MW-6	<0.0050	0.018	<0.015	0.013	0.0094
MW-10	<0.0050	<0.0050	<0.015	<0.0050	0.00028
MW-11	<0.0050	<0.0050	<0.015	<0.0050	<0.00020
MW-13	0.0057	<0.0050	<0.015	<0.0050	<0.00020
RW-1	<0.0050	<0.0050	0.0054	<0.0050	<0.00020
NM WQCC STANDARD	0.010 (mg/L)	0.75 (mg/L)	0.62 (mg/L)	0.03 (mg/L)	0.03 (mg/L)
REPORTING LIMIT	0.0050	0.0050	0.015	0.03	0.00020

NOTES:
TOLUENE NOT DETECTED IN ANY SAMPLE.

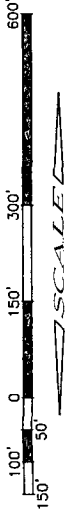
SAMPLES COLLECTED FEBRUARY 24 - MARCH 3, 2011.

LEGEND:

MW-9 • MONITOR WELL

Oil and Gas Wells

GROUNDWATER FLOW DIRECTION FEBRUARY, 2011



NAVJO REFINING CO.
LEA REFINERY
LOVINGTON, NM

FIGURE 13
BTEX, NAPHTHALENE
VOLATILES MAP
FEBRUARY - MARCH, 2011

DATE	4-7-11	SCALE	1" = 300'-0"
DRAWN BY	EJS	DB	APPR BY
REV	0	DRAWING NUMBER	Lovington03J.dwg

**Figure 14. Chloride Concentration Map, January 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

• LW-9

FIRE HOUSE

138
WW-EAST

OIL
WELLS

SALT WATER
DISPOSAL
WELLS
(2, PLUGGED)

REFINERY
PROCESS
AREA

ASPHALT
RACK
SUMP

PIPELINE
OFFICE

OFFICE

SHOP

WAREHOUSE

WW-NORTH
143

• MW-3
49.9

• MW-9
23.9

• MW-10
33.4

• MW-6
34.2

RW-1

• MW-7
28.0

• MW-4
29.3

• MW-11
164

MW-2
246

200

334

266

MW-1

FLARE

100

200

100

1201A

1201B

1201C

1201D

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**Figure 15. Chloride Concentration Map, August 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE UNLOADING

FIRE HOUSE

SALT WATER DISPOSAL WELLS (2, PLUGGED)

LSAU 9

REFINERY PROCESS AREA

OFFICE

SHOP

WAREHOUSE

ASPHALT RACK SUMP

PIPELINE OFFICE



LEGEND:

MW-13• MONITOR WELL WITH TOTAL CHLORIDE (mg/L) **390**
DASHED WHERE APPROXIMATE
CONTOUR INTERVAL 100 mg/L
UNLESS NOTED OTHERWISE

300
CHLORIDE CONCENTRATION (mg/L)
(DASHED WHERE APPROXIMATE)
CONTOUR INTERVAL 100 mg/L
UNLESS NOTED OTHERWISE

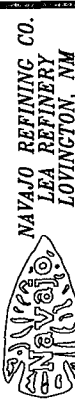
GROUNDWATER FLOW DIRECTION (AUGUST 2010)

♦ OIL AND GAS WELLS

NOTE: SAMPLES COLLECTED AUGUST 16-25, 2010

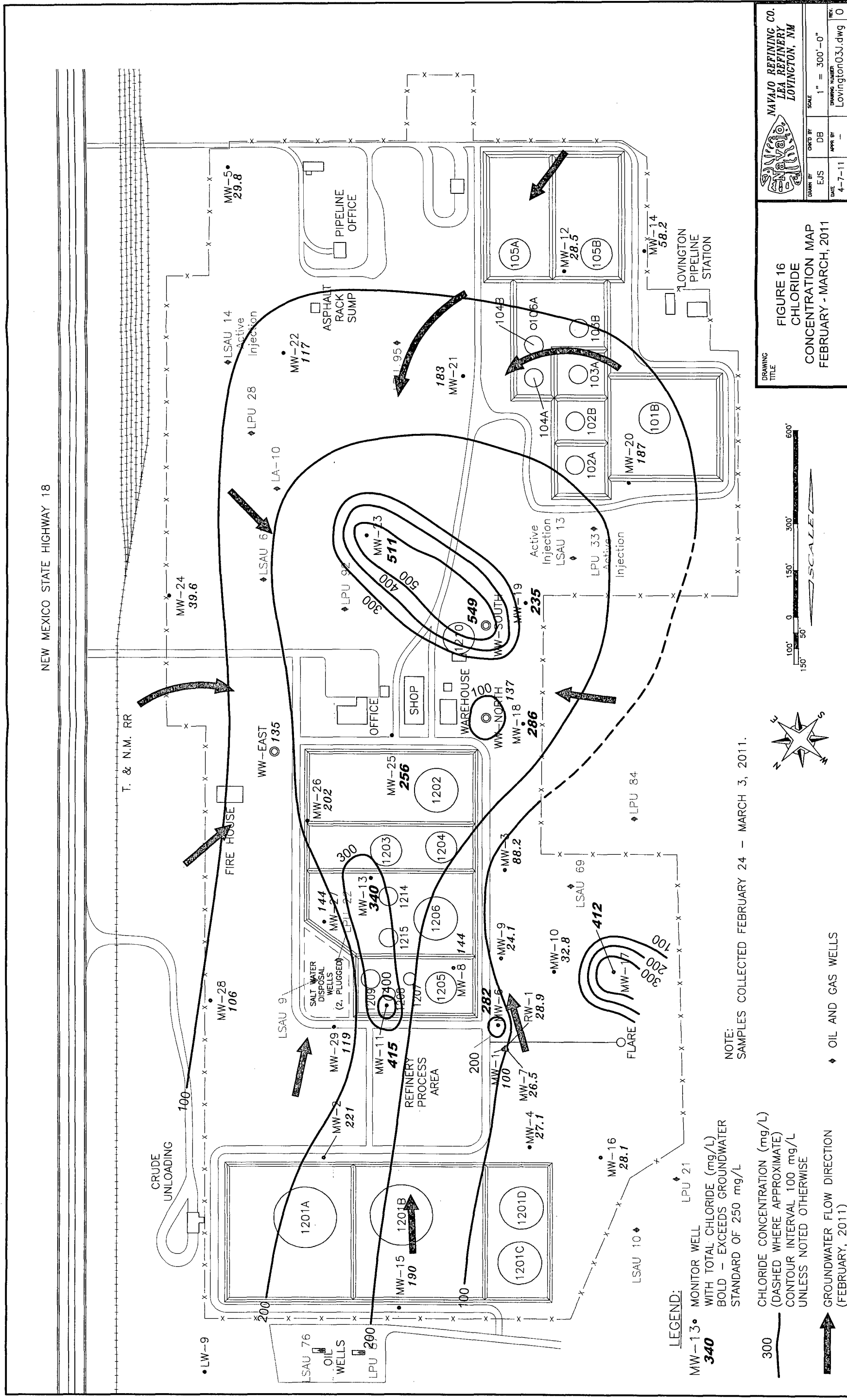
DRAWING TITLE

FIGURE 15
CHLORIDE
CONCENTRATION MAP
AUGUST, 2010



DESIGNED BY	EJS	CHECKED BY	DB	SCALE	1" = 300'-0"
DATE	4-14-11	APPROVED BY		DRAWING NUMBER	Lovington03G2.dwg
REV.					0

**Figure 16. Chloride Concentration Map, February-March 2011,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



**Figure 17. Total Dissolved Solids Concentration Map, January 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

• LW-9

• MW-13

FIRE HOUSE

676
WW-EAST

700

1500

2000

2210

1201A

900

1201B

800

1201C

1201D

1202

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**Figure 18. Total Dissolved Solids Concentration Map, August 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

FIRE HOUSE

REFINERY
PROCESS
AREA

SALT WATER
DISPOSAL
WELLS
(2, PLUGGED)

OFFICE

SHOP

WAREHOUSE

ASPHALT
RACK
SUMP

PIPELINE
OFFICE



LEGEND:

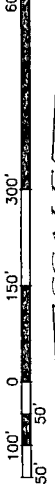
MW-13 • MONITOR WELL WITH TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)
BOLD - EXCEEDS GROUNDWATER STANDARD OF 1000 mg/L

300 — TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)
(DASHED WHERE APPROXIMATE)
CONTOUR INTERVAL 300mg/L
UNLESS OTHERWISE SHOWN

GROUNDWATER FLOW DIRECTION
(AUGUST 2010)

♦ OIL AND GAS WELLS

NOTE: SAMPLES COLLECTED AUGUST 16-25, 2010



SCALE

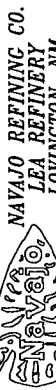
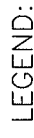


FIGURE 18
TOTAL DISSOLVED SOLIDS
CONCENTRATION MAP
AUGUST, 2010

DRAWING TITLE	FIGURE 18 TOTAL DISSOLVED SOLIDS CONCENTRATION MAP AUGUST, 2010
NAVJO REFINING CO. LEA REFINERY LOVINGTON, NM	
DRAWN BY	EJS
CHECKED BY	DB
DATE	4-14-11
REV.	0
SCALE	1" = 300'-0"
DRAWING NUMBER	Lovington03G2.dwg

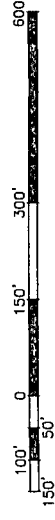
**Figure 19. Total Dissolved Solids Concentration Map,
February-March 2011,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



MW-13 • MONITOR WELL WITH 5'1" TOTAL DISSOLVED SOLIDS CONCENTRATION (mg/L)
1540 BOLD - EXCEEDS GROUNDWATER STANDARD OF 1000 mg/L

600 TOTAL DISSOLVED SOLIDS
CONCENTRATION (mg/L)
(DASHED WHERE APPROXIMATE)
CONTOUR INTERVAL 300mg/L
UNLESS OTHERWISE SHOWN

GROUNDWATER FLOW DIRECTION
(FEBRUARY, 2011)



DRAWING
TITLE

FIGURE 19
TOTAL DISSOLVED SOLIDS
CONCENTRATION MAP
FEBRUARY - MARCH, 2011

DRAWN BY		CHK'D BY	SCALE	REV.
EUS		DB	1" = 300'-0"	
DATE		APPR BY	DRAWING NUMBER	0
4-7-11		-	Lovington03J.dwg	

**Figure 20. Fluoride Concentration Map, January 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

• LW-9

FIRE HOUSE

0.991
WW-EAST

OIL
WELLS

MW-2
0.672

SALT WATER
DISPOSAL
WELLS
(2, PLUGGED)

MW-13
0.170

REFINERY
PROCESS
AREA

MW-11
0.527

MW-8
0.493

MW-1
0.249

MW-6
0.100

RW-1
0.913

MW-9
1.78

MW-3
3.18

WW-NORTH
0.793

WW-SOUTH
0.686

WAREHOUSE

SHOP

OFFICE

ASPHALT
RACK
SUMP

PIPELINE
OFFICE

MW-5
0.781

1201A

1201B

1201C

1201D

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**Figure 21. Fluoride Concentration Map, August 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

FIRE HOUSE

LSAU 76
OIL
WELLS

REFINERY
PROCESS
AREA

LSAU 92
0.782
MW-23

OFFICE
0.871

WAREHOUSE
1210

WW-NORTH
0.932
MW-18
0.456
MW-19
0.536

•MW-3
2.99

•MW-9
1.64

•MW-6
0.249
•MW-7
0.570
•MW-4
1.70
RW-1
0.991

•MW-10
1.07

LSAU 69

•MW-17
0.517

•MW-16
0.930

LSAU 10

LPU 21

LEGEND:
MW-9 • MONITOR WELL
1.64 WITH TOTAL FLUORIDE (mg/L)
BOLD - EXCEEDS GROUNDWATER
STANDARD 1.6 mg/L
♦ OIL AND GAS WELLS
➔ GROUNDWATER FLOW DIRECTION
(AUGUST, 2010)

NOTE:
SAMPLES COLLECTED AUGUST 16-25, 2010.



DRAWING
TITLE

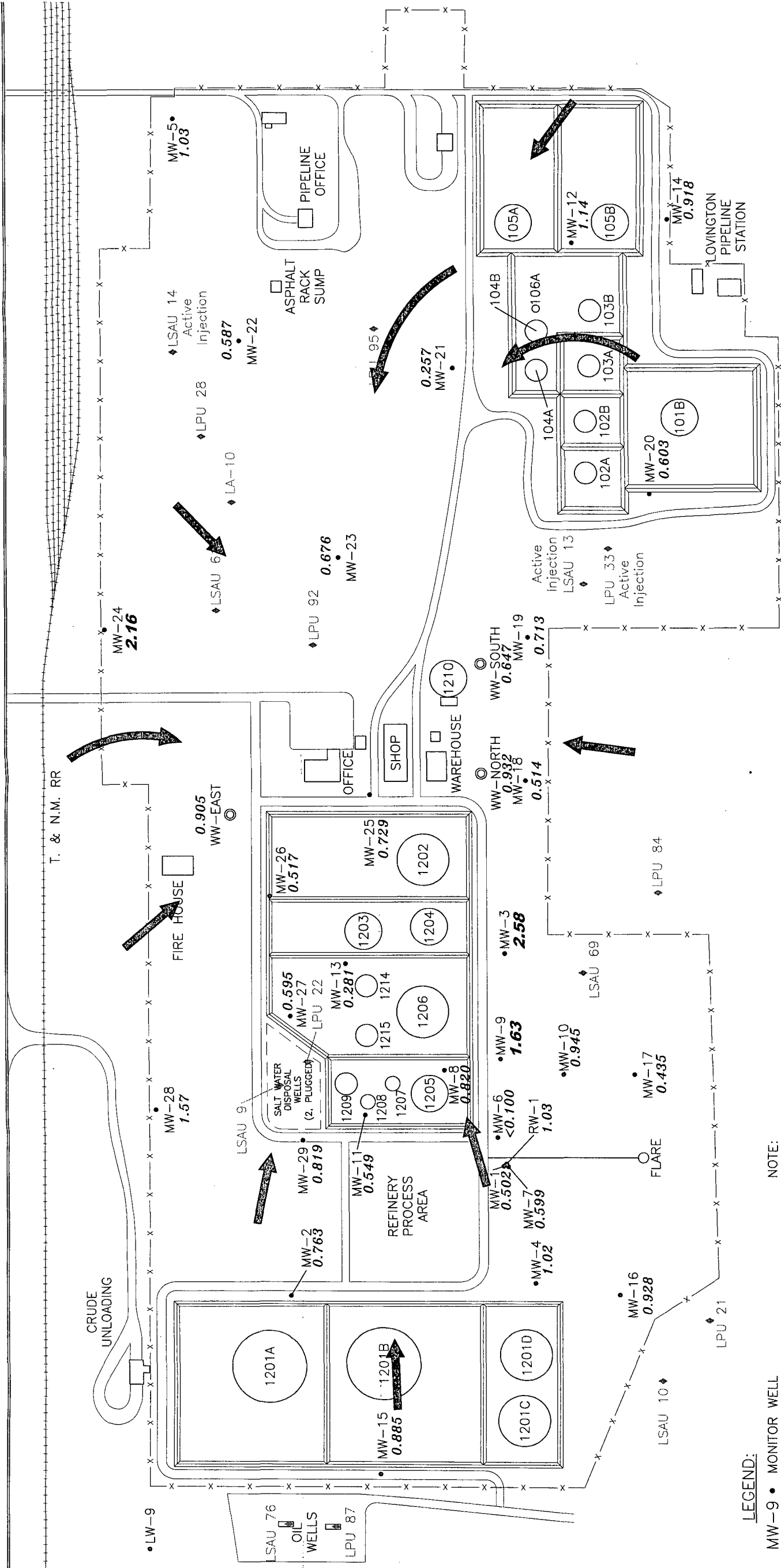
FIGURE 21
FLUORIDE
CONCENTRATION MAP
AUGUST, 2010



DESIGNED BY	CHKD BY	SCALE	DATE	REV.
EJS	DB	1" = 300'-0"	4-7-11	D
DRAWING NUMBER: Lovington03G2.dwg				

**Figure 22. Fluoride Concentration Map,
February-March 2011,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18



LEGEND:

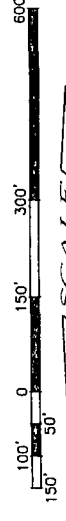
MW-9 • MONITOR WELL
1.63

WITH TOTAL FLUORIDE (mg/L)
BOLD - EXCEEDS GROUNDWATER
STANDARD 1.6 mg/L

OIL AND GAS WELLS

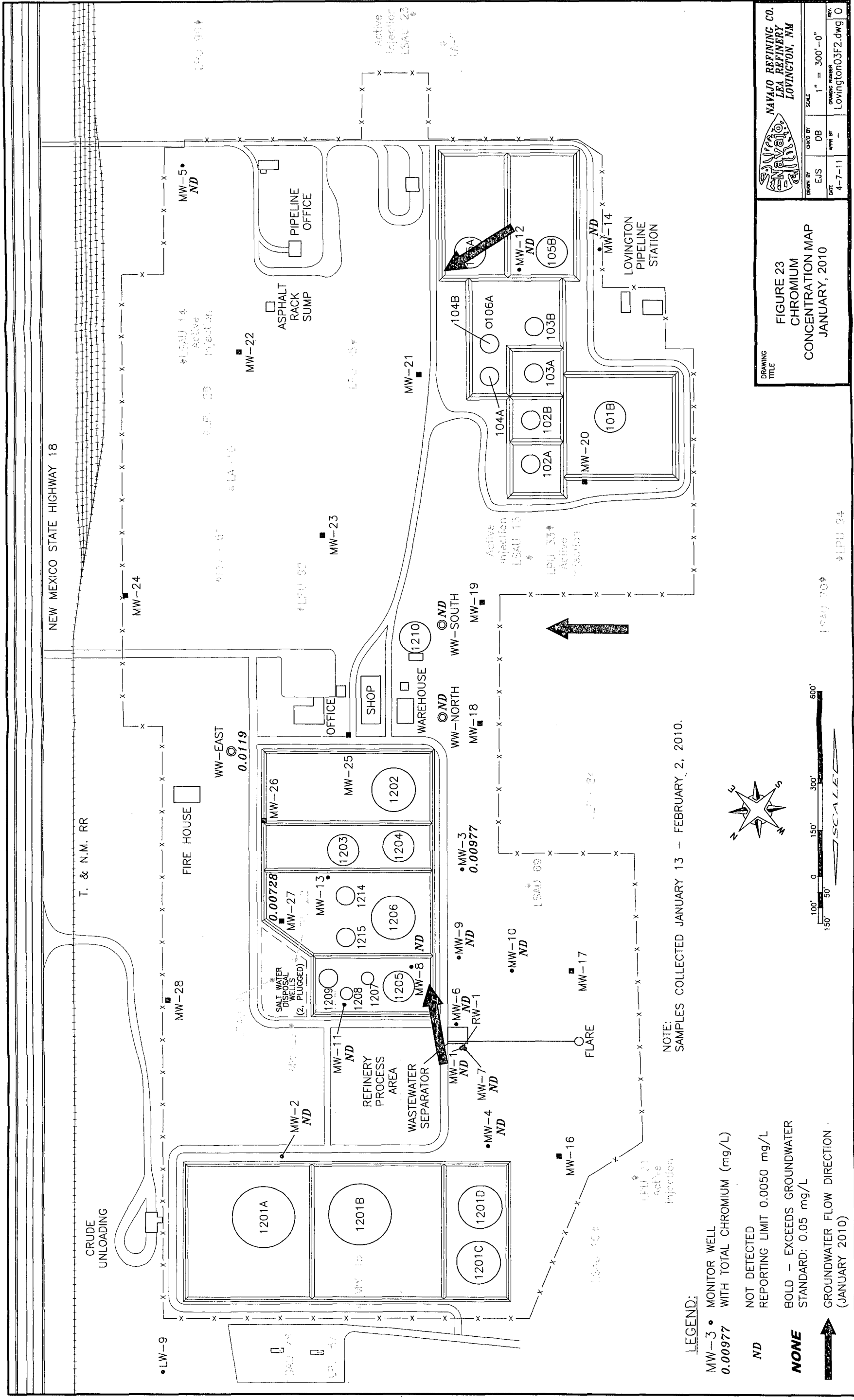
GROUNDWATER FLOW DIRECTION
(FEBRUARY, 2011)

NOTE:
SAMPLES COLLECTED FEBRUARY 24 - MARCH 3, 2011.

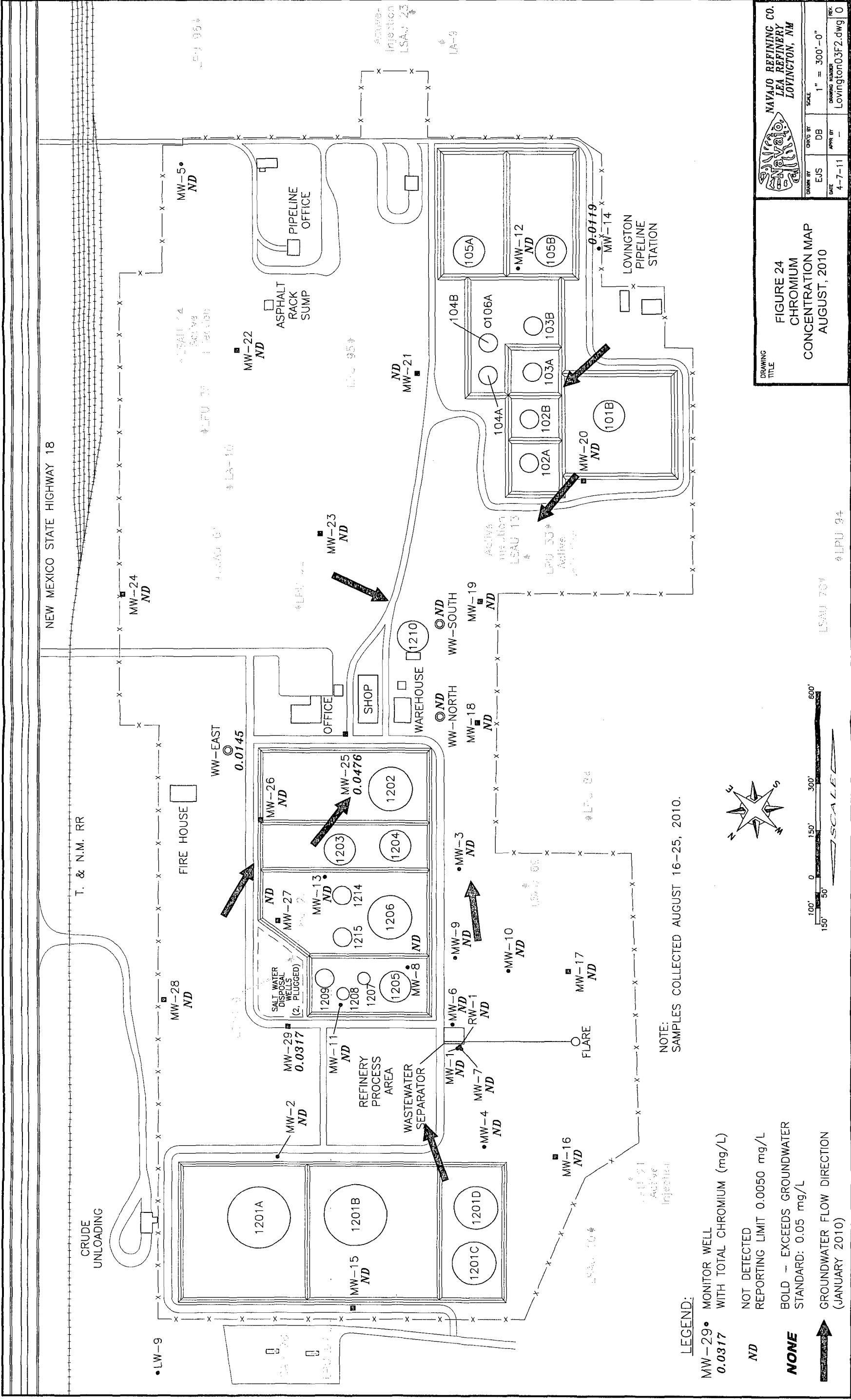


DRAWING TITLE			
FIGURE 22 FLUORIDE CONCENTRATION MAP FEBRUARY - MARCH, 2011			
NAVAJO REFINING CO. LEA REFINERY LOVINGTON, NM			
DRAWN BY	CHKD BY	SCALE	REV.
EJS	DB	1" = 300'-0"	
DATE	APPR BY	DRAWING NUMBER	
4-7-11	-	Lovington03J.dwg	0

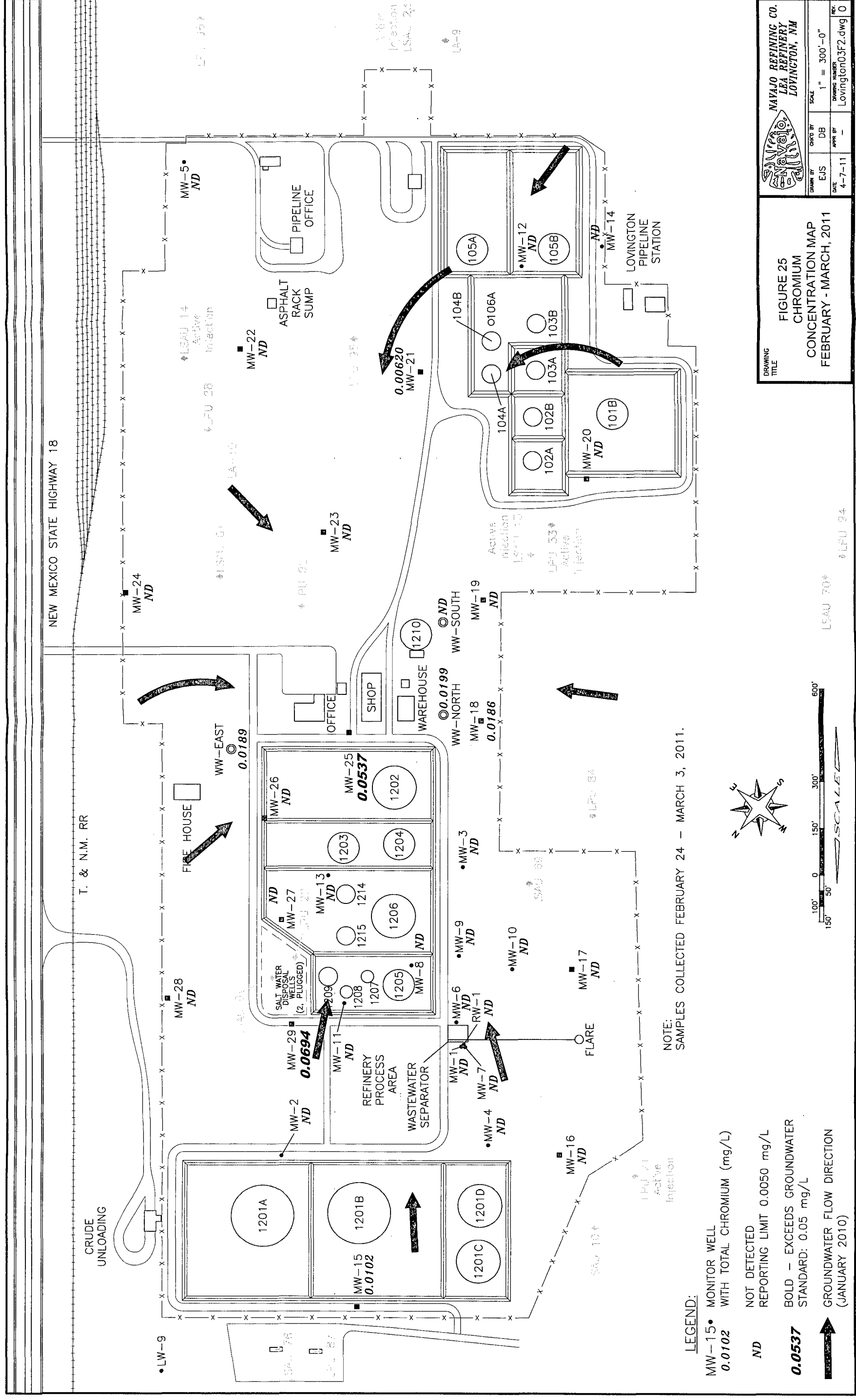
**Figure 23. Chromium Concentration Map, January 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



**Figure 24. Chromium Concentration Map, August 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



**Figure 25. Chromium Concentration Map, February-March 2011,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



**Figure 26. Iron and Manganese Concentration Map,
January 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

• LW-9

FIRE HOUSE

ND/ND
WW-EAST

OIL
WELLS

MW-2
ND/0.00538

MW-11
ND/0.0559

REFINERY
PROCESS
AREA

ND/2.72
MW-1

ND/ND
• MW-4

MW-7
ND/0.125

RW-1
ND/0.0467

FLARE

• MW-3
ND/
0.00597

• MW-9
ND/ND

• MW-10
ND/ND

• WW-NORTH
ND/ND

• WW-SOUTH
ND/0.0224

ASPHALT
RACK
SUMP

PIPELINE
OFFICE

MW-5
ND/ND

LEGEND:

MW-06
2.08/4.51

MONITOR WELL WITH
IRON(mg/L)/MANGANESE(mg/L)
BOLD - EXCEEDS GROUNDWATER STANDARD:
IRON 1.0 mg/L
MANGANESE 0.20 mg/L

ND

NOT DETECTED

REPORTING LIMITS:

IRON 0.200 mg/l

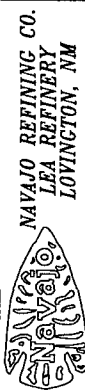
MANGANESE 0.0050 mg/l

GROUNDWATER FLOW DIRECTION
(JANUARY 2010)

NOTE:
SAMPLES COLLECTED JANUARY 13-19,
2010, EXCEPT MW-6, MW-7 AND RW-1
COLLECTED FEBRUARY 2, 2010.



FIGURE 26
IRON & MANGANESE
CONCENTRATION MAP
JANUARY, 2010



DRAWN BY	EJS	CHECKED BY	DB	SCALE	1" = 200'-0"
DATE	4-14-11	APPROVED BY	-	DRAWING NUMBER	Lovington03K.dwg
REV.	0				

**Figure 27. Iron and Manganese Concentration Map,
August 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18

T. & N.M. RR

CRUDE
UNLOADING

FIRE HOUSE

ND/ND
WW-EAST

LSAU 9

LSAU 76

OIL
WELLS

LPU 87

• LW-9

MW-28
ND/ND

LSAU 22

MW-29
ND/ND

MW-11
ND/ND

MW-2
ND/ND

MW-15
ND/ND

MW-1
ND/1.62

MW-4
ND/ND

MW-7
ND/0.343

MW-16
ND/0.0055

LSAU 10

LPU 21

MW-9
ND/0.00961

MW-6
ND/1.86/6.61

MW-10
ND/ND

RW-1
ND/ND

MW-17
ND/ND

FLARE

LSAU 69

MW-3
ND/ND

MW-18
ND/ND

WW-NORTH
ND/ND

WW-SOUTH
ND/0.00576

MW-19
ND/0.00666

MW-20
ND/ND

MW-12
ND/ND

MW-14
ND/ND

MW-21
ND/0.0567

MW-22
ND/0.0306

LSAU 14
Active Injection

LPU 28

LA-10

MW-24
ND/ND

LSAU 61

MW-23
ND/0.0067

LPU 92

PIPELINE
OFFICE

ASPHALT
RACK
SUMP

LPU 95

LOVINGTON
PIPELINE
STATION

1001A

1001B

1001C

1001D

1001E

1001F

1001G

1001H

1001I

1001J

1001K

1001L

1001M

1001N

1001O

1001P

1001Q

1001R

1001S

1001T

1001U

1001V

1001W

1001X

1001Y

1001Z

1001AA

1001AB

1001AC

1001AD

1001AE

1001AF

1001AG

1001AH

1001AI

1001AJ

1001AK

1001AL

1001AM

1001AN

1001AO

1001AP

1001AQ

1001AR

1001AS

1001AT

1001AU

1001AV

1001AW

1001AX

1001AY

1001AZ

1001BA

1001BB

1001BC

1001BD

1001BE

1001BF

1001BG

1001BH

1001BI

1001BJ

1001BK

1001BL

1001BM

1001BN

1001BO

1001BP

1001BQ

1001BR

1001BS

1001BT

1001BU

1001BV

1001BW

1001BX

1001BY

1001BZ

1001CA

1001CB

1001CC

1001CD

1001CE

1001CF

1001CG

1001CH

1001CI

1001CJ

1001CK

1001CL

1001CM

1001CN

1001CO

1001CP

1001CQ

1001CR

1001CS

1001CT

1001CU

1001CV

1001CW

1001CX

1001CY

1001CZ

1001DA

1001DB

1001DC

1001DD

1001DE

1001DF

1001DG

1001DH

1001DI

1001DJ

1001DK

1001DL

1001DM

1001DN

1001DO

1001DP

1001DQ

1001DR

1001DS

1001DT

1001DU

1001DV

1001DW

1001DX

1001DY

1001DZ

1001EA

1001EB

1001EC

1001ED

1001EE

1001EF

1001EG

1001EH

1001EI

1001EJ

1001EK

1001EL

1001EM

1001EN

1001EO

1001EP

1001EQ

1001ER

1001ES

1001ET

1001EU

1001EV

1001EW

1001EX

1001EY

1001EZ

1001FA

1001FB

1001FC

1001FD

1001FE

1001FF

1001FG

1001FH

1001FI

1001FJ

1001FK

1001FL

1001FM

1001FN

1001FO

1001FP

1001FQ

1001FR

1001FS

1001FT

1001FU

1001FV

1001FW

1001FX

1001FY

1001FZ

1001GA

1001GB

1001GC

1001GD

1001GE

1001GF

1001GG

1001GH

1001GI

1001GJ

1001GK

1001GL

1001GM

1001GN

1001GO

1001GP

1001GQ

1001GR

1001GS

1001GT

1001GU

1001GV

1001GW

1001GX

1001GY

1001GZ

1001HA

1001HB

1001HC

1001HD

1001HE

1001HF

1001HG

1001HH

1001HI

1001HJ

1001HK

1001HL

1001HM

1001HN

1001HO

1001HP

1001HQ

1001HR

1001HS

1001HT

1001HU

1001HV

1001HW

1001HX

1001HY

1001HZ

1001IA

1001IB

1001IC

1001ID

1001IE

1001IF

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1001IL

1001IM

1001IN

1001IO

1001IP

1001IQ

1001IR

1001IS

1001IT

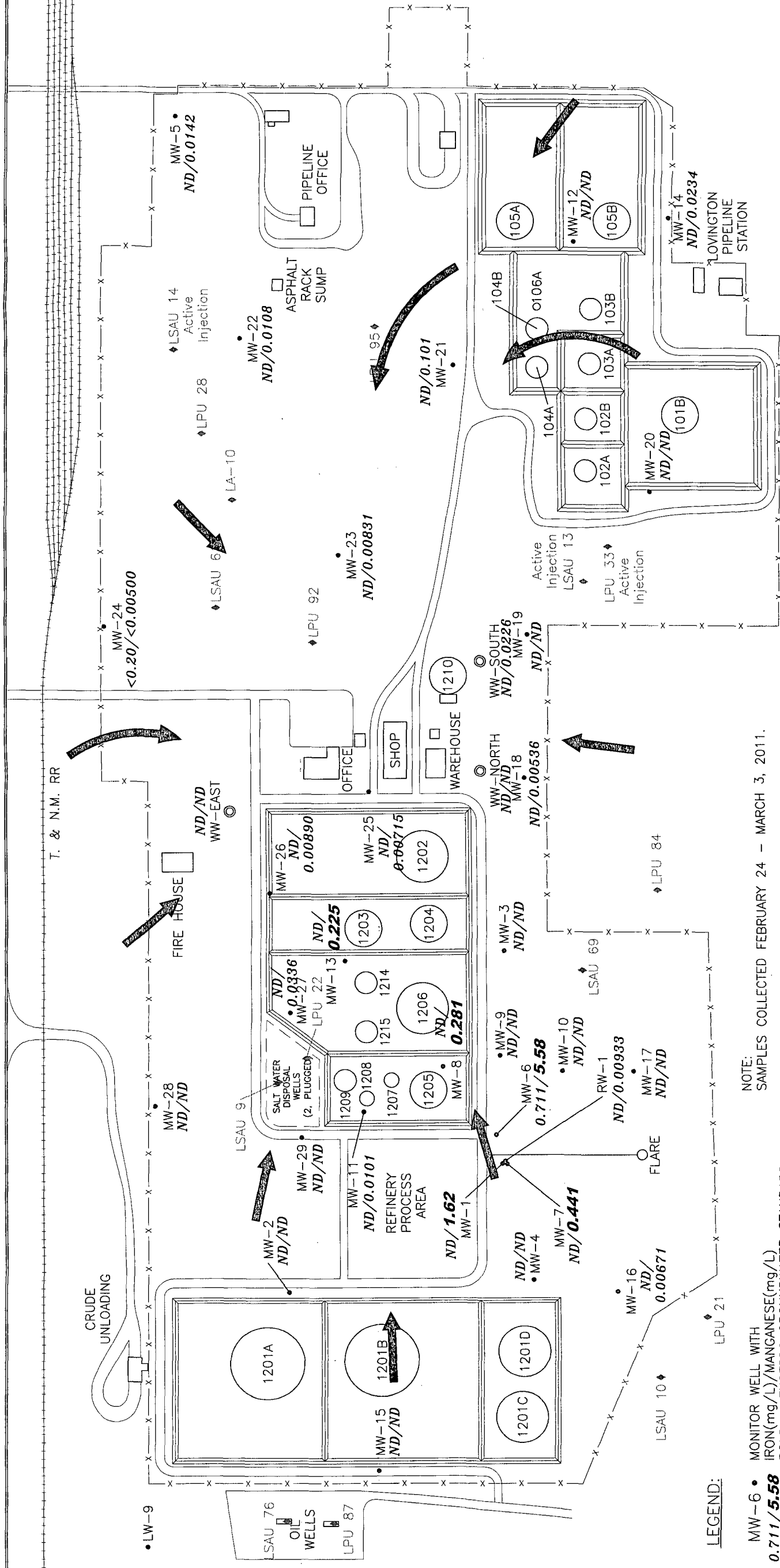
1001IU

1001IV

1001IW

**Figure 28. Iron and Manganese Concentration Map,
February-March 2011,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**

NEW MEXICO STATE HIGHWAY 18



LEGEND:

MW-6 • MONITOR WELL WITH
IRON(mg/L)/MANGANESE(mg/L)
0.711/5.58
BOLD - EXCEEDS GROUNDWATER STANDARD:
IRON 1.0 mg/L
MANGANESE 0.20 mg/L

ND
NOT DETECTED
REPORTING LIMITS:
IRON 0.200 mg/l
MANGANESE 0.0050 mg/l

♦ OIL AND GAS WELLS
➔ GROUNDWATER FLOW DIRECTION
(FEBRUARY 2011)

NOTE:
SAMPLES COLLECTED FEBRUARY 24 - MARCH 3, 2011.

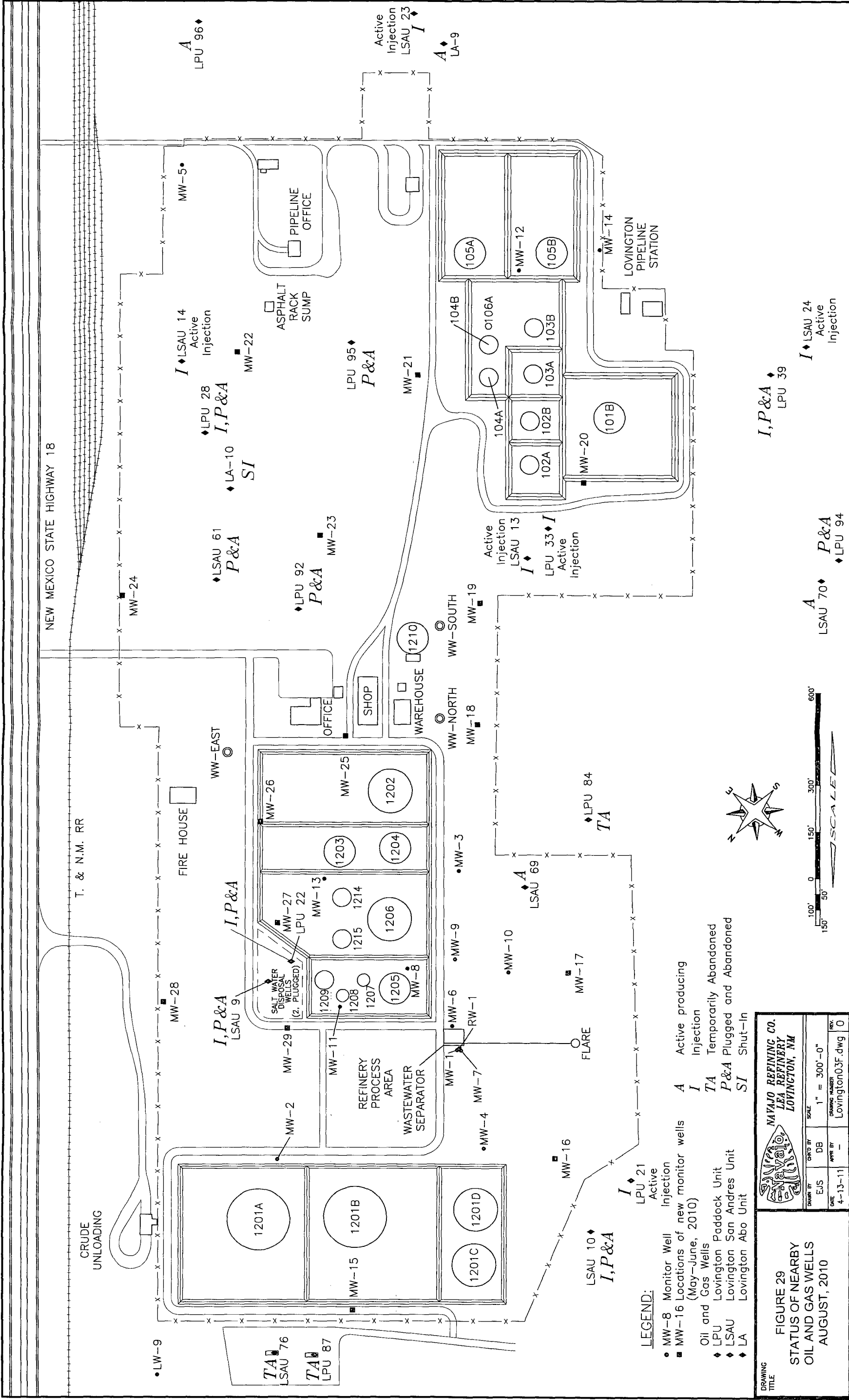


FIGURE 28
IRON & MANGANESE
CONCENTRATION MAP
FEBRUARY - MARCH, 2011

NAVAJO REFINING CO.
LEA REFINERY
LOVINGTON, NM

DRAWN BY	EJS	DATE	4-14-11
CHECKED BY	DB	APPROVED BY	
SCALE	1" = 200'-0"	DRAWING NUMBER	Lovington03J.dwg
REV.			0

**Figure 29. Status of Nearby Oil and Gas Wells, November 2010,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico**



15. APPENDICES

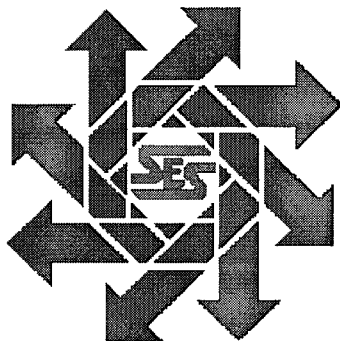
Appendix A
Copies of Lithologic Logs and Well Completion Diagrams
Navajo Refining Company, Lea Refinery
Lovington, New Mexico

Appendix B
Copies of Investigated Spill Reports,
Navajo Refining Company, Lea Refinery
Lovington, New Mexico

SUPPLEMENT 2

**Navajo Refining Company
Naptha/ Crude Release
Lea Refinery
Delineation Report/Work Plan
Section 36, Township 16S, Range 36E
Lea County, New Mexico**

October 22, 2010



Prepared for:

**Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211**

By:

**Safety & Environmental Solutions, Inc.
703 East Clinton
Hobbs, New Mexico 88240
(575) 397-0510**

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III. SURFACE AND GROUND WATER.....	1
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Figure 3 – Logs of Boring.....	5
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I. Company Contacts

NAME	Company	Telephone	E-mail
Darrell Moore	Navajo Refining	575-748-3311	darrell.moore@navajo-refining.com
Bob Allen	SESI	505-397-0510	ballen@sesi-nm.com

II. Background

On April 21, 2010 at 1510 hours a leak was found on the pipeline (crude-naptha mix) that comes from Tank 1202. The leak occurred in one of several pipelines that cross under a road within the refinery. The product surfaced at the southeast end of the crossing and flowed approximately 170 feet southeast on the northeast side of the ground level pipeline rack. At that point, it ponded in an area approximately 50 feet by 21 feet where it was recovered. Approximately 12 to 15 barrels was lost and an estimated 7 to 9 barrels was recovered by vacuum truck.

Notification was made by telephone to OCD Santa Fe about an hour after the release and a form C-141 was prepared and submitted to OCD. Safety and Environmental Solutions, Inc. (SESI) was engaged by Lea Refining Company to perform delineation services at the Lea Refinery.

III. Surface and Ground Water

The refinery has numerous monitor wells in the vicinity of this spill. The depth of water in the nearest monitor well (MW-3) is 103.29 feet below land surface measured on January 13, 2010.

IV. Soils

The surface soils in the area are predominantly sand and sandy loam.

V. Work Performed

On May 12, 2010, David Boyer, Hydro-geologist with SESI, was onsite with Eco Environmental Drilling to install a borehole to delineate the subsurface of the spill site. The borehole was advanced to a total depth of 34' bgs. Samples were taken approximately every 5', properly packaged and sent under chain of custody to ALS Laboratory Group in Houston, Texas for analysis for Total Petroleum Hydrocarbons (TPH GRO, DRO, ORO) (EPA Method SW8015) and Benzene, Toluene, Ethylbenzene and Xylenes (BTEX, EPA Method WS8021B).

The results of the analysis are as follows:

Sample ID	GRO (mg/kg)	DRO (mg/kg)	MOR (mg/kg)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
BH#1 0-4' (cuttings)	17	13,000	2,800	15,817	<0.12	0.15	2.8	4.9
BH#1 4-9'	16	7,200	1,800	9,016	<0.12	0.14	1.2	3.1
BH#1 13-14'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030
BH#1 18-19'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030
BH#1 23-24'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030

Sample ID	GRO (mg/kg)	DRO (mg/kg)	MOR (mg/kg)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
BH#1 28-29'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030
BH#1 33-34'	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0030

All borings were backfilled from total depth to surface with bentonite and hydrated.

PID readings taken on site indicated volatiles above 20 ppm to a depth of 24 feet thus drilling continued deeper than laboratory results would indicate was necessary. The laboratory results indicate only minimal vertical migration to the depth between 9 and 13 feet below ground surface.

VI. Action Plan

It is recommended that the spill area that is not under the piping be excavated to remove the most highly contaminated soils and backfilled with clean soil and returned to grade.

The excavated soils will be transported to an NMOCD approved facility for disposal. Upon completion a closure report will be submitted to the NMOCD.

VII. Figures & Appendices

Figure 1 – Vicinity Map

Figure 2 – Site Plan

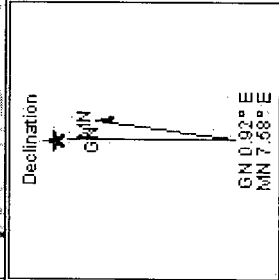
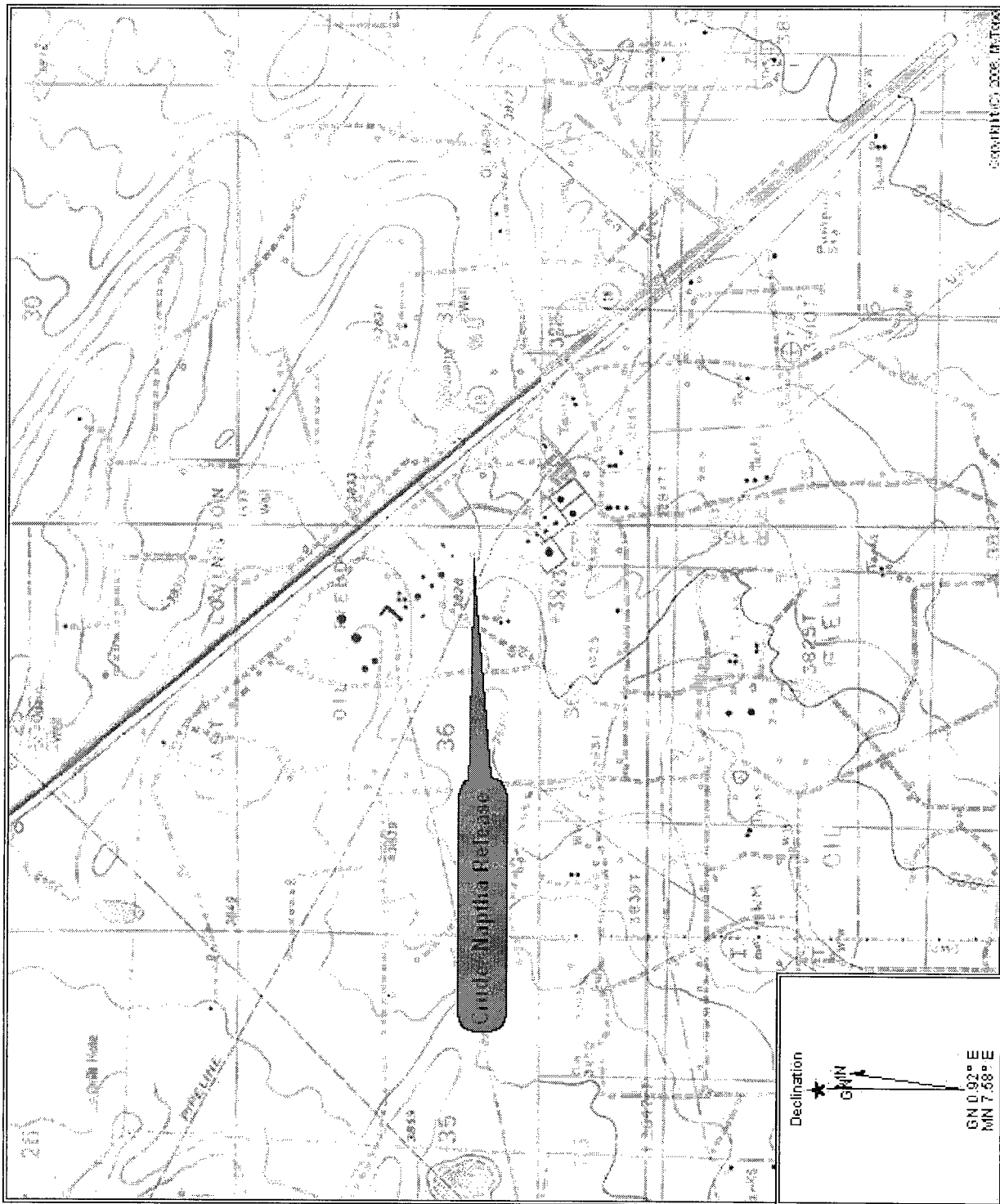
Figure 3 – Log of Boring

Appendix A – Analytical Results

Appendix B – C-141

Figure 1

Vicinity Map

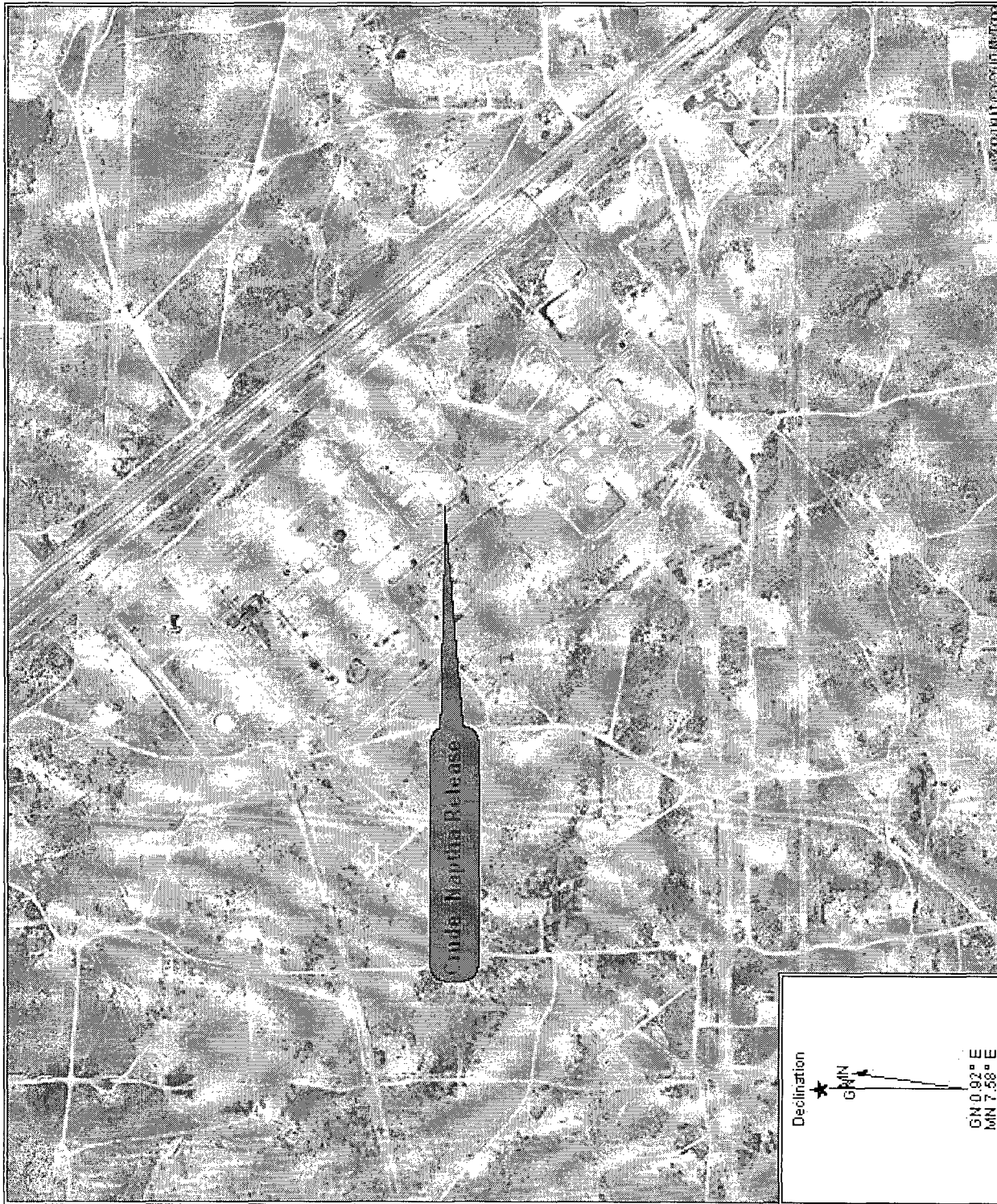


Map Name: LOVINGTON SE,
Scale: 1 inch = 2,000 ft.

Map Center: 032.8764106° N 103.3027293° W
Horizontal Datum: WGS84

Copyright © 2008, M. J. P. Co.

Figure 2 Site Plan



Declination



GN

MN

GN 0.92° E
MN 7.58° E

Map Name: NE LOVINGTON SE, NM

Scale: 1 inch = 1,000 ft.

Map Center: 032.8764106° N 103.3027293° W

Horizontal Datum: WGS84

Figure 2

Log of Boring



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING 1

(Page 1 of 1)

Navajo Refinery
Les Refinery Crude/Naptha Release
Sec. 36, Township 16S, Range 36E
Eddy County, New Mexico
N32° 52' 39.3", W103° 18' 02.5"

Date/Time Started : 05/12/10 9:15
Date/Time Completed : 05/12/10 12:30
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

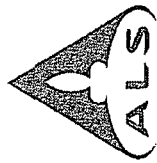
Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : Dave Boyer, SESI

Depth in Feet	Sample Method	Sample Recovery (ft.)	USCS	GRAPHIC	Sample Method: SS Split Spoon (18" or 24") CB Core Barrel (2.5' or 5') CT Auger Cuttings NR No recovery	Lab No.	GRO (mg/Kg)28	DRO (mg/Kg)	MOR (mg/Kg)	TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
					DESCRIPTION									
0					Auger cuttings, 0-4 FT.									
1					0-2 ft. Loose Rock									
2	CT				2-4 ft. - CALICHE, with silty sand, sandy silt, light brown, strong H/C odor	1005384-01	17	13,000	2,800	15,817	<0.12	0.15	2.8	4.9
3														
4														
5					4-9 ft. - CALICHE and SANDY SILT with light brown, added water at 9 ft. to remove cuttings, H/C odor	1005384-02	16	7,200	1,800	9,016	<0.12	0.14	1.2	3.1
6														
7	CB	0.9												
8														
9														
10					9-13 ft. - CALICHE, soft and SANDY SILT									
11														
12	CB	1.4												
13														
14					Transition from caliche to sand	1005384-03	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0010
15					13-14 ft. - SAND, slight H/C odor									
16														
17					14-19 ft. - SAND, light brown, very fine to fine grained, moist, occasional rock, slight H/C odor	1005384-04	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0010
18	CB	2												
19														
20					19-24 ft. SAND, very fine grained, uniform, slightly moist, occasional caliche rock to 1.5 in., possible H/C odor									
21														
22														
23	CB	1.9												
24														
25					24-29 ft. - SAND, light brown with occasional carbonate cemented sandstone, sand very fine grained, dry, no hydrocarbon staining or odor	1005384-05	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0010
26														
27														
28	CB	1.9												
29														
30					29-34 ft. - Added water for drilling. SAND, light brown with frequent sandstone pieces, sandstone very well cemented, no hydrocarbon staining or odor.	1005384-06	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0010
31														
32	CB	1.6												
33														
34						1005384-08	<0.050	<1.7	<3.4	<5.1	<0.0010	<0.0010	<0.0010	<0.0010
35														

Notes:
Location is edge of dug pit where contamination removed.
Plugged back to surface with 15 bags bentonite, hydrated.

Appendix A

Analytical Results



☒ **ALS Laboratory Group**

10450 Stancil Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Chain of Custody Form

☐ **ALS Laboratory Group**

3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

Page 1 of 1

Customer Information				Project Information				ALS Project Manager:				ALS Work Order #:					
Project Name				Lea Refinery New Units				BTEX (8021)				Parameter/Method Request for Analysis					
Project Number				NAU-10004				GRO (8015M)									
Bill To Company				Navajo Refining Company				DRO (8015M)									
Invoice Attn				Darrell Moore				ORO (8015M)									
Address				P.O. Box 159													
City/State/Zip				Artesia, NM 80211													
Phone				(505) 748-3311													
Fax				(505) 746-5421													
e-Mail Address				dgboyer@SES-ML.com													
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	BH-1 Angel Contingents 0-4'	5/12/10	0950	Soil	8	2	X	X	X	X							
2	BH-1 4-9'		1040				X	X	X	X							
3	BH-1 13-14'		1055				X	X	X	X							
4	BH-1 18-19'		1105				X	X	X	X							
5	BH-1 23-24'		1115				X	X	X	X							
6	BH-1 28-29'		1135				X	X	X	X							
7	BH-1 33-34'	5/12/10	1205	Soil	8	2	X	X	X	X							
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time (Check Box)		Results Due Date:	
D. Boyer	5/12/10	Fed Ex	5/12/10	5 Wk. Days	10 Day TAT. Co Drive Boyer	5/12/10	5/12/10
Relinquished by: D. Boyer		Received by (Laboratory):		Notes:		QC Package: (Check One Box Below)	
Relinquished by: D. Boyer		Received by (Laboratory):		Cooler ID:		Level II Std QC	
Logged by (Laboratory):		Checked by (Laboratory):		Cooler Temp:		Level III Std QC	
Preservative Key: 1-HCl, 2-HNO ₃ , 3-H ₂ SO ₄ , 4-NaOH, 5-Na ₂ S ₂ O ₃ , 6-NaHSO ₃ , 7-Other		8-4°C		9-5035		Level IV SWR4/CLP	

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH-1 Auger Cuttings 0-4'
 Collection Date: 5/12/2010 09:50 AM

Work Order: 1005384
 Lab ID: 1005384-01
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	13,000		340	mg/Kg	200	5/27/2010 04:41 PM
TPH (Motor Oil Range)	2,800		680	mg/Kg	200	5/27/2010 04:41 PM
Surr: 2-Fluorobiphenyl	0	S	70-130	%REC	200	5/27/2010 04:41 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	17		0.25	mg/Kg	5	5/19/2010 04:01 PM
Surr: 4-Bromofluorobenzene	110		70-130	%REC	5	5/19/2010 04:01 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.12	mg/Kg	125	5/20/2010 05:18 PM
Toluene	0.15		0.12	mg/Kg	125	5/20/2010 05:18 PM
Ethylbenzene	2.8		0.12	mg/Kg	125	5/20/2010 05:18 PM
Xylenes, Total	4.9		0.38	mg/Kg	125	5/20/2010 05:18 PM
Surr: 4-Bromofluorobenzene	96.0		75-131	%REC	125	5/20/2010 05:18 PM
Surr: Trifluorotoluene	83.2		73-130	%REC	125	5/20/2010 05:18 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH1 4-9'
 Collection Date: 5/12/2010 10:40 AM

Work Order: 1005384
 Lab ID: 1005384-02
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	7,200		340	mg/Kg	200	5/27/2010 04:22 PM
TPH (Motor Oil Range)	1,800		680	mg/Kg	200	5/27/2010 04:22 PM
Surr: 2-Fluorobiphenyl	0	S	70-130	%REC	200	5/27/2010 04:22 PM
GASOLINE RANGE ORGANICS			SW8015			Analyst: KKP
Gasoline Range Organics	16		0.25	mg/Kg	5	5/19/2010 05:08 PM
Surr: 4-Bromofluorobenzene	117		70-130	%REC	5	5/19/2010 05:08 PM
BTEX			SW8021B			Analyst: KKP
Benzene	ND		0.12	mg/Kg	125	5/20/2010 05:46 PM
Toluene	0.14		0.12	mg/Kg	125	5/20/2010 05:46 PM
Ethylbenzene	1.2		0.12	mg/Kg	125	5/20/2010 05:46 PM
Xylenes, Total	3.1		0.38	mg/Kg	125	5/20/2010 05:46 PM
Surr: 4-Bromofluorobenzene	96.7		75-131	%REC	125	5/20/2010 05:46 PM
Surr: Trifluorotoluene	83.8		73-130	%REC	125	5/20/2010 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH-1 13-14'
 Collection Date: 5/12/2010 10:55 AM

Work Order: 1005384
 Lab ID: 1005384-03
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/27/2010 04:02 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/27/2010 04:02 PM
Surr: 2-Fluorobiphenyl	101		70-130	%REC	1	5/27/2010 04:02 PM
GASOLINE RANGE ORGANICS			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 06:42 PM
Surr: 4-Bromofluorobenzene	86.0		70-130	%REC	1	5/19/2010 06:42 PM
BTEX			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 04:46 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 04:46 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 04:46 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 04:46 PM
Surr: 4-Bromofluorobenzene	103		75-131	%REC	1	5/19/2010 04:46 PM
Surr: Trifluorotoluene	97.7		73-130	%REC	1	5/19/2010 04:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
Project: Lea Refinery Crude/Naptha Release
Sample ID: BH-1 18-19'
Collection Date: 5/12/2010 11:05 AM

Work Order: 1005384
Lab ID: 1005384-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/14/2010 06:20 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/14/2010 06:20 PM
Surr: 2-Fluorobiphenyl	106		70-130	%REC	1	5/14/2010 06:20 PM
GASOLINE RANGE ORGANICS			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 07:07 PM
Surr: 4-Bromofluorobenzene	82.4		70-130	%REC	1	5/19/2010 07:07 PM
BTEX			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 05:06 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 05:06 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 05:06 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 05:06 PM
Surr: 4-Bromofluorobenzene	99.7		75-131	%REC	1	5/19/2010 05:06 PM
Surr: Trifluorotoluene	97.8		73-130	%REC	1	5/19/2010 05:06 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
Project: Lea Refinery Crude/Naptha Release
Sample ID: BH-1 23-24'
Collection Date: 5/12/2010 11:15 AM

Work Order: 1005384
Lab ID: 1005384-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/14/2010 06:40 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/14/2010 06:40 PM
Surr: 2-Fluorobiphenyl	105		70-130	%REC	1	5/14/2010 06:40 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 07:31 PM
Surr: 4-Bromofluorobenzene	81.5		70-130	%REC	1	5/19/2010 07:31 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 05:26 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 05:26 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 05:26 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 05:26 PM
Surr: 4-Bromofluorobenzene	99.5		75-131	%REC	1	5/19/2010 05:26 PM
Surr: Trifluorotoluene	96.9		73-130	%REC	1	5/19/2010 05:26 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 28-May-10

Client: Navajo Refining Company
 Project: Lea Refinery Crude/Naptha Release
 Sample ID: BH-1 28-29'
 Collection Date: 5/12/2010 11:35 AM

Work Order: 1005384
 Lab ID: 1005384-06
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH DRO/ORO						
			SW8015M		Prep Date: 5/14/2010	Analyst: KMB
TPH (Diesel Range)	ND		1.7	mg/Kg	1	5/14/2010 06:59 PM
TPH (Motor Oil Range)	ND		3.4	mg/Kg	1	5/14/2010 06:59 PM
Surr: 2-Fluorobiphenyl	82.7		70-130	%REC	1	5/14/2010 06:59 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: KKP
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/19/2010 07:55 PM
Surr: 4-Bromofluorobenzene	80.8		70-130	%REC	1	5/19/2010 07:55 PM
BTEX						
			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/Kg	1	5/19/2010 05:46 PM
Toluene	ND		0.0010	mg/Kg	1	5/19/2010 05:46 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/19/2010 05:46 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/19/2010 05:46 PM
Surr: 4-Bromofluorobenzene	98.0		75-131	%REC	1	5/19/2010 05:46 PM
Surr: Trifluorotoluene	94.7		73-130	%REC	1	5/19/2010 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Appendix B

C-141

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

Form C-141
Revised October 10, 2003

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: Navajo Refining Co. LLC	Contact: Aaron Strange
Address: 7406 South Main Lovington, N.M.	Telephone No. 575-748-3311
Facility Name: Artesia Plant	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Spill of Crude Naphtha Mix	Volume of Release: ~12 to 15 bbls	Volume Recovered: ~7 to 9 barrels
Source of Release: Underground Pipe Line.	Date and Hour of Occurrence: 04/21/2010 ~ 15:00	Date and Hour of Discovery: 04/21/2010 ~ 15:10
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Spoke with Carl Chavez with OCD in Santa Fe (505-476-3490), and left a voicemail with the OCD Hobbs Office (575-393-6161 extension 111).	
By Whom? Aaron Strange	Date and Hour: 04/21/2010 at ~16:03 to Carl Chavez (OCD Santa Fe), 04/21/2010 at ~16:28 to the OCD Hobbs office.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

Describe Cause of Problem and Remedial Action Taken.*

On 04/21/2010 at ~ 15:10 a leak was found on the underground pipeline (Crude Naphtha Mix) that comes from Tank 1202. The Line was blocked in at the transfer pump and isolated until repairs are completed.

Describe Area Affected and Cleanup Action Taken.*

The area affected is under the road (by the warehouse) where the line leaked and where the leak pooled up under the pipe rack. The plant vacuum truck immediately started to remove the standing liquid. It recovered approximately 7 to 9 barrels of product. A backhoe has excavated the contaminated soil. Safety and Environmental Solutions will be doing the delineation on the spill and any bottom hole sampling.

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:	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Aaron Strange	Approved by District Supervisor:		
Title: Sr. Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: aaron.strange@hollycorp.com	Conditions of Approval:		Attached ☐
Date: 04/22/2010	Phone: 575-703-5057		

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Lea Plant
 Address 7406 S. Main
 City/State Lovington, N.M. 88260

(575) 396-5821
 Telephone No.

ORIGIN OF WASTE:

Operations Center _____ Permit No. NMD360010367

Property Name Lovington
 (Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)

Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____

DESCRIPTION / NOTES

Crude Contaminated Soil 10 yds

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
 Signature of Generator's Authorized Agent

6-8-10
 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
 Address _____
 City/State _____

Telephone No. _____
432
 Truck No. _____

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
 Signature of Transporter's Agent

6-8-10
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079
 Telephone No.
www.crihobbs.com
 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

6-8-10
 Date and Time Received

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Refining Lea Plant
 Address 7406 S. Main
 City/State Lovington, N.M. 88260

(575) 396-5821

Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. NMD360010367Property Name Lovington

(Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)

Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____

DESCRIPTION / NOTES

Crude Contaminated Soil 10 yds

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
 Signature of Generator's Authorized Agent

6-8-10

Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
 Address 4617 W. Hwy 100
 City/State San Diego, CA

602-523-5413

Telephone No.

472

Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
 Signature of Transporter's Agent

6-8-10

Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079

Telephone No.

www.crihobbs.com

E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

6-11-10

Date and Time Received

35253

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Lea Plant
 Address 7406 S. Main
 City/State Lovington, N.M. 88260

(575) 396-5821
 Telephone No.

ORGINATION OF WASTE:

Operations Center _____

Permit No. NMD360010367

Property Name Lovington
 (Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)		
Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____
DESCRIPTION / NOTES		
<u>Crude Contaminated Soil 10 yds</u>		

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
 Signature of Generator's Authorized Agent

6-8-10
 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
 Address 4647 W Hwy 120
 City/State SUMMIT W

(505) 523 5517
 Telephone No.
432
 Truck No.

CERTIFICATION:

I certify that the waste in quantity above, was received by me for shipment to the destination below.

[Signature]
 Signature of Transporter's Agent

6-8-10
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079
 Telephone No.

www.crihobbs.com
 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

6-11-10
 Date and Time Received

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

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

Form C-141
Revised October 10, 2003

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: Navajo Refining Co. LLC	Contact: Aaron Strange
Address: 7406 South Main Lovington, N.M.	Telephone No. 575-748-3311
Facility Name: Lovington Plant	Facility Type: Petroleum Refinery

Surface Owner	Mineral Owner	Lease No.
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude

Longitude

NATURE OF RELEASE

Type of Release: Spill (cleaning media consisting of 3 drums of BP 44231 soap, 1/2 drum of BP 9272 H2S scavenger, ~ 2- 3 bbls of diesel and the rest is water)	Volume of Release: ~680 barrels	Volume Recovered: ~ 475 barrels
Source of Release: Broken discharge hose from pump being used to circulate the cleaning media.	Date and Hour of Occurrence: 6/22/10 ~ 14:02	Date and Hour of Discovery: 6/22/10 ~ 14:45
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not-Required	If YES, To Whom? Left voicemail with Carl Chavez (OCD Santa Fe) Spoke with Michael Leighton (City Manager of Lovington). Left voicemail with Larry Johnson (OCD Hobbs).	
By Whom? Johnny Lackey to Santa Fe OCD and to City of Lovington. Darrell Moore to Hobbs OCD.	Date and Hour: 06/22/2010 at ~15:00 to Carl Chavez (Santa Fe OCD), 06/22/2010 at ~15:08 to City of Artesia), and 06/22/2010 at ~15:29 to Larry Johnson to (OCD Hobbs).	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

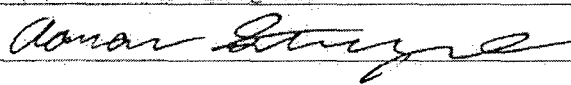
Describe Cause of Problem and Remedial Action Taken.*

On 6/22/10 at ~ 14:02 the discharge hose broke on the pump from Tank 1204 that was being used to circulate cleaning media. The pump and suction valves were blocked in.

Describe Area Affected and Cleanup Action Taken.*

The area affected was inside the tank dike of Tank 1204. Approximately 680 barrels of cleaning media spilled onto the ground but remained within the Tank 1204 tank dike. The media consisted of 3 drums of BP 44231 soap, 1/2 drum of BP 9272 H2S scavenger, ~ 2- 3 bbls of diesel and the rest is water. Vacuum trucks were brought in to remove the standing media and put it back into the tank. ~475 barrels of the media was recovered with vacuum trucks. The contaminated soil has been removed and placed into roll-off bins for disposal. Bottom hole samples have been collected and sent for analysis.

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: Aaron Strange	Approved by District Supervisor:	
Title: Sr. Environmental Technician	Approval Date:	Expiration Date:
E-mail Address: aaron.strange@hollycorp.com	Conditions of Approval:	Attached ☐
Date: 7/07/10	Phone: 575-703-5057	

Tank 1204 Cleaning Media Release Narrative

Background:

Tank 1204 which normally contains diesel fuel was being cleaned. At approximately 14:02 on June 22, 2010 the discharge hose being used to circulate the cleaning media broke. The pump and suction valves were blocked in.

The area affected by the release was inside the tank dike of Tank 1204. Approximately 680 barrels of cleaning media spilled onto the ground but remained within the tank dike. The media consisted of 3 drums of BP 44321 soap, ½ drum of BP 9272 H₂S scavenger, approximately 2-3 barrels of diesel with the rest being water. Vacuum trucks were brought in to remove the standing media and put back in the tank. Approximately 475 barrels of the media was recovered with vacuum trucks. The contaminated surface soil was removed and placed into roll-off bins for disposal.

Investigation:

The release detailed on the attached C-141 was investigated April 4, 2011 by drilling two soil borings at the location of the release. A Foremost-Mobile model B-57 hollow stem auger with a 5-foot sample tube was used to drill and extract soil borings to a depth of 35 feet. Samples of the resultant soil were taken every 5 feet, properly cooled and sent together with a chain-of-custody to ALS Environmental Laboratory in Houston Texas. Each sample was analyzed for volatile and semi-volatile hydrocarbons that would best characterize the diesel fuel in the tank. Soil boring logs are attached with this report.

Results:

The results of the analyses are shown on the attached spreadsheet with detections above the reporting limit highlighted. The results were compared to soil screening criteria developed by the NM Environment Department to aid in determination of the threat of a spill or release to damage the environment. Volatile hydrocarbons, including benzene, ethylbenzene, toluene and xylenes, were not detected except for naphthalene. Several semi-volatile hydrocarbons were detected as shown in the table. All detections (except those semi-volatiles not listed in the soil screening document) were well below NMED guidance. In addition, the maximum depth of contamination of the diesel fuel hydrocarbons was 30 feet and not detected below that depth in either borehole.

No soil screening information was readily available for dibenzofuran which is an aromatic ether having the chemical formula C₁₂H₈O. It is recovered from a wash oil fraction of coal tar that boils between 275 °C and 290 °C. Redistillation separates dibenzofuran from acenaphthene, which boils at a lower temperature. Its source and reason for detection at the release location are unknown. However, the maximum depth of dibenzofuran detection was 20 feet. No information was found on benzaldehyde. Phthalates are a common contaminant found in plasticizers; the source here is unknown but may be a laboratory artifact.

Conclusion:

The release did not reach groundwater which is at a depth of about 105 feet. The water solubility of semi-volatiles is generally slight and the low concentrations of hydrocarbons found in the subsurface do not constitute a threat to the groundwater.

Tank 1204 Borehole Soil Sampling Results compared with NM Environment Department Soil Screening Levels

	Chemical:	Benzene (mg/Kg)	Ethyl- benzene (mg/Kg)	Toluene (mg/Kg)	Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Naphthalene 8270 (mg/Kg)	2-Methyl Naphthalene (mg/Kg)
	Residential Soil	15.5	69.6	5,570	1,090	45.0	45.0	NL
	Industrial/ Occupational Soil	85.4	385	57,900	3,610	252	252	NL
	Construction Worker Soil	471	6,630	21,100	3,130	702	702	NL
Date: 4/4/2011								
Borehole BH-1								
	5 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.075
	10 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.18
	15 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	0.019	0.50
	20 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.13
	25 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	30 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	35 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
Borehole BH-2								
	5 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	10 feet	<0.0050	<0.0050	<0.0050	<0.015	0.033	0.58	5.2
	15 feet	<0.0050	<0.0050	<0.0050	<0.015	0.024	0.11	0.93
	20 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.32
	25 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	30 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
	35 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066
Source: NMED Soil Screening Levels, July 2009, Revision 5.0								

Tank 1204 Borehole Soil Sampling Results compared with NM Environment Department Soil Screening Levels

1,1-Biphenyl (mg/Kg)	Acenaphthene (mg/Kg)	Acetophenone (mg/Kg)	Anthracene (mg/Kg)	Benzaldehyde (mg/Kg)	Bis(2-ethylhexyl) phthalate (mg/Kg)	Dibenzofuran (mg/Kg)	Fluorene (mg/Kg)	Phenanthrene (mg/Kg)
3,910	3,440	7,820	17,200	NL	280	NL	2,290	1,830
56,800	36,700	114,000	183,000	NL	1,370	NL	24,400	20,500
15,500	18,600	31,000	66,800	NL	4,760	NL	8,910	7,150
0.25	0.22	<0.0066	0.10	<0.0066	<0.0066	0.37	0.074	0.20
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.24
<0.0066	<0.0066	0.014	<0.0066	<0.0066	0.010	0.50	0.49	0.85
<0.0066	<0.0066	0.0080	<0.0066	0.0076	0.0088	0.50	0.29	0.67
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.014
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0091
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0083	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	0.039	0.12	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	4.2	2.7	4.3
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0068	1.0	0.88	1.1
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0093	0.76	0.76	0.85
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	0.018	<0.0066	<0.0066	<0.0066	<0.0066
<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.015	<0.0066	<0.0066	<0.0066



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-1

(Page 1 of 1)

Tank 1204 Cleaning Media Release Investigation
Navajo Refining Company, Lea Refinery
Section 36, T16S, R36E
Lea County, New Mexico
N32° 52' 47.91", W103° 18' 1.36"

Date, Time Started : 04/04/11, 1230
Date, Time Complete : 04/04/11, 1400
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : David Boyer
Company Rep. :

Depth in Feet	Sample Type	Recovery (ft.)	USCS	GRAPHIC	Sample Type SS Split Spoon (18" or 24") CB Core Barrel (2.5' or 5') CT Auger Cuttings NR No recovery	Lab No.	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Total Naphthalene 8270 (mg/Kg)
					DESCRIPTION							
0					0-5 ft. Caliche rock in tip, sample from cuttings.							
1					0-1 ft. CALICHE, gray, H/C odor							
2	CB/CT	1.2	CA		1-3 ft. CALICHE,							
3					3-5 ft. SAND with sandstone pieces, slight H/C odor	1104143-01	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.075
4			SP									
5												
6												
7	CB	1	SP/SS		5-10 ft. SAND and SANDSTONE, fine grained, brown, slight H/C odor	1104143-02	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.180
8												
9												
10	CB	2.3			10-15 ft. SANDSTONE and SAND, light brown, fine grained, H/C odor	1104143-03	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.519
11			SS/SP									
12												
13												
14												
15	CB	1.5			15-20 ft. SANDSTONE and SAND, light brown, fine grained, slight H/C odor	1104143-04	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.130
16												
17												
18												
19												
20												
21	CB	3			20-25 ft. SAND, brown, very fine to fine grained, uniform, slight H/C odor	1104143-05	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
22			SP									
23												
24												
25												
26	CB	1.6			25-30 ft. SAND, brown, very fine grained, uniform, slightly damp, slight H/C odor	1104143-06	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
27					30-31.4 ft. SAND, brown, very fine grained, uniform, damp, slight H/C odor							
28												
29												
30												
31												
32	CB	3.2			31.4-35 ft. SANDSTONE and SAND, light brown, dry, no H/C odor or staining	1104143-07	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
33			SS/SP									
34												
35												

Notes:

Boring backfilled with 17 bags bentonite, hydrated.
Other semi-volatiles detected; see accompanying table
H/C - Petroleum hydrocarbons



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-2

(Page 1 of 1)

Tank 1204 Cleaning Media Release Investigation
Navajo Refining Company, Lea Refinery
Section 36, T16S, R36E
Lea County, New Mexico
N32° 52' 48.27", W103° 18' 0.93"

Date, Time Started : 04/04/11, 1415
Date, Time Complete : 04/04/11, 1530
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : David Boyer
Company Rep. :

Depth in Feet	Sample Type	Recovery (ft.)	USCS	GRAPHIC	Sample Type SS Split Spoon (18" or 24") CB Core Barrel (2.5' or 5') CT Auger Cuttings NR No recovery	Lab No.	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Total Naphthalene 8270 (mg/Kg)
					DESCRIPTION							
0					0-1 ft. CALICHE rock, gray-black staining							
1					1-3 ft. CALICHE							
2	CB	1.4	CA									
3												
4			SP/CA		3-5 ft. SAND and CALICHE rock, light brown, no H/C odor on cuttings	1104143-08	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
5												
6	CB	1.4	SP/SS		5-10 ft. SAND and SANDSTONE, light brown, dry, slight H/C odor	1104143-09	<0.0050	<0.0050	<0.015	<0.010	0.033	5.78
7												
8												
9												
10												
11	CB	3.8	SP		10-15 ft. SAND, light brown, very fine grained, minor sandstone, slight H/C odor	1104143-10	<0.0050	<0.0050	<0.015	<0.010	0.024	1.04
12												
13												
14												
15												
16	CB	1.6			15-20 ft. SAND, light brown and white, some minor sandstone/caliche, slight H/C odor	1104143-11	<0.0050	<0.0050	<0.015	<0.010	<0.0050	0.32
17												
18												
19												
20												
21	CB	1.7	SP		20-25 ft. SAND, light brown, very fine to fine grained, uniform, slight H/C odor	1104143-12	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
22												
23												
24												
25												
26	CB	1.7			25-30 ft. SAND, brown, very fine to fine grained, uniform, slightly damp, slight H/C odor	1104143-13	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
27												
28												
29												
30												
31												
32	CB	2.3	SS/SP		30-31.6 ft. SAND, brown, very fine to fine grained, uniform, slightly damp, slight H/C odor	1104143-13	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
33					31.6-35 ft. SANDSTONE and SAND, sandstone pieces cemented, dry, no H/C staining and odor	1104143-14	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
34												
35												

Notes:

Boring backfilled with 17 bags bentonite, hydrated.

Other semi-volatiles detected; see accompanying table

H/C - Petroleum hydrocarbons



35265

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Lea Plant
 Address 7406 S. Main
 City/State Lovington, N.M. 88260

(575) 396-5821
 Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. NMD360010367

Property Name Lovington
 (Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)		
Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____
DESCRIPTION / NOTES		
<u>Diesel Contaminated Soil 12 yds</u>		

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
 Signature of Generator's Authorized Agent

7-13-10
 Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
 Address 4647 W. 180
 City/State Snyder TX. 79549

325-573-5421
 Telephone No.
432
 Truck No.

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
 Signature of Transporter's Agent

7-13-10
 Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
 Address P.O. Box 388
 City/State Hobbs, N.M. 88241-0388

(575) 393-1079
 Telephone No.
www.crihobbs.com
 E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
 Signature of Facility Agent

7/13/10
 Date and Time Received



08-Apr-2011

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (575) 746-5281
Fax: (505) 746-5421

Re: Tank 1204 Release

Work Order: **1104143**

Dear Darrell,

ALS Environmental received 15 samples on 06-Apr-2011 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 89.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Makenzie L. Henderson

JayLynn F Thibault
Project Manager



Certificate No: T104704231-09A-TX

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1104143-01	BH-1 5'	Soil		4/4/2011 12:45	4/6/2011	☐
1104143-02	BH-1 10'	Soil		4/4/2011 12:50	4/6/2011	☐
1104143-03	BH-1 15'	Soil		4/4/2011 13:00	4/6/2011	☐
1104143-04	BH-1 20'	Soil		4/4/2011 13:10	4/6/2011	☐
1104143-05	BH-1 25'	Soil		4/4/2011 13:20	4/6/2011	☐
1104143-06	BH-1 30'	Soil		4/4/2011 13:25	4/6/2011	☐
1104143-07	BH-1 35'	Soil		4/4/2011 13:45	4/6/2011	☐
1104143-08	BH-2 5'	Soil		4/4/2011 14:30	4/6/2011	☐
1104143-09	BH-2 10'	Soil		4/4/2011 14:35	4/6/2011	☐
1104143-10	BH-2 15'	Soil		4/4/2011 14:45	4/6/2011	☐
1104143-11	BH-2 20'	Soil		4/4/2011 14:50	4/6/2011	☐
1104143-12	BH-2 25'	Soil		4/4/2011 14:55	4/6/2011	☐
1104143-13	BH-2 30'	Soil		4/4/2011 15:05	4/6/2011	☐
1104143-14	BH-2 35'	Soil		4/4/2011 15:20	4/6/2011	☐
1104143-15	Trip Blank	Trip Blank		4/4/2011 15:20	4/6/2011	☒

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 5'

Lab ID: 1104143-01

Collection Date: 4/4/2011 12:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	0.25		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4,5-Trichlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4,6-Trichlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dichlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dimethylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dinitrophenol	ND		0.33	mg/Kg	10	4/6/2011 10:32 PM
2,4-Dinitrotoluene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2,6-Dinitrotoluene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Chloronaphthalene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Chlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Methylnaphthalene	0.075		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Nitroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
2-Nitrophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
3&4-Methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
3,3'-Dichlorobenzidine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
3-Nitroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4,6-Dinitro-2-methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Bromophenyl phenyl ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Chloro-3-methylphenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Chloroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Chlorophenyl phenyl ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Nitroaniline	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
4-Nitrophenol	ND		0.33	mg/Kg	10	4/6/2011 10:32 PM
Acenaphthene	0.22		0.066	mg/Kg	10	4/6/2011 10:32 PM
Acenaphthylene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Acetophenone	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Anthracene	0.10		0.066	mg/Kg	10	4/6/2011 10:32 PM
Atrazine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benz(a)anthracene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzaldehyde	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(a)pyrene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(b)fluoranthene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(g,h,i)perylene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Benzo(k)fluoranthene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-chloroethoxy)methane	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-chloroethyl)ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-chloroisopropyl)ether	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Bis(2-ethylhexyl)phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 5'

Lab ID: 1104143-01

Collection Date: 4/4/2011 12:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Caprolactam	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Carbazole	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Chrysene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Dibenz(a,h)anthracene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Dibenzofuran	0.37		0.066	mg/Kg	10	4/6/2011 10:32 PM
Diethyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Dimethyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Di-n-butyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Di-n-octyl phthalate	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Fluoranthene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Fluorene	0.074		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachlorobenzene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachlorobutadiene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachlorocyclopentadiene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Hexachloroethane	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Indeno(1,2,3-cd)pyrene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Isophorone	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Naphthalene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Nitrobenzene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
N-Nitrosodi-n-propylamine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
N-Nitrosodiphenylamine	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Pentachlorophenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Phenanthrene	0.20		0.066	mg/Kg	10	4/6/2011 10:32 PM
Phenol	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Pyrene	ND		0.066	mg/Kg	10	4/6/2011 10:32 PM
Surr: 2,4,6-Tribromophenol	61.8		36-126	%REC	10	4/6/2011 10:32 PM
Surr: 2-Fluorobiphenyl	74.4		43-125	%REC	10	4/6/2011 10:32 PM
Surr: 2-Fluorophenol	84.2		37-125	%REC	10	4/6/2011 10:32 PM
Surr: 4-Terphenyl-d14	88.5		32-125	%REC	10	4/6/2011 10:32 PM
Surr: Nitrobenzene-d5	99.9		37-125	%REC	10	4/6/2011 10:32 PM
Surr: Phenol-d6	86.9		40-125	%REC	10	4/6/2011 10:32 PM

VOLATILES**SW8260**

Analyst: WLR

1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company**Project:** Tank 1204 Release**Work Order:** 1104143**Sample ID:** BH-1 5'**Lab ID:** 1104143-01**Collection Date:** 4/4/2011 12:45 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 02:14 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 02:14 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:14 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 02:14 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 02:14 PM
Surr: 1,2-Dichloroethane-d4	101		70-128	%REC	1	4/6/2011 02:14 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 5'

Lab ID: 1104143-01

Collection Date: 4/4/2011 12:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	86.7		73-126	%REC	1	4/6/2011 02:14 PM
Surr: Dibromofluoromethane	102		71-128	%REC	1	4/6/2011 02:14 PM
Surr: Toluene-d8	95.6		73-127	%REC	1	4/6/2011 02:14 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 10'

Lab ID: 1104143-02

Collection Date: 4/4/2011 12:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4,5-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4,6-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dimethylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dinitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:33 PM
2,4-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2,6-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Chloronaphthalene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Chlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Methylnaphthalene	0.18		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
2-Nitrophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
3&4-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
3,3'-Dichlorobenzidine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
3-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4,6-Dinitro-2-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Bromophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Chloro-3-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Chloroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Chlorophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
4-Nitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:33 PM
Acenaphthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Acenaphthylene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Acetophenone	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Atrazine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benz(a)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzaldehyde	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(a)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(b)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(g,h,i)perylene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Benzo(k)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-chloroethoxy)methane	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-chloroethyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-chloroisopropyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Bis(2-ethylhexyl)phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 10'
 Collection Date: 4/4/2011 12:50 PM

Work Order: 1104143
 Lab ID: 1104143-02
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Caprolactam	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Carbazole	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Chrysene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Dibenz(a,h)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Dibenzofuran	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Diethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Dimethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Di-n-butyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Di-n-octyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Fluorene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachlorobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachlorobutadiene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachlorocyclopentadiene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Hexachloroethane	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Indeno(1,2,3-cd)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Isophorone	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Naphthalene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Nitrobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
N-Nitrosodi-n-propylamine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
N-Nitrosodiphenylamine	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Pentachlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Phenanthrene	0.24		0.066	mg/Kg	10	4/7/2011 01:33 PM
Phenol	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:33 PM
Surr: 2,4,6-Tribromophenol	105		36-126	%REC	10	4/7/2011 01:33 PM
Surr: 2-Fluorobiphenyl	99.5		43-125	%REC	10	4/7/2011 01:33 PM
Surr: 2-Fluorophenol	65.6		37-125	%REC	10	4/7/2011 01:33 PM
Surr: 4-Terphenyl-d14	84.5		32-125	%REC	10	4/7/2011 01:33 PM
Surr: Nitrobenzene-d5	76.2		37-125	%REC	10	4/7/2011 01:33 PM
Surr: Phenol-d6	67.6		40-125	%REC	10	4/7/2011 01:33 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 10'

Lab ID: 1104143-02

Collection Date: 4/4/2011 12:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 02:37 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 02:37 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 02:37 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 02:37 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 02:37 PM
Surr: 1,2-Dichloroethane-d4	103		70-128	%REC	1	4/6/2011 02:37 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 10'

Lab ID: 1104143-02

Collection Date: 4/4/2011 12:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	99.4		73-126	%REC	1	4/6/2011 02:37 PM
Surr: Dibromofluoromethane	101		71-128	%REC	1	4/6/2011 02:37 PM
Surr: Toluene-d8	103		73-127	%REC	1	4/6/2011 02:37 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 15'
 Collection Date: 4/4/2011 01:00 PM

Work Order: 1104143
 Lab ID: 1104143-03
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 01:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Methylnaphthalene	0.50		0.066	mg/Kg	10	4/7/2011 02:12 PM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 01:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Acetophenone	0.014		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Bis(2-ethylhexyl)phthalate	0.010		0.0066	mg/Kg	1	4/7/2011 01:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 15'
 Collection Date: 4/4/2011 01:00 PM

Work Order: 1104143
 Lab ID: 1104143-03
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Dibenzofuran	0.50		0.066	mg/Kg	10	4/7/2011 02:12 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Fluorene	0.49		0.066	mg/Kg	10	4/7/2011 02:12 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Naphthalene	0.019		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Phenanthrene	0.85		0.066	mg/Kg	10	4/7/2011 02:12 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:53 AM
Surr: 2,4,6-Tribromophenol	54.9		36-126	%REC	1	4/7/2011 01:53 AM
Surr: 2,4,6-Tribromophenol	87.9		36-126	%REC	10	4/7/2011 02:12 PM
Surr: 2-Fluorobiphenyl	98.3		43-125	%REC	1	4/7/2011 01:53 AM
Surr: 2-Fluorobiphenyl	77.5		43-125	%REC	10	4/7/2011 02:12 PM
Surr: 2-Fluorophenol	57.8		37-125	%REC	10	4/7/2011 02:12 PM
Surr: 2-Fluorophenol	56.6		37-125	%REC	1	4/7/2011 01:53 AM
Surr: 4-Terphenyl-d14	67.1		32-125	%REC	1	4/7/2011 01:53 AM
Surr: 4-Terphenyl-d14	70.9		32-125	%REC	10	4/7/2011 02:12 PM
Surr: Nitrobenzene-d5	71.5		37-125	%REC	10	4/7/2011 02:12 PM
Surr: Nitrobenzene-d5	57.5		37-125	%REC	1	4/7/2011 01:53 AM
Surr: Phenol-d6	63.0		40-125	%REC	1	4/7/2011 01:53 AM
Surr: Phenol-d6	58.9		40-125	%REC	10	4/7/2011 02:12 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 15'

Lab ID: 1104143-03

Collection Date: 4/4/2011 01:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 03:01 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 03:01 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 15'

Lab ID: 1104143-03

Collection Date: 4/4/2011 01:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:01 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 03:01 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 03:01 PM
Surr: 1,2-Dichloroethane-d4	99.7		70-128	%REC	1	4/6/2011 03:01 PM
Surr: 4-Bromofluorobenzene	93.1		73-126	%REC	1	4/6/2011 03:01 PM
Surr: Dibromofluoromethane	101		71-128	%REC	1	4/6/2011 03:01 PM
Surr: Toluene-d8	104		73-127	%REC	1	4/6/2011 03:01 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 20'
 Collection Date: 4/4/2011 01:10 PM

Work Order: 1104143
 Lab ID: 1104143-04
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Methylnaphthalene	0.13		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Acetophenone	0.0080		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzaldehyde	0.0076		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Bis(2-ethylhexyl)phthalate	0.0088		0.0066	mg/Kg	1	4/7/2011 02:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 20'
 Collection Date: 4/4/2011 01:10 PM

Work Order: 1104143
 Lab ID: 1104143-04
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Dibenzofuran	0.50		0.066	mg/Kg	10	4/8/2011 01:54 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Fluorene	0.29		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Phenanthrene	0.67		0.066	mg/Kg	10	4/8/2011 01:54 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:13 AM
Surr: 2,4,6-Tribromophenol	79.3		36-126	%REC	10	4/8/2011 01:54 PM
Surr: 2,4,6-Tribromophenol	66.1		36-126	%REC	1	4/7/2011 02:13 AM
Surr: 2-Fluorobiphenyl	78.2		43-125	%REC	1	4/7/2011 02:13 AM
Surr: 2-Fluorobiphenyl	80.4		43-125	%REC	10	4/8/2011 01:54 PM
Surr: 2-Fluorophenol	49.7		37-125	%REC	1	4/7/2011 02:13 AM
Surr: 2-Fluorophenol	84.2		37-125	%REC	10	4/8/2011 01:54 PM
Surr: 4-Terphenyl-d14	88.3		32-125	%REC	10	4/8/2011 01:54 PM
Surr: 4-Terphenyl-d14	69.8		32-125	%REC	1	4/7/2011 02:13 AM
Surr: Nitrobenzene-d5	87.5		37-125	%REC	10	4/8/2011 01:54 PM
Surr: Nitrobenzene-d5	62.4		37-125	%REC	1	4/7/2011 02:13 AM
Surr: Phenol-d6	89.4		40-125	%REC	10	4/8/2011 01:54 PM
Surr: Phenol-d6	65.3		40-125	%REC	1	4/7/2011 02:13 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 20'

Lab ID: 1104143-04

Collection Date: 4/4/2011 01:10 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 03:25 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 03:25 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 20'

Lab ID: 1104143-04

Collection Date: 4/4/2011 01:10 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:25 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 03:25 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 03:25 PM
Surr: 1,2-Dichloroethane-d4	102		70-128	%REC	1	4/6/2011 03:25 PM
Surr: 4-Bromofluorobenzene	97.1		73-126	%REC	1	4/6/2011 03:25 PM
Surr: Dibromofluoromethane	98.8		71-128	%REC	1	4/6/2011 03:25 PM
Surr: Toluene-d8	100		73-127	%REC	1	4/6/2011 03:25 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 25'
 Collection Date: 4/4/2011 01:20 PM

Work Order: 1104143
 Lab ID: 1104143-05
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:33 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:33 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 25'

Lab ID: 1104143-05

Collection Date: 4/4/2011 01:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Phenanthrene	0.014		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:33 AM
Surr: 2,4,6-Tribromophenol	55.1		36-126	%REC	1	4/7/2011 02:33 AM
Surr: 2-Fluorobiphenyl	56.7		43-125	%REC	1	4/7/2011 02:33 AM
Surr: 2-Fluorophenol	57.9		37-125	%REC	1	4/7/2011 02:33 AM
Surr: 4-Terphenyl-d14	62.5		32-125	%REC	1	4/7/2011 02:33 AM
Surr: Nitrobenzene-d5	57.1		37-125	%REC	1	4/7/2011 02:33 AM
Surr: Phenol-d6	60.1		40-125	%REC	1	4/7/2011 02:33 AM

VOLATILES**SW8260**

Analyst: WLR

1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 25'

Lab ID: 1104143-05

Collection Date: 4/4/2011 01:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 03:48 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 03:48 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 03:48 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 03:48 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 03:48 PM
Surr: 1,2-Dichloroethane-d4	99.6		70-128	%REC	1	4/6/2011 03:48 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 25'

Lab ID: 1104143-05

Collection Date: 4/4/2011 01:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	100		73-126	%REC	1	4/6/2011 03:48 PM
Surr: Dibromofluoromethane	95.4		71-128	%REC	1	4/6/2011 03:48 PM
Surr: Toluene-d8	102		73-127	%REC	1	4/6/2011 03:48 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 30'

Lab ID: 1104143-06

Collection Date: 4/4/2011 01:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 02:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 30'

Lab ID: 1104143-06

Collection Date: 4/4/2011 01:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Phenanthrene	0.0091		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 02:53 AM
Surr: 2,4,6-Tribromophenol	74.5		36-126	%REC	1	4/7/2011 02:53 AM
Surr: 2-Fluorobiphenyl	66.1		43-125	%REC	1	4/7/2011 02:53 AM
Surr: 2-Fluorophenol	70.8		37-125	%REC	1	4/7/2011 02:53 AM
Surr: 4-Terphenyl-d14	83.1		32-125	%REC	1	4/7/2011 02:53 AM
Surr: Nitrobenzene-d5	65.4		37-125	%REC	1	4/7/2011 02:53 AM
Surr: Phenol-d6	68.1		40-125	%REC	1	4/7/2011 02:53 AM
VOLATILES			SW8260		Analyst: WLR	
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 30'

Lab ID: 1104143-06

Collection Date: 4/4/2011 01:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 04:12 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 04:12 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:12 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 04:12 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 04:12 PM
Surr: 1,2-Dichloroethane-d4	100		70-128	%REC	1	4/6/2011 04:12 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 30'

Lab ID: 1104143-06

Collection Date: 4/4/2011 01:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	109		73-126	%REC	1	4/6/2011 04:12 PM
Surr: Dibromofluoromethane	98.2		71-128	%REC	1	4/6/2011 04:12 PM
Surr: Toluene-d8	100		73-127	%REC	1	4/6/2011 04:12 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 35'
 Collection Date: 4/4/2011 01:45 PM

Work Order: 1104143
 Lab ID: 1104143-07
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Bis(2-ethylhexyl)phthalate	0.0083		0.0066	mg/Kg	1	4/7/2011 03:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 35'
 Collection Date: 4/4/2011 01:45 PM

Work Order: 1104143
 Lab ID: 1104143-07
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:13 AM
Surr: 2,4,6-Tribromophenol	73.7		36-126	%REC	1	4/7/2011 03:13 AM
Surr: 2-Fluorobiphenyl	79.3		43-125	%REC	1	4/7/2011 03:13 AM
Surr: 2-Fluorophenol	62.5		37-125	%REC	1	4/7/2011 03:13 AM
Surr: 4-Terphenyl-d14	87.2		32-125	%REC	1	4/7/2011 03:13 AM
Surr: Nitrobenzene-d5	79.0		37-125	%REC	1	4/7/2011 03:13 AM
Surr: Phenol-d6	75.3		40-125	%REC	1	4/7/2011 03:13 AM

VOLATILES**SW8260**

Analyst: WLR

1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-1 35'
 Collection Date: 4/4/2011 01:45 PM

Work Order: 1104143
 Lab ID: 1104143-07
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 04:35 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 04:35 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:35 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 04:35 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 04:35 PM
Surr: 1,2-Dichloroethane-d4	97.0		70-128	%REC	1	4/6/2011 04:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-1 35'

Lab ID: 1104143-07

Collection Date: 4/4/2011 01:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	101		73-126	%REC	1	4/6/2011 04:35 PM
Surr: Dibromofluoromethane	92.9		71-128	%REC	1	4/6/2011 04:35 PM
Surr: Toluene-d8	94.2		73-127	%REC	1	4/6/2011 04:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 5'

Lab ID: 1104143-08

Collection Date: 4/4/2011 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4,5-Trichlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4,6-Trichlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dichlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dimethylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dinitrophenol	ND		0.16	mg/Kg	5	4/7/2011 05:33 AM
2,4-Dinitrotoluene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2,6-Dinitrotoluene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Chloronaphthalene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Chlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Methylnaphthalene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Nitroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
2-Nitrophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
3&4-Methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
3,3'-Dichlorobenzidine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
3-Nitroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4,6-Dinitro-2-methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Bromophenyl phenyl ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Chloro-3-methylphenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Chloroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Chlorophenyl phenyl ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Nitroaniline	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
4-Nitrophenol	ND		0.16	mg/Kg	5	4/7/2011 05:33 AM
Acenaphthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Acenaphthylene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Acetophenone	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Anthracene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Atrazine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benz(a)anthracene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzaldehyde	0.039		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(a)pyrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(b)fluoranthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(g,h,i)perylene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Benzo(k)fluoranthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-chloroethoxy)methane	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-chloroethyl)ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-chloroisopropyl)ether	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Bis(2-ethylhexyl)phthalate	0.12		0.033	mg/Kg	5	4/7/2011 05:33 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 5'

Lab ID: 1104143-08

Collection Date: 4/4/2011 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Caprolactam	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Carbazole	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Chrysene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Dibenz(a,h)anthracene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Dibenzofuran	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Diethyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Dimethyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Di-n-butyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Di-n-octyl phthalate	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Fluoranthene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Fluorene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachlorobenzene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachlorobutadiene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachlorocyclopentadiene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Hexachloroethane	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Indeno(1,2,3-cd)pyrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Isophorone	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Naphthalene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Nitrobenzene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
N-Nitrosodi-n-propylamine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
N-Nitrosodiphenylamine	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Pentachlorophenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Phenanthrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Phenol	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Pyrene	ND		0.033	mg/Kg	5	4/7/2011 05:33 AM
Surr: 2,4,6-Tribromophenol	65.3		36-126	%REC	5	4/7/2011 05:33 AM
Surr: 2-Fluorobiphenyl	69.0		43-125	%REC	5	4/7/2011 05:33 AM
Surr: 2-Fluorophenol	93.6		37-125	%REC	5	4/7/2011 05:33 AM
Surr: 4-Terphenyl-d14	88.9		32-125	%REC	5	4/7/2011 05:33 AM
Surr: Nitrobenzene-d5	86.2		37-125	%REC	5	4/7/2011 05:33 AM
Surr: Phenol-d6	98.1		40-125	%REC	5	4/7/2011 05:33 AM
VOLATILES			SW8260		Analyst: WLR	
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 5'

Lab ID: 1104143-08

Collection Date: 4/4/2011 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 04:59 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 04:59 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 04:59 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 04:59 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 04:59 PM
Surr: 1,2-Dichloroethane-d4	103		70-128	%REC	1	4/6/2011 04:59 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 5'

Lab ID: 1104143-08

Collection Date: 4/4/2011 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	93.1		73-126	%REC	1	4/6/2011 04:59 PM
Surr: Dibromofluoromethane	101		71-128	%REC	1	4/6/2011 04:59 PM
Surr: Toluene-d8	103		73-127	%REC	1	4/6/2011 04:59 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4,5-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4,6-Trichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dichlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dimethylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dinitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:53 PM
2,4-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2,6-Dinitrotoluene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Chloronaphthalene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Chlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Methylnaphthalene	5.2		0.66	mg/Kg	100	4/7/2011 04:12 PM
2-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
2-Nitrophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
3&4-Methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
3,3'-Dichlorobenzidine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
3-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4,6-Dinitro-2-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Bromophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Chloro-3-methylphenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Chloroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Chlorophenyl phenyl ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Nitroaniline	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
4-Nitrophenol	ND		0.33	mg/Kg	10	4/7/2011 01:53 PM
Acenaphthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Acenaphthylene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Acetophenone	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Atrazine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benz(a)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzaldehyde	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(a)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(b)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(g,h,i)perylene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Benzo(k)fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-chloroethoxy)methane	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-chloroethyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-chloroisopropyl)ether	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Bis(2-ethylhexyl)phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Caprolactam	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Carbazole	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Chrysene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Dibenz(a,h)anthracene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Dibenzofuran	4.2		0.66	mg/Kg	100	4/7/2011 04:12 PM
Diethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Dimethyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Di-n-butyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Di-n-octyl phthalate	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Fluoranthene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Fluorene	2.7		0.66	mg/Kg	100	4/7/2011 04:12 PM
Hexachlorobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Hexachlorobutadiene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Hexachlorocyclopentadiene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Hexachloroethane	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Indeno(1,2,3-cd)pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Isophorone	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Naphthalene	0.58		0.066	mg/Kg	10	4/7/2011 01:53 PM
Nitrobenzene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
N-Nitrosodi-n-propylamine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
N-Nitrosodiphenylamine	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Pentachlorophenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Phenanthrene	4.3		0.66	mg/Kg	100	4/7/2011 04:12 PM
Phenol	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Pyrene	ND		0.066	mg/Kg	10	4/7/2011 01:53 PM
Surr: 2,4,6-Tribromophenol	103		36-126	%REC	10	4/7/2011 01:53 PM
Surr: 2,4,6-Tribromophenol	0	S	36-126	%REC	100	4/7/2011 04:12 PM
Surr: 2-Fluorobiphenyl	117		43-125	%REC	100	4/7/2011 04:12 PM
Surr: 2-Fluorobiphenyl	60.7		43-125	%REC	10	4/7/2011 01:53 PM
Surr: 2-Fluorophenol	72.0		37-125	%REC	10	4/7/2011 01:53 PM
Surr: 2-Fluorophenol	0	S	37-125	%REC	100	4/7/2011 04:12 PM
Surr: 4-Terphenyl-d14	84.8		32-125	%REC	10	4/7/2011 01:53 PM
Surr: 4-Terphenyl-d14	0	S	32-125	%REC	100	4/7/2011 04:12 PM
Surr: Nitrobenzene-d5	59.7		37-125	%REC	10	4/7/2011 01:53 PM
Surr: Nitrobenzene-d5	118		37-125	%REC	100	4/7/2011 04:12 PM
Surr: Phenol-d6	0	S	40-125	%REC	100	4/7/2011 04:12 PM
Surr: Phenol-d6	69.8		40-125	%REC	10	4/7/2011 01:53 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 05:22 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 05:22 PM
Naphthalene	0.033		0.0050	mg/Kg	1	4/6/2011 05:22 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 10'

Lab ID: 1104143-09

Collection Date: 4/4/2011 02:35 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:22 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 05:22 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 05:22 PM
Surr: 1,2-Dichloroethane-d4	105		70-128	%REC	1	4/6/2011 05:22 PM
Surr: 4-Bromofluorobenzene	102		73-126	%REC	1	4/6/2011 05:22 PM
Surr: Dibromofluoromethane	102		71-128	%REC	1	4/6/2011 05:22 PM
Surr: Toluene-d8	102		73-127	%REC	1	4/6/2011 05:22 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-2 15'
Collection Date: 4/4/2011 02:45 PM

Work Order: 1104143
Lab ID: 1104143-10
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Methylnaphthalene	0.93		0.13	mg/Kg	20	4/8/2011 12:58 PM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 03:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Bis(2-ethylhexyl)phthalate	0.0068		0.0066	mg/Kg	1	4/7/2011 03:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: Tank 1204 Release
Sample ID: BH-2 15'
Collection Date: 4/4/2011 02:45 PM

Work Order: 1104143
Lab ID: 1104143-10
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Dibenzofuran	1.0		0.13	mg/Kg	20	4/8/2011 12:58 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Fluorene	0.88		0.13	mg/Kg	20	4/8/2011 12:58 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Naphthalene	0.11		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Phenanthrene	1.1		0.13	mg/Kg	20	4/8/2011 12:58 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 03:53 AM
Surr: 2,4,6-Tribromophenol	37.0		36-126	%REC	1	4/7/2011 03:53 AM
Surr: 2,4,6-Tribromophenol	67.2		36-126	%REC	20	4/8/2011 12:58 PM
Surr: 2-Fluorobiphenyl	68.5		43-125	%REC	20	4/8/2011 12:58 PM
Surr: 2-Fluorobiphenyl	89.1		43-125	%REC	1	4/7/2011 03:53 AM
Surr: 2-Fluorophenol	92.1		37-125	%REC	1	4/7/2011 03:53 AM
Surr: 2-Fluorophenol	86.4		37-125	%REC	20	4/8/2011 12:58 PM
Surr: 4-Terphenyl-d14	85.6		32-125	%REC	1	4/7/2011 03:53 AM
Surr: 4-Terphenyl-d14	82.0		32-125	%REC	20	4/8/2011 12:58 PM
Surr: Nitrobenzene-d5	109		37-125	%REC	1	4/7/2011 03:53 AM
Surr: Nitrobenzene-d5	91.6		37-125	%REC	20	4/8/2011 12:58 PM
Surr: Phenol-d6	87.2		40-125	%REC	20	4/8/2011 12:58 PM
Surr: Phenol-d6	103		40-125	%REC	1	4/7/2011 03:53 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-2 15'
 Collection Date: 4/4/2011 02:45 PM

Work Order: 1104143
 Lab ID: 1104143-10
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 05:46 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 05:46 PM
Naphthalene	0.024		0.0050	mg/Kg	1	4/6/2011 05:46 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 15'

Lab ID: 1104143-10

Collection Date: 4/4/2011 02:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 05:46 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 05:46 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 05:46 PM
Surr: 1,2-Dichloroethane-d4	105		70-128	%REC	1	4/6/2011 05:46 PM
Surr: 4-Bromofluorobenzene	87.1		73-126	%REC	1	4/6/2011 05:46 PM
Surr: Dibromofluoromethane	100		71-128	%REC	1	4/6/2011 05:46 PM
Surr: Toluene-d8	94.9		73-127	%REC	1	4/6/2011 05:46 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 20'

Lab ID: 1104143-11

Collection Date: 4/4/2011 02:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Methylnaphthalene	0.32		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Bis(2-ethylhexyl)phthalate	0.0093		0.0066	mg/Kg	1	4/7/2011 04:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-2 20'
 Collection Date: 4/4/2011 02:50 PM

Work Order: 1104143
 Lab ID: 1104143-11
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Dibenzofuran	0.76		0.066	mg/Kg	10	4/8/2011 01:18 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Fluorene	0.76		0.066	mg/Kg	10	4/8/2011 01:18 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Phenanthrene	0.85		0.066	mg/Kg	10	4/8/2011 01:18 PM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:13 AM
Surr: 2,4,6-Tribromophenol	46.8		36-126	%REC	1	4/7/2011 04:13 AM
Surr: 2,4,6-Tribromophenol	75.4		36-126	%REC	10	4/8/2011 01:18 PM
Surr: 2-Fluorobiphenyl	75.2		43-125	%REC	10	4/8/2011 01:18 PM
Surr: 2-Fluorobiphenyl	104		43-125	%REC	1	4/7/2011 04:13 AM
Surr: 2-Fluorophenol	68.8		37-125	%REC	1	4/7/2011 04:13 AM
Surr: 2-Fluorophenol	80.8		37-125	%REC	10	4/8/2011 01:18 PM
Surr: 4-Terphenyl-d14	79.3		32-125	%REC	1	4/7/2011 04:13 AM
Surr: 4-Terphenyl-d14	94.5		32-125	%REC	10	4/8/2011 01:18 PM
Surr: Nitrobenzene-d5	80.9		37-125	%REC	1	4/7/2011 04:13 AM
Surr: Nitrobenzene-d5	91.3		37-125	%REC	10	4/8/2011 01:18 PM
Surr: Phenol-d6	83.5		40-125	%REC	10	4/8/2011 01:18 PM
Surr: Phenol-d6	81.5		40-125	%REC	1	4/7/2011 04:13 AM

VOLATILES**SW8260**

Analyst: WLR

1,1,1-Trichloroethane	ND	0.0050	mg/Kg	1	4/6/2011 06:09 PM
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Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 20'

Lab ID: 1104143-11

Collection Date: 4/4/2011 02:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
2-Butanone	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Acetone	ND		0.020	mg/Kg	1	4/6/2011 06:09 PM
Benzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Bromoform	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Bromomethane	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Chloroethane	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Chloroform	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Chloromethane	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/6/2011 06:09 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Styrene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Toluene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 20'

Lab ID: 1104143-11

Collection Date: 4/4/2011 02:50 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/6/2011 06:09 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/6/2011 06:09 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/6/2011 06:09 PM
Surr: 1,2-Dichloroethane-d4	96.7		70-128	%REC	1	4/6/2011 06:09 PM
Surr: 4-Bromofluorobenzene	95.0		73-126	%REC	1	4/6/2011 06:09 PM
Surr: Dibromofluoromethane	93.9		71-128	%REC	1	4/6/2011 06:09 PM
Surr: Toluene-d8	104		73-127	%REC	1	4/6/2011 06:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 25'

Lab ID: 1104143-12

Collection Date: 4/4/2011 02:55 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:33 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:33 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-2 25'
 Collection Date: 4/4/2011 02:55 PM

Work Order: 1104143
 Lab ID: 1104143-12
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:33 AM
Surr: 2,4,6-Tribromophenol	70.6		36-126	%REC	1	4/7/2011 04:33 AM
Surr: 2-Fluorobiphenyl	72.2		43-125	%REC	1	4/7/2011 04:33 AM
Surr: 2-Fluorophenol	69.5		37-125	%REC	1	4/7/2011 04:33 AM
Surr: 4-Terphenyl-d14	87.2		32-125	%REC	1	4/7/2011 04:33 AM
Surr: Nitrobenzene-d5	70.4		37-125	%REC	1	4/7/2011 04:33 AM
Surr: Phenol-d6	71.2		40-125	%REC	1	4/7/2011 04:33 AM

VOLATILES**SW8260**

Analyst: WLR

1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 25'

Lab ID: 1104143-12

Collection Date: 4/4/2011 02:55 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 10:58 AM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 10:58 AM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 10:58 AM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 10:58 AM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 10:58 AM
Surr: 1,2-Dichloroethane-d4	99.6		70-128	%REC	1	4/7/2011 10:58 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 25'

Lab ID: 1104143-12

Collection Date: 4/4/2011 02:55 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	98.3		73-126	%REC	1	4/7/2011 10:58 AM
Surr: Dibromofluoromethane	96.4		71-128	%REC	1	4/7/2011 10:58 AM
Surr: Toluene-d8	108		73-127	%REC	1	4/7/2011 10:58 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 30'

Lab ID: 1104143-13

Collection Date: 4/4/2011 03:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 04:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzaldehyde	0.018		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-2 30'
 Collection Date: 4/4/2011 03:05 PM

Work Order: 1104143
 Lab ID: 1104143-13
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 04:53 AM
Surr: 2,4,6-Tribromophenol	71.2		36-126	%REC	1	4/7/2011 04:53 AM
Surr: 2-Fluorobiphenyl	75.8		43-125	%REC	1	4/7/2011 04:53 AM
Surr: 2-Fluorophenol	75.5		37-125	%REC	1	4/7/2011 04:53 AM
Surr: 4-Terphenyl-d14	88.3		32-125	%REC	1	4/7/2011 04:53 AM
Surr: Nitrobenzene-d5	74.5		37-125	%REC	1	4/7/2011 04:53 AM
Surr: Phenol-d6	78.1		40-125	%REC	1	4/7/2011 04:53 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 30'

Lab ID: 1104143-13

Collection Date: 4/4/2011 03:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 11:22 AM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 11:22 AM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:22 AM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 11:22 AM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 11:22 AM
Surr: 1,2-Dichloroethane-d4	97.6		70-128	%REC	1	4/7/2011 11:22 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 30'

Lab ID: 1104143-13

Collection Date: 4/4/2011 03:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	91.9		73-126	%REC	1	4/7/2011 11:22 AM
Surr: Dibromofluoromethane	95.9		71-128	%REC	1	4/7/2011 11:22 AM
Surr: Toluene-d8	94.7		73-127	%REC	1	4/7/2011 11:22 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 35'

Lab ID: 1104143-14

Collection Date: 4/4/2011 03:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 05:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 05:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Bis(2-ethylhexyl)phthalate	0.015		0.0066	mg/Kg	1	4/7/2011 05:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Navajo Refining Company
 Project: Tank 1204 Release
 Sample ID: BH-2 35'
 Collection Date: 4/4/2011 03:20 PM

Work Order: 1104143
 Lab ID: 1104143-14
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 05:13 AM
Surr: 2,4,6-Tribromophenol	71.2		36-126	%REC	1	4/7/2011 05:13 AM
Surr: 2-Fluorobiphenyl	81.3		43-125	%REC	1	4/7/2011 05:13 AM
Surr: 2-Fluorophenol	76.3		37-125	%REC	1	4/7/2011 05:13 AM
Surr: 4-Terphenyl-d14	85.9		32-125	%REC	1	4/7/2011 05:13 AM
Surr: Nitrobenzene-d5	74.9		37-125	%REC	1	4/7/2011 05:13 AM
Surr: Phenol-d6	79.3		40-125	%REC	1	4/7/2011 05:13 AM

VOLATILES**SW8260**

Analyst: WLR

1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 35'

Lab ID: 1104143-14

Collection Date: 4/4/2011 03:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 11:45 AM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 11:45 AM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 11:45 AM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 11:45 AM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 11:45 AM
Surr: 1,2-Dichloroethane-d4	98.2		70-128	%REC	1	4/7/2011 11:45 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company

Project: Tank 1204 Release

Work Order: 1104143

Sample ID: BH-2 35'

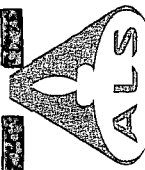
Lab ID: 1104143-14

Collection Date: 4/4/2011 03:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	87.9		73-126	%REC	1	4/7/2011 11:45 AM
Surr: Dibromofluoromethane	98.2		71-128	%REC	1	4/7/2011 11:45 AM
Surr: Toluene-d8	90.1		73-127	%REC	1	4/7/2011 11:45 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Page 2 of 2

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ALS Work Order #

10413

Customer Information				Project Information				ALS Project Manager: Navajo Lea Refinery-Semi-Annual											
Purchase Order				Project Name				Parameter/Method Request for Analysis											
Work Order				Project Number				A VOC (8260) Select											
Company Name				Bill To Company				B LL SVOC (8270) TCL											
Send Report To				Invoice Attn				C Total Metals (6020/7000) Hg											
Address				Address				D Dissolved Metals (6020/7000) Select											
City/State/Zip				City/State/Zip				E Arsenic (300) Cl, F, SO4											
Phone				Phone				F Alkalinity											
Fax				Fax				G pH											
e-Mail Address				e-Mail Address				H Specific Conductivity											
								I TDS											
								J Nitrate/Nitrite (300)											
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	BH-2, 20'	4/4/11	1450	Soil	8	2	X	X											
2	BH-2, 25'		1455		1	1													
3	BH-2, 30'		1505		1	1													
4	BH-2, 35'	4/4/11	1520	Soil	8	1	X												
5	Trip Blank 012111-58			H2O	1, 8	2	X												
6																			
7																			
8																			
9																			
10																			

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
D. Boyer		Fed Ex		☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour			
Relinquished by: D. Boyer		Received by: Raw ACS		☒ Std 10 Wk Days ☐ Std 10 Wk Days ☐ 24 Hour			
Relinquished by: D. Boyer		Received by: (Laboratory):		Notes: 40 Day TAT. Cg Dave Boyer			
Logged by (Laboratory):		Checked by (Laboratory):		Cooler ID		Cooler Temp	
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4°C 9-5035				QC Package: (Check One Box Below)		☒ Level II Std QC ☐ TRRP Checklist	
						☐ Level III Std QC/Raw Data ☐ TRRP Level IV	
						☐ Level IV SW846/CLP ☐ Other / EIDD	

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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Sample Receipt Checklist

Client Name: **NAVAJO REFINING**

Date/Time Received: **06-Apr-11 00:00**

Work Order: **1104143**

Received by: **RDN**

Checklist completed by Jay Lynn F Thibault
eSignature

06-Apr-11
Date

Reviewed by: Jay Lynn F Thibault
eSignature

06-Apr-11
Date

Matrices: soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☒	Not Present ☐
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>1.9</u>	<u>002</u>	
Cooler(s)/Kit(s):	<u>3586</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:	<u></u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

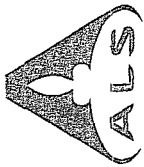
Client: Navajo Refining Company
Project: Tank 1204 Release
WorkOrder: 1104143

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram



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Chain of Custody Form

Page 1 of 2

1104143

NAVAJO REFINING: Holly Energy Partners
Project: Tank 1204 Release



ALS Project Manager:

Customer Information				Project Information													
Purchase Order	Tank 1204 Release			Navajo Lea Refinery - Semi-Annual													
Work Order				VOC (8260) Select													
Company Name	Navajo Refining Company			LL SVOC (8270) TCL													
Send Report To	Darrell Moore			Total Metals (6020/7000) Hg													
Address	PO Box 159			Dissolved Metals (6020/7000) Select													
City/State/Zip	Artesia, NM 88211			Anions (300) Cl, F, SO4													
Phone	(575) 748-6733			Alkalinity													
Fax	(575) 746-5421			pH													
e-Mail Address				Specific Conductivity													
				TDS													
				Nitrate/Nitrite (300)													
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	BH-1, 5'	4/4/11	1245	Soil	8	2	X										
2	BH-1, 10'		1250														
3	BH-1, 15'		1300														
4	BH-1, 20'		1310														
5	BH-1, 25'		1320														
6	BH-1, 30'		1335														
7	BH-1, 35'		1345														
8	BH-2, 5'		1430														
9	BH-2, 10'		1435														
10	BH-2, 15'	4/4/11	1445	Soil	8	2	X										
Sampler(s) Please Print & Sign				Shipment Method		Required Turnaround Time: (Check Box)		Other		Results Due Date:							
D. Boyer				FedEx		5 WK Days		2 WK Days		24 Hour							
Relinquished by: D. Boyer				Date: 4/4/11		Time: 1700		Received by (Laboratory):		Cooler ID		Cooler Temp		Notes: Due 4/11/11 Dave Boyer			
Relinquished by: R. Boyer				Date: 4/6/11		Time: 0910		Received by (Laboratory):		Cooler ID		Cooler Temp		QC Package: (Check One Box Below)			
Logged by (Laboratory):				Date: 4/6/11		Time: 1700		Received by (Laboratory):		Cooler ID		Cooler Temp		☒ Level II Std QC ☐ Level III Std QC/Raw Data ☐ Level IV SW846/CLP ☐ Other / EDD			
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4°C 9-5035																	

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2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be complete and accurate.

 ALS Environmental 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By: RA Date: 4/16/11
	Date: 4/5/11	Time: 1700	
	Name: BROYER		
	Company: SEST		

 ALS Environmental 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	CUSTODY SEAL		Seal Broken By: RA Date: 4/16/11
	Date: 4/5/11	Time: 1700	
	Name: BROYER		
	Company: SEST		

This portion can be removed for Recipient's records.
 e **4/5/11** FedEx Tracking Number **874196688692**
 Order's me **BROYER** Phone **281 530 7067**
 Company **SEST**
 Address **703 E. Clinton** Dept./Floor/Suite/Room
Hobbs State **TX** ZIP **75240**
 Our Internal Billing Reference

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

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

Form C-141
Revised October 10, 2003

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 Navajo Refining Company, LLC	Contact Aaron Strange
Address PO Box 159	Telephone No. 575-748-3311
Facility Name Lea Refining Co	Facility Type Petroleum Refinery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Water	Volume of Release 10-12 bbls	Volume Recovered none
Source of Release Leaking butterfly valve	Date and Hour of Occurrence 10:30 am 8/9/10	Date and Hour of Discovery 10:30 am 8/9/10
Was Immediate Notice Given? ☐ Yes x No x Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes x No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

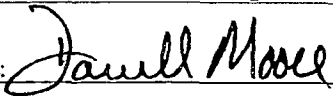
Describe Cause of Problem and Remedial Action Taken.*

A leaking butterfly valve allowed D-70 (Soft Water Tank) to overfill and run over. A vacuum truck was called out to suck down the tank to keep it from running over and a new butterfly valve was put in place. The water soaked in so none was available to be vacuumed up.

Describe Area Affected and Cleanup Action Taken.*

The area affected is just west of the RO Unit between the road and the RO Unit. It is about 15' wide and 20' long. The area will be sampled to determine if any remediation needs to be done. Its soft water!

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: Darrell Moore	Approved by District Supervisor:	
Title: Env. Mgr. for Water and Waste	Approval Date:	Expiration Date:
E-mail Address: Darrell.moore@hollycorp.com	Conditions of Approval:	Attached ☐
Date: 8/16/10	Phone: 575-748-3311	

* Attach Additional Sheets If Necessary

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

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

Form C-141
Revised October 10, 2003

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	Navajo Refining Company, LLC	Contact	Aaron Strange
Address	7420 South Hiway 18	Telephone No.	575-748-3311
Facility Name	Lea Refinery	Facility Type	Petroleum Refinery
Surface Owner	Mineral Owner	Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	10 bbls	Volume Recovered	6 bbls
Source of Release	Overrun of wastewater	Date and Hour of Occurrence	7:45 pm 8/10/10	Date and Hour of Discovery	7:45 pm 8/10/10
Was Immediate Notice Given?	☐ Yes x No x Not Required				
By Whom?	If YES, To Whom?				
Was a Watercourse Reached?	☐ Yes x No				
If YES, Volume Impacting the Watercourse.					

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Due to heavy rainstorms and lightening in the area, power was lost to the plant. This knocked out all pumps and hindered the ability of the plant to pump wastewater. In addition, heavy rain added to the problem and so, the wastewater system overflowed. Four vacuum trucks were called out and sucked up rainwater and any hydrocarbons that were floating on the water.

Describe Area Affected and Cleanup Action Taken.*

The area affected runs from the Unit on the north end of the plant to the southeast where the water pools up near the firehouse. It is about 20' wide and 600 yds long. Contaminated soil has been picked up and bottom hole samples will be taken on 8/17/10.

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.

OIL CONSERVATION DIVISION

Signature: <i>Darrell Moore</i>	Approved by District Supervisor:		
Printed Name: Darrell Moore	Approval Date: _____ Expiration Date: _____		
Title: Env. Mgr. for Water and Waste	Conditions of Approval:		
E-mail Address: Darrell.moore@hollycorp.com	Attached ☐		
Date: 8/16/10	Phone: 575-748-3311		

Wastewater Overflow Release and Ponding Narrative

Background:

During the early evening of August 10, 2010 severe thunderstorms in the area produced heavy rain and lightening. Due to the latter power was lost to the refinery that knocked out all pumps and hindered the ability of the plant to pump wastewater. In addition the heavy rain added to the problem such that the wastewater system, which receives runoff from some uncovered process areas, overflowed. Four vacuum trucks were called out and sucked up rainwater and any hydrocarbons floating on the water.

The affected area ran from the unit on the north end of the refinery process area to the southeast where the water ponded up near the northwest side of the firehouse. The affected area was about 20 feet wide and 600 yards long.

Investigation:

The release detailed on the attached C-141 was investigated April 4, 2011 by drilling two soil borings at the location of the formerly ponded water. A Foremost-Mobile model B-57 hollow stem auger with a 5-foot sample tube was used to drill and extract soil borings to a depth of 20 feet. Samples of the resultant soil were taken every 5 feet, properly cooled and sent together with a chain-of-custody to ALS Environmental Laboratory in Houston Texas. Each sample was analyzed for volatile and semi-volatile hydrocarbons that would best characterize the hydrocarbons in the tank. Soil boring logs are attached with this report.

Results:

The results of the analyses are shown on the attached spreadsheet with detections above the reporting limit highlighted. The results were compared to soil screening criteria developed by the NM Environment Department to aid in determination of the threat of a spill or release to damage the environment. Volatile hydrocarbons, including benzene, ethylbenzene, toluene, xylenes, and naphthalene were not detected. Several semi-volatile hydrocarbons (not including method 8270 naphthalene) were detected as shown in the table. All detections (except those semi-volatiles not listed in the soil screening document) were well below NMED guidance. In addition, the maximum depth of any contamination is 20 feet or less.

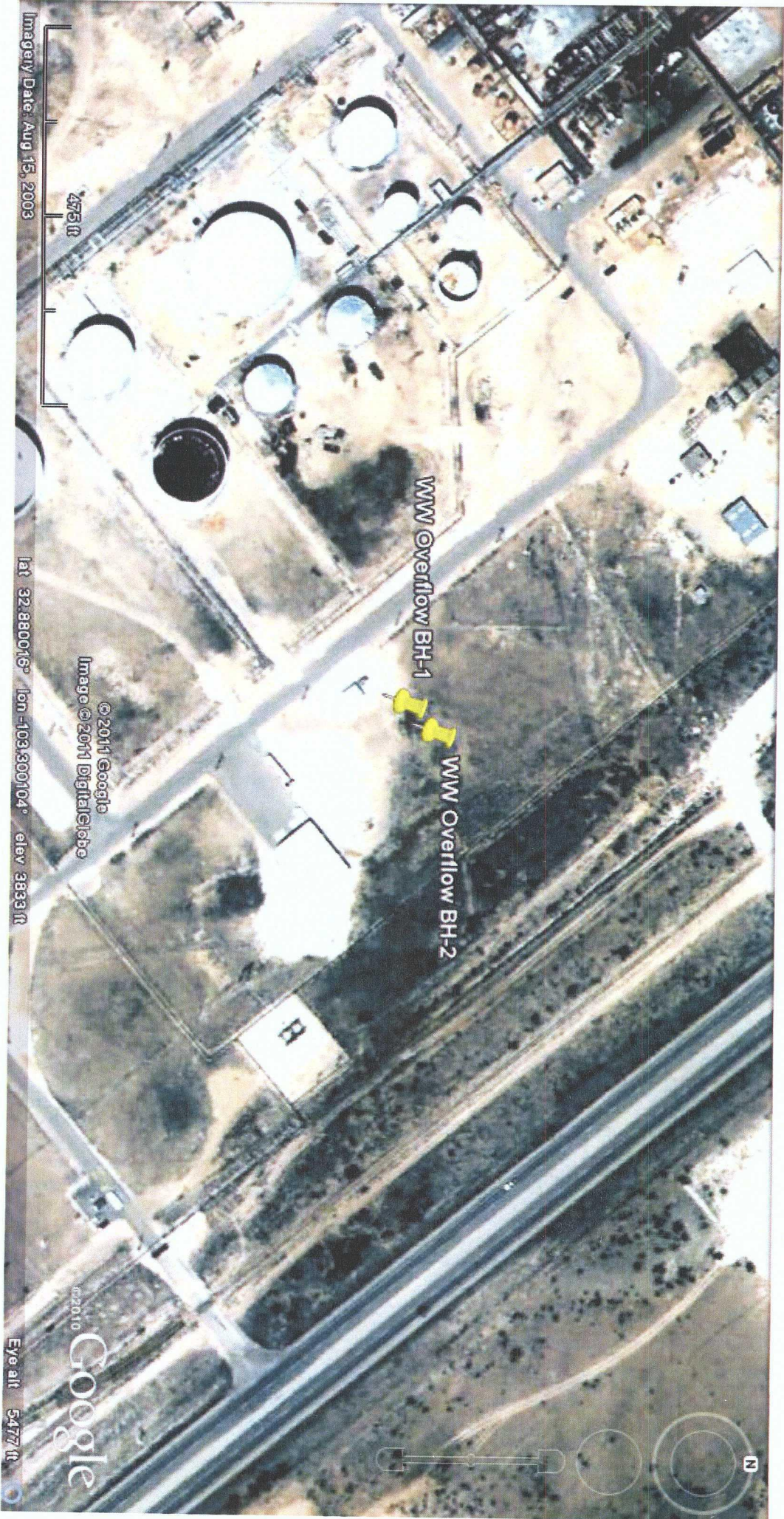
Of the semi-volatiles detected, only fluoranthene is associated directly with petroleum hydrocarbons. No information was found on benzaldehyde. Phthalates are a common contaminant found in plasticizers; the source here is unknown but may be a laboratory artifact.

Conclusion:

The release did not reach groundwater which is at a depth of about 105 feet. The water solubility of semi-volatiles is generally slight and the low concentrations of hydrocarbons found in the subsurface do not constitute a threat to the groundwater.

Wastewater Ponding Soil Sampling Results compared with NM Environment Department Soil Screening Levels

	Chemical:	Benzene (mg/Kg)	Ethyl- benzene (mg/Kg)	Toluene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Naphthalene 8270 (mg/Kg)	Benzaldehyde (mg/Kg)	Bis(2-ethylhexyl) phthalate (mg/Kg)	Fluorethane (mg/Kg)
	Residential Soil	15.5	69.6	5,570	1,090	45.0	45.0	NL	280	2,290
	Industrial/ Occupational Soil	85.4	385	57,900	3,610	252	252	NL	1,370	24,400
	Construction Worker Soil	471	6,630	21,100	3,130	702	702	NL	4,760	8,910
Date: 4/4/2011										
Borehole BH-1	5 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066	0.0080	<0.0066
	10 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066	0.0094	<0.0066
	15 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.0082	0.0091	<0.0066
Borehole BH-2	5 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066	0.0087	<0.0066
	10 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066	<0.0066	0.0085
	15 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	0.011	<0.0066	<0.0066
	20 feet	<0.0050	<0.0050	<0.0050	<0.015	<0.0050	<0.0066	<0.0066	<0.0066	<0.0066
Source: NMED Soil Screening Levels, July 2009, Revision 5.0										



Imagery Date: Aug 15, 2003

475 ft

WW Overflow BH-1

WW Overflow BH-2

© 2011 Google
Image © 2011 DigitalGlobe

lat 32.880016° lon -103.300104° elev 3833 ft

Google

Eye alt 5477 ft



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-1

(Page 1 of 1)

Wastewater Tank Overflow Ponding Investigation
Navajo Refining Company, Lea Refinery
Section 36, T16S, R36E
Lea County, New Mexico
N32° 52' 42.49", W103° 18' 5.49"

Date, Time Started : 04/04/11, 1030
Date, Time Complete : 04/04/11, 1125
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

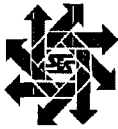
Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : David Boyer
Company Rep. :

Depth in Feet	Sample Type	Recovery (ft.)	USCS	GRAPHIC	Sample Type SS Split Spoon (18" or 24") CB Core Barrel (2.5' or 5') CT Auger Cuttings NR No recovery	Lab No.	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Total Naphthalene 8270 (mg/Kg)
					DESCRIPTION							
0				TS	0-0.5 ft. Top soil, loam, roots, gray, dry, no H/C odor							
1					0.8-2.7 ft. CALICHE and SAND, white and light brown, no H/C staining and odor							
2	CB	2.7		CA/SP								
3												
4												
5						1104144-01	<0.0050	<0.005	<0.005	<0.010	<0.0050	<0.0066
6												
7	CB	4.5			5-10 ft. SAND, light reddish-brown and poorly cemented SANDSTONE, white streaks, very fine grained, no H/C staining and odor							
8												
9												
10				SP/SS		1104144-02	<0.005	<0.005	<0.005	<0.010	<0.0050	<0.0066
11												
12												
13	CB	2.2			10-15 ft. SAND, light reddish-brown and poorly cemented SANDSTONE, white streaks, very fine grained, no H/C staining and odor							
14												
15						1104144-03	<0.005	<0.005	<0.005	<0.010	<0.0050	<0.0066
16												
17												
18												
19												
20												

Notes:

Boring backfilled with 7 bags bentonite, hydrated.
Other semi-volatiles detected; see accompanying table
H/C - Petroleum hydrocarbons

Z:\Company Files\Navajo\2011 Cleanup\NAV-11-002 Wastewater tank overflow 2010 (firehouse ponding)\BH-1 NW firehouse.bor



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-2

(Page 1 of 1)

Wastewater Tank Overflow Ponding Investigation
Navajo Refining Company, Lea Refinery
Section 36, T16S, R36E
Lea County, New Mexico
N32° 52' 41.81", W103° 18' 4.89"

Date, Time Started : 04/04/11, 1130
Date, Time Complete : 04/04/11, 1215
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-57

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : David Boyer
Company Rep. :

Depth in Feet	Sample Type	Recovery (ft.)	USCS	GRAPHIC	Sample Type SS Split Spoon (18" or 24") CB Core Barrel (2.5' or 5') CT Auger Cuttings NR No recovery	DESCRIPTION	Lab No.	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	Naphthalene 8260 (mg/Kg)	Total Naphthalene 8270 (mg/Kg)
0													
1													
2	CB	3.3			0-5 ft. SILTY CLAY, gray-black, dry, soft, plastic, no H/C odor (possible old pit?)								
3							1104144-04	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
4													
5													
6													
7	CB	1.3	CL		5-10 ft. SANDY CLAY, mottled light dark brown and some gray, no H/C odor								
8													
9													
10							1104144-05	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
11					10-12 ft. SILTY CLAYEY SAND, reddish-brown, no H/C staining and odor								
12													
13	CB	5	SM/SC		12-15 ft. SAND with poorly cemented SANDSTONE, mottled light brown to grayish white, very fine grained, no H/C staining and odor								
14							1104144-06	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066
15													
16													
17													
18	CB	1	SP/SS		15-20 ft. SAND with poorly cemented SANDSTONE, mottled color, very fine grained, no H/C staining and odor								
19													
20							1104144-07	<0.0050	<0.0050	<0.015	<0.010	<0.0050	<0.0066

Notes:

Boring backfilled with 11 bags bentonite, hydrated.
Other semi-volatiles detected; see accompanying table
H/C - Petroleum hydrocarbons

Z:\Company Files\Navajo\2011 Cleanup\NAV-11-002 Wastewater tank overflow 2010 (firehouse ponding)\BH-2 NW firehouse bor



08-Apr-2011

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (575) 746-5281
Fax: (505) 746-5421

Re: WW Ponding Firehouse Area

Work Order: **1104144**

Dear Darrell,

ALS Environmental received 8 samples on 06-Apr-2011 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 60.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Glenda H. Ramos

JayLynn F Thibault
Project Manager



Certificate No: T104704231-09A-TX

ADDRESS: 6440 Glenridge Drive, Suite 200, Houston, Texas 77066-1738 | PHONE (281) 530-1256 | FAX (281) 530-6667

ALS GROUP USA, LLC is part of the ALS Laboratory Group, a Campbell Brothers Limited Company

www.alsglobal.com

RIGHT SOLUTIONS. RIGHT PEOPLE. RIGHT TIME.

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Work Order: 1104144

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1104144-01	BH-1 5'	Soil		4/4/2011 10:50	4/6/2011	☐
1104144-02	BH-1 10'	Soil		4/4/2011 11:05	4/6/2011	☐
1104144-03	BH-1 15'	Soil		4/4/2011 11:15	4/6/2011	☐
1104144-04	BH-2 5'	Soil		4/4/2011 11:35	4/6/2011	☐
1104144-05	BH-2 10'	Soil		4/4/2011 11:40	4/6/2011	☐
1104144-06	BH-2 15'	Soil		4/4/2011 11:45	4/6/2011	☐
1104144-07	BH-2 20'	Soil		4/4/2011 11:55	4/6/2011	☐
1104144-08	Trip Blank 012111-58	Trip Blank		4/4/2011 11:55	4/6/2011	☐

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-1 5'
 Collection Date: 4/4/2011 10:50 AM

Work Order: 1104144
 Lab ID: 1104144-01
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/6/2011 08:48 PM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/6/2011 08:48 PM
Acenaphthene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Acetophenone	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Anthracene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Atrazine	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Bis(2-ethylhexyl)phthalate	0.0080		0.0066	mg/Kg	1	4/6/2011 08:48 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 5'
Collection Date: 4/4/2011 10:50 AM

Work Order: 1104144
Lab ID: 1104144-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Caprolactam	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Carbazole	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Chrysene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Fluorene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Isophorone	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Naphthalene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Phenanthrene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Phenol	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Pyrene	ND		0.0066	mg/Kg	1	4/6/2011 08:48 PM
Surr: 2,4,6-Tribromophenol	57.0		36-126	%REC	1	4/6/2011 08:48 PM
Surr: 2-Fluorobiphenyl	70.8		43-125	%REC	1	4/6/2011 08:48 PM
Surr: 2-Fluorophenol	61.9		37-125	%REC	1	4/6/2011 08:48 PM
Surr: 4-Terphenyl-d14	69.9		32-125	%REC	1	4/6/2011 08:48 PM
Surr: Nitrobenzene-d5	70.2		37-125	%REC	1	4/6/2011 08:48 PM
Surr: Phenol-d6	57.5		40-125	%REC	1	4/6/2011 08:48 PM

VOLATILES**SW8260**

Analyst: WLR

1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-1 5'
 Collection Date: 4/4/2011 10:50 AM

Work Order: 1104144
 Lab ID: 1104144-01
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 02:06 PM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 02:06 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:06 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 02:06 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 02:06 PM
Surr: 1,2-Dichloroethane-d4	97.8		70-128	%REC	1	4/7/2011 02:06 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 5'
Collection Date: 4/4/2011 10:50 AM

Work Order: 1104144
Lab ID: 1104144-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	97.5		73-126	%REC	1	4/7/2011 02:06 PM
Surr: Dibromofluoromethane	94.8		71-128	%REC	1	4/7/2011 02:06 PM
Surr: Toluene-d8	106		73-127	%REC	1	4/7/2011 02:06 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-1 10'
 Collection Date: 4/4/2011 11:05 AM

Work Order: 1104144
 Lab ID: 1104144-02
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/6/2011 11:33 PM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/6/2011 11:33 PM
Acenaphthene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Acetophenone	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Anthracene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Atrazine	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Bis(2-ethylhexyl)phthalate	0.0094		0.0066	mg/Kg	1	4/6/2011 11:33 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 10'
Collection Date: 4/4/2011 11:05 AM

Work Order: 1104144
Lab ID: 1104144-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Caprolactam	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Carbazole	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Chrysene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Fluorene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Isophorone	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Naphthalene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Phenanthrene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Phenol	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Pyrene	ND		0.0066	mg/Kg	1	4/6/2011 11:33 PM
Surr: 2,4,6-Tribromophenol	59.6		36-126	%REC	1	4/6/2011 11:33 PM
Surr: 2-Fluorobiphenyl	65.8		43-125	%REC	1	4/6/2011 11:33 PM
Surr: 2-Fluorophenol	65.1		37-125	%REC	1	4/6/2011 11:33 PM
Surr: 4-Terphenyl-d14	71.3		32-125	%REC	1	4/6/2011 11:33 PM
Surr: Nitrobenzene-d5	65.5		37-125	%REC	1	4/6/2011 11:33 PM
Surr: Phenol-d6	67.5		40-125	%REC	1	4/6/2011 11:33 PM
VOLATILES			SW8260	Analyst: WLR		
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 10'
Collection Date: 4/4/2011 11:05 AM

Work Order: 1104144
Lab ID: 1104144-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 02:30 PM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 02:30 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:30 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 02:30 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 02:30 PM
Surr: 1,2-Dichloroethane-d4	99.2		70-128	%REC	1	4/7/2011 02:30 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 10'
Collection Date: 4/4/2011 11:05 AM

Work Order: 1104144
Lab ID: 1104144-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.1		73-126	%REC	1	4/7/2011 02:30 PM
Surr: Dibromofluoromethane	97.7		71-128	%REC	1	4/7/2011 02:30 PM
Surr: Toluene-d8	93.2		73-127	%REC	1	4/7/2011 02:30 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 15'
Collection Date: 4/4/2011 11:15 AM

Work Order: 1104144
Lab ID: 1104144-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/6/2011 11:53 PM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/6/2011 11:53 PM
Acenaphthene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Acetophenone	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Anthracene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Atrazine	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Benzaldehyde	0.0082		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Bis(2-ethylhexyl)phthalate	0.0091		0.0066	mg/Kg	1	4/6/2011 11:53 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 15'
Collection Date: 4/4/2011 11:15 AM

Work Order: 1104144
Lab ID: 1104144-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Caprolactam	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Carbazole	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Chrysene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Fluoranthene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Fluorene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Isophorone	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Naphthalene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Phenanthrene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Phenol	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Pyrene	ND		0.0066	mg/Kg	1	4/6/2011 11:53 PM
Surr: 2,4,6-Tribromophenol	47.6		36-126	%REC	1	4/6/2011 11:53 PM
Surr: 2-Fluorobiphenyl	47.0		43-125	%REC	1	4/6/2011 11:53 PM
Surr: 2-Fluorophenol	45.5		37-125	%REC	1	4/6/2011 11:53 PM
Surr: 4-Terphenyl-d14	62.0		32-125	%REC	1	4/6/2011 11:53 PM
Surr: Nitrobenzene-d5	47.4		37-125	%REC	1	4/6/2011 11:53 PM
Surr: Phenol-d6	47.9		40-125	%REC	1	4/6/2011 11:53 PM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 15'
Collection Date: 4/4/2011 11:15 AM

Work Order: 1104144
Lab ID: 1104144-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 02:53 PM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 02:53 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 02:53 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 02:53 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 02:53 PM
Surr: 1,2-Dichloroethane-d4	101		70-128	%REC	1	4/7/2011 02:53 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-1 15'
Collection Date: 4/4/2011 11:15 AM

Work Order: 1104144
Lab ID: 1104144-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	86.7		73-126	%REC	1	4/7/2011 02:53 PM
Surr: Dibromofluoromethane	95.5		71-128	%REC	1	4/7/2011 02:53 PM
Surr: Toluene-d8	85.9		73-127	%REC	1	4/7/2011 02:53 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-2 5'
 Collection Date: 4/4/2011 11:35 AM

Work Order: 1104144
 Lab ID: 1104144-04
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 12:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 12:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Bis(2-ethylhexyl)phthalate	0.0087		0.0066	mg/Kg	1	4/7/2011 12:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 5'
Collection Date: 4/4/2011 11:35 AM

Work Order: 1104144
Lab ID: 1104144-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:13 AM
Surr: 2,4,6-Tribromophenol	58.3		36-126	%REC	1	4/7/2011 12:13 AM
Surr: 2-Fluorobiphenyl	60.9		43-125	%REC	1	4/7/2011 12:13 AM
Surr: 2-Fluorophenol	59.8		37-125	%REC	1	4/7/2011 12:13 AM
Surr: 4-Terphenyl-d14	65.7		32-125	%REC	1	4/7/2011 12:13 AM
Surr: Nitrobenzene-d5	57.0		37-125	%REC	1	4/7/2011 12:13 AM
Surr: Phenol-d6	61.0		40-125	%REC	1	4/7/2011 12:13 AM

VOLATILES

SW8260

Analyst: WLR

1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-2 5'
 Collection Date: 4/4/2011 11:35 AM

Work Order: 1104144
 Lab ID: 1104144-04
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 12:09 PM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 12:09 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 12:09 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 12:09 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 12:09 PM
Surr: 1,2-Dichloroethane-d4	106		70-128	%REC	1	4/7/2011 12:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental**Date:** 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 5'
Collection Date: 4/4/2011 11:35 AM

Work Order: 1104144
Lab ID: 1104144-04
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	106		73-126	%REC	1	4/7/2011 12:09 PM
Surr: Dibromofluoromethane	102		71-128	%REC	1	4/7/2011 12:09 PM
Surr: Toluene-d8	108		73-127	%REC	1	4/7/2011 12:09 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-2 10'
 Collection Date: 4/4/2011 11:40 AM

Work Order: 1104144
 Lab ID: 1104144-05
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 12:33 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 12:33 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 10'
Collection Date: 4/4/2011 11:40 AM

Work Order: 1104144
Lab ID: 1104144-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Fluoranthene	0.0085		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:33 AM
Surr: 2,4,6-Tribromophenol	56.3		36-126	%REC	1	4/7/2011 12:33 AM
Surr: 2-Fluorobiphenyl	59.3		43-125	%REC	1	4/7/2011 12:33 AM
Surr: 2-Fluorophenol	60.6		37-125	%REC	1	4/7/2011 12:33 AM
Surr: 4-Terphenyl-d14	68.4		32-125	%REC	1	4/7/2011 12:33 AM
Surr: Nitrobenzene-d5	58.3		37-125	%REC	1	4/7/2011 12:33 AM
Surr: Phenol-d6	63.5		40-125	%REC	1	4/7/2011 12:33 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-2 10'
 Collection Date: 4/4/2011 11:40 AM

Work Order: 1104144
 Lab ID: 1104144-05
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 03:17 PM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 03:17 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:17 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 03:17 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 03:17 PM
Surr: 1,2-Dichloroethane-d4	100		70-128	%REC	1	4/7/2011 03:17 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 10'
Collection Date: 4/4/2011 11:40 AM

Work Order: 1104144
Lab ID: 1104144-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	99.2		73-126	%REC	1	4/7/2011 03:17 PM
Surr: Dibromofluoromethane	96.7		71-128	%REC	1	4/7/2011 03:17 PM
Surr: Toluene-d8	99.5		73-127	%REC	1	4/7/2011 03:17 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 15'
Collection Date: 4/4/2011 11:45 AM

Work Order: 1104144
Lab ID: 1104144-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 12:53 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 12:53 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Benzaldehyde	0.011		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 15'
Collection Date: 4/4/2011 11:45 AM

Work Order: 1104144
Lab ID: 1104144-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 12:53 AM
Surr: 2,4,6-Tribromophenol	54.8		36-126	%REC	1	4/7/2011 12:53 AM
Surr: 2-Fluorobiphenyl	56.5		43-125	%REC	1	4/7/2011 12:53 AM
Surr: 2-Fluorophenol	52.3		37-125	%REC	1	4/7/2011 12:53 AM
Surr: 4-Terphenyl-d14	66.5		32-125	%REC	1	4/7/2011 12:53 AM
Surr: Nitrobenzene-d5	55.4		37-125	%REC	1	4/7/2011 12:53 AM
Surr: Phenol-d6	58.6		40-125	%REC	1	4/7/2011 12:53 AM
VOLATILES			SW8260		Analyst: WLR	
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
 Project: WW Ponding Firehouse Area
 Sample ID: BH-2 15'
 Collection Date: 4/4/2011 11:45 AM

Work Order: 1104144
 Lab ID: 1104144-06
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 03:40 PM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 03:40 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 03:40 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 03:40 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 03:40 PM
Surr: 1,2-Dichloroethane-d4	95.0		70-128	%REC	1	4/7/2011 03:40 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 15'
Collection Date: 4/4/2011 11:45 AM

Work Order: 1104144
Lab ID: 1104144-06
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	98.9		73-126	%REC	1	4/7/2011 03:40 PM
Surr: Dibromofluoromethane	93.2		71-128	%REC	1	4/7/2011 03:40 PM
Surr: Toluene-d8	99.9		73-127	%REC	1	4/7/2011 03:40 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 20'
Collection Date: 4/4/2011 11:55 AM

Work Order: 1104144
Lab ID: 1104144-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL SEMIVOLATILES			SW8270		Prep Date: 4/6/2011	Analyst: KMB
1,1'-Biphenyl	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2,4,5-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2,4,6-Trichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2,4-Dichlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2,4-Dimethylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2,4-Dinitrophenol	ND		0.033	mg/Kg	1	4/7/2011 01:13 AM
2,4-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2,6-Dinitrotoluene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2-Chloronaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2-Chlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2-Methylnaphthalene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
2-Nitrophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
3&4-Methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
3,3'-Dichlorobenzidine	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
3-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
4,6-Dinitro-2-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
4-Bromophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
4-Chloro-3-methylphenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
4-Chloroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
4-Chlorophenyl phenyl ether	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
4-Nitroaniline	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
4-Nitrophenol	ND		0.033	mg/Kg	1	4/7/2011 01:13 AM
Acenaphthene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Acenaphthylene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Acetophenone	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Atrazine	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Benz(a)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Benzaldehyde	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Benzo(a)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Benzo(b)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Benzo(g,h,i)perylene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Benzo(k)fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Bis(2-chloroethoxy)methane	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Bis(2-chloroethyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Bis(2-chloroisopropyl)ether	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Bis(2-ethylhexyl)phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 20'
Collection Date: 4/4/2011 11:55 AM

Work Order: 1104144
Lab ID: 1104144-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Butyl benzyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Caprolactam	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Carbazole	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Chrysene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Di-n-butyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Di-n-octyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Dibenz(a,h)anthracene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Dibenzofuran	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Diethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Dimethyl phthalate	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Fluoranthene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Fluorene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Hexachlorobenzene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Hexachlorobutadiene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Hexachlorocyclopentadiene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Hexachloroethane	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Indeno(1,2,3-cd)pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Isophorone	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
N-Nitrosodi-n-propylamine	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
N-Nitrosodiphenylamine	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Naphthalene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Nitrobenzene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Pentachlorophenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Phenanthrene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Phenol	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Pyrene	ND		0.0066	mg/Kg	1	4/7/2011 01:13 AM
Surr: 2,4,6-Tribromophenol	48.7		36-126	%REC	1	4/7/2011 01:13 AM
Surr: 2-Fluorobiphenyl	55.2		43-125	%REC	1	4/7/2011 01:13 AM
Surr: 2-Fluorophenol	60.8		37-125	%REC	1	4/7/2011 01:13 AM
Surr: 4-Terphenyl-d14	62.1		32-125	%REC	1	4/7/2011 01:13 AM
Surr: Nitrobenzene-d5	55.5		37-125	%REC	1	4/7/2011 01:13 AM
Surr: Phenol-d6	55.1		40-125	%REC	1	4/7/2011 01:13 AM
VOLATILES			SW8260			Analyst: WLR
1,1,1-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,1,2-Trichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,1-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,1-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,2-Dibromoethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 20'
Collection Date: 4/4/2011 11:55 AM

Work Order: 1104144
Lab ID: 1104144-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,2-Dichloropropane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
2-Butanone	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
2-Hexanone	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
4-Isopropyltoluene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
4-Methyl-2-pentanone	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
Acetone	ND		0.020	mg/Kg	1	4/7/2011 04:04 PM
Benzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Bromodichloromethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Bromoform	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Bromomethane	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
Carbon disulfide	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
Carbon tetrachloride	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Chlorobenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Chloroethane	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
Chloroform	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Chloromethane	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Dibromochloromethane	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Ethylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Isopropylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
m,p-Xylene	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Methylene chloride	ND		0.010	mg/Kg	1	4/7/2011 04:04 PM
n-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
n-Propylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Naphthalene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
o-Xylene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
sec-Butylbenzene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Styrene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Tetrachloroethene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Toluene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Trichloroethene	ND		0.0050	mg/Kg	1	4/7/2011 04:04 PM
Vinyl chloride	ND		0.0020	mg/Kg	1	4/7/2011 04:04 PM
Xylenes, Total	ND		0.015	mg/Kg	1	4/7/2011 04:04 PM
Surr: 1,2-Dichloroethane-d4	99.6		70-128	%REC	1	4/7/2011 04:04 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: BH-2 20'
Collection Date: 4/4/2011 11:55 AM

Work Order: 1104144
Lab ID: 1104144-07
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	109		73-126	%REC	1	4/7/2011 04:04 PM
Surr: Dibromofluoromethane	95.6		71-128	%REC	1	4/7/2011 04:04 PM
Surr: Toluene-d8	99.4		73-127	%REC	1	4/7/2011 04:04 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: Trip Blank 012111-58
Collection Date: 4/4/2011 11:55 AM

Work Order: 1104144
Lab ID: 1104144-08
Matrix: TRIP BLANK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILES			SW8260			Analyst: PC
1,1,1-Trichloroethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,1,2,2-Tetrachloroethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,1,2-Trichloroethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,1-Dichloroethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,1-Dichloroethene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,2,4-Trimethylbenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,2-Dibromoethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,2-Dichloroethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,2-Dichloropropane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
1,3,5-Trimethylbenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
2-Butanone	ND		0.010	mg/L	1	4/6/2011 02:35 PM
2-Hexanone	ND		0.010	mg/L	1	4/6/2011 02:35 PM
4-Isopropyltoluene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
4-Methyl-2-pentanone	ND		0.010	mg/L	1	4/6/2011 02:35 PM
Acetone	ND		0.010	mg/L	1	4/6/2011 02:35 PM
Benzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Bromodichloromethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Bromoform	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Bromomethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Carbon disulfide	ND		0.010	mg/L	1	4/6/2011 02:35 PM
Carbon tetrachloride	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Chlorobenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Chloroethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Chloroform	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Chloromethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
cis-1,2-Dichloroethene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
cis-1,3-Dichloropropene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Dibromochloromethane	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Ethylbenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Isopropylbenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
m,p-Xylene	ND		0.010	mg/L	1	4/6/2011 02:35 PM
Methyl tert-butyl ether	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Methylene chloride	ND		0.010	mg/L	1	4/6/2011 02:35 PM
n-Butylbenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
n-Propylbenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Naphthalene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
o-Xylene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
sec-Butylbenzene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Styrene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
Sample ID: Trip Blank 012111-58
Collection Date: 4/4/2011 11:55 AM

Work Order: 1104144
Lab ID: 1104144-08
Matrix: TRIP BLANK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Tetrachloroethene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Toluene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
trans-1,2-Dichloroethene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
trans-1,3-Dichloropropene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Trichloroethene	ND		0.0050	mg/L	1	4/6/2011 02:35 PM
Vinyl chloride	ND		0.0020	mg/L	1	4/6/2011 02:35 PM
Xylenes, Total	ND		0.015	mg/L	1	4/6/2011 02:35 PM
Surr: 1,2-Dichloroethane-d4	100		70-125	%REC	1	4/6/2011 02:35 PM
Surr: 4-Bromofluorobenzene	91.2		72-125	%REC	1	4/6/2011 02:35 PM
Surr: Dibromofluoromethane	105		71-125	%REC	1	4/6/2011 02:35 PM
Surr: Toluene-d8	113		75-125	%REC	1	4/6/2011 02:35 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 08-Apr-11

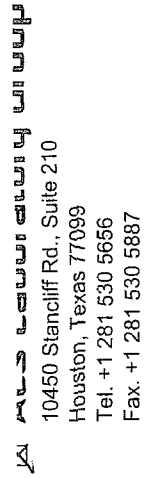
Client: Navajo Refining Company
Project: WW Ponding Firehouse Area
WorkOrder: 1104144

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter



1444

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[illegible]

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TRK 423

35280

NON-HAZARDOUS WASTE MANIFEST

PART I: Generator Navajo Refining Lea Plant
Address 7406 S. Main
City/State Lovington, N.M. 88260

(575) 396-5821
Telephone No.

ORIGINATION OF WASTE:

Operations Center _____

Permit No. NMD360010367

Property Name Lovington
(Well, Tank Battery, Plant, Facility)

WASTE IDENTIFICATION AND AMOUNT (BARRELS, YARDS, TONS, CU.FT., LBS., UNITS, ETC.)

Drilling Fluids _____	Tank Bottoms _____	Exempt Fluids _____
Completion Fluids _____	Gas Plant Waste _____	C117 No. _____
Contaminated Soil _____	Other Materials _____	Pit No. _____

DESCRIPTION / NOTES

Diesel Contaminated Soil - 4 yds

CERTIFICATION:

The waste described above is not hazardous pursuant to 40 CFR Part 261 and was consigned to the transporter named below. I certify that the foregoing is true and correct to the best of my knowledge.

[Signature]
Signature of Generator's Authorized Agent

10-26-10
Date and Time of Shipment

PART II: TRANSPORTER: (To be completed in full by Transporter)

Name Fluid Transport
Address _____
City/State _____

Telephone No. _____

Truck No. _____

CERTIFICATION:

I certify that the waste in quantity above was received by me for shipment to the destination below.

[Signature]
Signature of Transporter's Agent

10-26-10
Date and Time Received

PART III: DISPOSAL OR RECLAMATION SITE:

Name Controlled Recovery, Inc.
Address P.O. Box 388
City/State Hobbs, N.M. 88241-0388

(575) 393-1079
Telephone No.

www.crihobbs.com
E-mail

CERTIFICATION:

I certify that the waste described in Part I was received by me via the transporter described in Part II.

[Signature]
Signature of Facility Agent

10-26-10
Date and Time Received

SUPPLEMENT 3

ALS Laboratory Group

Date: 05-Feb-10

Client: Holly Energy Partners

Project: Lovington Lea Refining-Monthly

Sample ID: City Waste Water

Collection Date: 1/27/2010 08:00 AM

Work Order: 1001612

Lab ID: 1001612-01

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: KKP
Benzene	0.14		0.010	mg/L	10	2/4/2010 06:51 PM
Toluene	0.084		0.0010	mg/L	1	1/30/2010 09:05 PM
Ethylbenzene	0.060		0.0010	mg/L	1	1/30/2010 09:05 PM
Xylenes, Total	0.11		0.0030	mg/L	1	1/30/2010 09:05 PM
Surr: 4-Bromofluorobenzene	103		77-129	%REC	1	1/30/2010 09:05 PM
Surr: 4-Bromofluorobenzene	105		77-129	%REC	10	2/4/2010 06:51 PM
Surr: Trifluorotoluene	113		75-130	%REC	10	2/4/2010 06:51 PM
Surr: Trifluorotoluene	127		75-130	%REC	1	1/30/2010 09:05 PM
ANIONS			E300			Analyst: IGF
Nitrogen, Nitrate (As N)	0.108		0.100	mg/L	1	1/28/2010 12:43 PM
Nitrogen, Nitrite (As N)	2.20		0.100	mg/L	1	1/28/2010 12:43 PM
Surr: Selenate (surr)	95.3		85-115	%REC	1	1/28/2010 12:43 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: RPM
Nitrogen, Ammonia (as N)	14.4		1.25	mg/L	50	2/2/2010 10:00 AM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	ND		2.00	mg/L	1	2/1/2010 04:00 PM
SULFIDE			SM4500 S2-F			Analyst: IGF
Sulfide	ND		1.00	mg/L	1	2/1/2010 04:00 PM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: TDW
Total Dissolved Solids (Residue, Filterable)	2,550		10.0	mg/L	1	1/29/2010 03:30 PM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: RPM
Nitrogen, Total Kjeldahl	15.1		1.00	mg/L	1	2/2/2010 09:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

[illegible]

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

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Date: 01-Mar-10

Client: Holly Energy Partners

Project: Lovington Lea Refining-Monthly

Sample ID: City Waste Water

Collection Date: 2/22/2010 08:00 AM

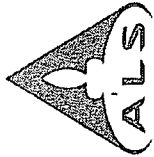
Work Order: 1002640

Lab ID: 1002640-01

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: KKP
Benzene	0.041		0.0050	mg/L	5	2/23/2010 04:35 PM
Toluene	0.014		0.0050	mg/L	5	2/23/2010 04:35 PM
Ethylbenzene	0.034		0.0050	mg/L	5	2/23/2010 04:35 PM
Xylenes, Total	0.070		0.015	mg/L	5	2/23/2010 04:35 PM
Surr: 4-Bromofluorobenzene	112		77-129	%REC	5	2/23/2010 04:35 PM
Surr: Trifluorotoluene	113		75-130	%REC	5	2/23/2010 04:35 PM
ANIONS			E300			Analyst: JBA
Nitrate/Nitrite (as N)	0.683		0.100	mg/L	1	2/23/2010 03:54 PM
Surr: Selenate (surr)	100		85-115	%REC	1	2/23/2010 03:54 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: RPM
Nitrogen, Ammonia (as N)	11.6		1.25	mg/L	50	2/26/2010 08:30 AM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	8.16		2.00	mg/L	1	2/25/2010
SULFIDE			SM4500 S2-F			Analyst: RPM
Sulfide	8.10		1.00	mg/L	1	2/27/2010 11:00 AM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: TDW
Total Dissolved Solids (Residue, Filterable)	2,910		10.0	mg/L	1	2/23/2010 01:00 PM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: RPM
Nitrogen, Total Kjeldahl	14.9		1.00	mg/L	1	2/25/2010 11:00 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Customer Information				Project Information				ALS Project Manager:				ALS Work Order #:			
Project Information				Project Information				Parameter/Method Request for Analysis							
Purchase Order	Project Name	Project Number	Lovington Lea Refining-Monthly	A	B	C	D	E	F	G	H	I	J	Hold	
Work Order	Project Name	Project Number	Lovington Lea Refining-Monthly	A	B	C	D	E	F	G	H	I	J	Hold	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	A	B	C	D	E	F	G	H	I	J	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	A	B	C	D	E	F	G	H	I	J	
Address	501 East Main	Address	501 East Main	E	A	B	C	D	E	F	G	H	I	J	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	F	A	B	C	D	E	F	G	H	I	J	
Phone	(505) 748-3311	Phone	(505) 748-3311	G	A	B	C	D	E	F	G	H	I	J	
Fax	(505) 748-5421	Fax	(505) 748-5421	H	A	B	C	D	E	F	G	H	I	J	
e-Mail Address		e-Mail Address		J	A	B	C	D	E	F	G	H	I	J	
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles									
1	City Waste Water	2-22-10	8:00 W	Y	g										
2															
3															
4															
5															
6															
7															
8															
9															
10															

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
STEVE HENRY	Permitting			☒ Std 10 Wk Days	☐ 5 Wk Days	☐ 2 Wk Days	☐ 24 Hour
Relinquished by:	Date: 2-22-10	Time: 9:00	Received by:	Notes: 10 Day TAT.			
Relinquished by:	Date: 2-22-10	Time: 9:00	Received by:	Notes: 10 Day TAT.			
Logged by (Laboratory):	Date: 2-22-10	Time: 9:00	Checked by (Laboratory):	Notes: 10 Day TAT.			
Preservative Key:	1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₈ 6-NaHSO ₄ 7-Other 8-4°C 9-5035	Cooler ID: 22310 B120			Cooler Temp: 10 Day TAT.		
QC Package: (Check One Box Below)				Level II Std QC ☒ Level III Std QC/Raw Data ☐ Level IV SW046/CLP ☐ Other ☐			

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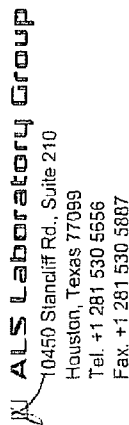
Date: 31-Mar-10

Client: Navajo Refining Company
 Project: Lovington Lea Refining-Monthly
 Sample ID: City Waste Water
 Collection Date: 3/24/2010 08:30 AM

Work Order: 1003617
 Lab ID: 1003617-01
 Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: KKP
Benzene	0.0035		0.0010	mg/L	1	3/27/2010 06:34 PM
Toluene	0.0023		0.0010	mg/L	1	3/27/2010 06:34 PM
Ethylbenzene	0.0077		0.0010	mg/L	1	3/27/2010 06:34 PM
Methyl tert-butyl ether	ND		0.0050	mg/L	1	3/27/2010 06:34 PM
Xylenes, Total	0.019		0.0030	mg/L	1	3/27/2010 06:34 PM
Surr: 4-Bromofluorobenzene	104		77-129	%REC	1	3/27/2010 06:34 PM
Surr: Trifluorotoluene	97.4		75-130	%REC	1	3/27/2010 06:34 PM
ANIONS			E300			Analyst: IGF
Nitrate/Nitrite (as N)	ND		0.100	mg/L	1	3/25/2010 11:45 AM
Surr: Selenate (surr)	104		85-115	%REC	1	3/25/2010 11:45 AM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: RPM
Nitrogen, Ammonia (as N)	8.60		1.25	mg/L	50	3/27/2010 10:00 AM
OIL AND GREASE			E1664			Analyst: JBA
Oil and Grease	7.87		2.00	mg/L	1	3/30/2010 09:00 AM
SULFIDE			SM4500 S2-F			Analyst: IGF
Sulfide	6.20		1.00	mg/L	1	3/29/2010 04:15 PM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: TDW
Total Dissolved Solids (Residue, Filterable)	2,280		10.0	mg/L	1	3/26/2010 04:00 PM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: RPM
Nitrogen, Total Kjeldahl	13.6		1.00	mg/L	1	3/27/2010 10:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Customer Information				Project Information				ALS Project Manager:				ALS Work Order #: 103617			
Customer Information				Project Information				Parameter/Method Request for Analysis							
Purchase Order	Project Name			Project Number			Billing To Company			Invoice Attn			Address		
Work Order	City/State/Zip			Phone			Fax			e-Mail Address					
Company Name	Artesia, NM 88211			(505) 748-3311			(505) 746-5421								
Send Report To	Darrell Moore			501 East Main											
Address	Artesia, NM 88211			(505) 748-3311			(505) 746-5421								
City/State/Zip	Artesia, NM 88211			(505) 748-3311			(505) 746-5421								
Phone	Artesia, NM 88211			(505) 748-3311			(505) 746-5421								
Fax	Artesia, NM 88211			(505) 748-3311			(505) 746-5421								
e-Mail Address	Artesia, NM 88211			(505) 748-3311			(505) 746-5421								
Sample Description				Time				Matrix				Pres. #Bottles			
City Waste Water				3-24-10 8:30				W				4			
1				2				3				4			
2				3				4				5			
3				4				5				6			
4				5				6				7			
5				6				7				8			
6				7				8				9			
7				8				9				10			
8				9				10				11			
9				10				11				12			
10				11				12				13			
11				12				13				14			
12				13				14				15			
13				14				15				16			
14				15				16				17			
15				16				17				18			
16				17				18				19			
17				18				19				20			
18				19				20				21			
19				20				21				22			
20				21				22				23			
21				22				23				24			
22				23				24				25			
23				24				25				26			
24				25				26				27			
25				26				27				28			
26				27				28				29			
27				28				29				30			
28				29				30				31			
29				30				31				32			
30				31				32				33			
31				32				33				34			
32				33				34				35			
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57				58				59				60			
58				59				60				61			
59				60				61				62			
60				61				62				63			
61				62				63				64			

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Date: 29-Apr-10

Client: Navajo Refining Company

Project: Lovington Lea Refining Monthly

Sample ID: City Waste Water

Collection Date: 4/21/2010 09:00 AM

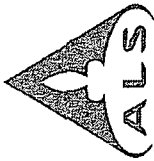
Work Order: 1004559

Lab ID: 1004559-01

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: KKP
Benzene	ND		0.0010	mg/L	1	4/22/2010 08:42 PM
Toluene	0.0010		0.0010	mg/L	1	4/22/2010 08:42 PM
Ethylbenzene	0.0051		0.0010	mg/L	1	4/22/2010 08:42 PM
Xylenes, Total	0.011		0.0030	mg/L	1	4/22/2010 08:42 PM
Surr: 4-Bromofluorobenzene	103		77-129	%REC	1	4/22/2010 08:42 PM
Surr: Trifluorotoluene	101		75-130	%REC	1	4/22/2010 08:42 PM
ANIONS			E300			Analyst: IGF
Nitrogen, Nitrate (As N)	2.78		0.100	mg/L	1	4/22/2010 11:44 AM
Nitrogen, Nitrite (As N)	ND		0.100	mg/L	1	4/22/2010 11:44 AM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: RPM
Nitrogen, Ammonia (as N)	8.65		1.25	mg/L	50	4/26/2010 10:00 AM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	6.79		2.00	mg/L	1	4/27/2010 10:00 AM
SULFIDE			SM4500 S2-F			Analyst: JBA
Sulfide	4.03		1.00	mg/L	1	4/27/2010 05:45 PM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: TDW
Total Dissolved Solids (Residue, Filterable)	2,100		10.0	mg/L	1	4/23/2010 04:00 PM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: RPM
Nitrogen, Total Kjeldahl	11.7		1.00	mg/L	1	4/27/2010 04:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Page 1 of 1

Customer Information				ALS Project Manager:				ALS Work Order #:									
Project Information				Parameter/Method Request for Analysis													
Purchase Order	Project Name	Lovington Lea Refining-Monthly	A	BTEX (8021)													
Work Order	Project Number		B	Anions (300) NO3, NO2													
Company Name	Bill To Company	Navajo Refining Company	C	Ammonia													
Send Report To	Invoice Attn	Darrell Moore	D	TKN													
Address	Address	501 East Main	E	Oil & Grease													
City/State/Zip	City/State/Zip	Artesia, NM 88211	F	TDS													
Phone	Phone	(505) 748-3311	G	Sulfide													
Fax	Fax	(505) 746-5421	H														
e-Mail Address	e-Mail Address		I														
			J														
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold.
1	City Waste Water	4-21-10	9:00	W	Y	8											
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Sampler(s) Please Print & Sign				Shipment Method				Required Turnaround Time: (Check Box)				Results Due Date:					
Steve Terry								Std 10 WK Days				24 Hour					
Relinquished by:				Received by:				Notes:				10 Day TAT.					
Date: 4-21-10				Time: 10:00				Cooler ID: 2149				Cooler Temp:					
Relinquished by:				Checked by (Laboratory):				QC Package: (Check One Box Below)				Level II Std QC					
Date: 4-21-10				Time: 10:00				Cooler ID: 2149				Level III Std QC/Raw Data					
Date: 4-21-10				Time: 10:00				Cooler ID: 2149				Level IV SW846/CLP					
Date: 4-21-10				Time: 10:00				Cooler ID: 2149				Other					
Preservative Key: 1-HCl, 2-HNO3, 3-H2SO4, 4-NaOH, 5-Na2S2O3, 6-NaHSO3, 7-Other				8-4°C, 9-5035													

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ALS Laboratory Group

Date: 04-Jun-10

Client: Navajo Refining Company

Project: Lovington Lea Refining-Monthly

Sample ID: City Waste Water

Collection Date: 5/25/2010 09:00 AM

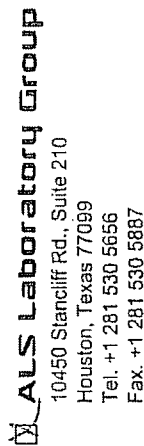
Work Order: 1005829

Lab ID: 1005829-01

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: KKP
Benzene	0.15		0.010	mg/L	10	5/27/2010 01:56 PM
Toluene	0.17		0.010	mg/L	10	5/27/2010 01:56 PM
Ethylbenzene	0.064		0.0010	mg/L	1	5/27/2010 06:26 AM
Xylenes, Total	0.13		0.0030	mg/L	1	5/27/2010 06:26 AM
Surr: 4-Bromofluorobenzene	105		77-129	%REC	1	5/27/2010 06:26 AM
Surr: 4-Bromofluorobenzene	97.6		77-129	%REC	10	5/27/2010 01:56 PM
Surr: Trifluorotoluene	110		75-130	%REC	10	5/27/2010 01:56 PM
Surr: Trifluorotoluene	96.9		75-130	%REC	1	5/27/2010 06:26 AM
ANIONS			E300			Analyst: IGF
Nitrogen, Nitrate (As N)	ND		0.100	mg/L	1	5/26/2010 03:16 PM
Nitrogen, Nitrite (As N)	ND		0.100	mg/L	1	5/26/2010 03:16 PM
Surr: Selenate (surr)	98.0		85-115	%REC	1	5/26/2010 03:16 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: JBA
Nitrogen, Ammonia (as N)	8.37		0.250	mg/L	10	6/4/2010 01:10 PM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	ND		2.00	mg/L	1	6/1/2010 12:00 PM
SULFIDE			SM4500 S2-F			Analyst: JBA
Sulfide	5.40		1.00	mg/L	1	6/1/2010 08:00 AM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: TDW
Total Dissolved Solids (Residue, Filterable)	2,570		10.0	mg/L	1	5/28/2010
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: TDW
Nitrogen, Total Kjeldahl	15.7		1.00	mg/L	1	6/4/2010 04:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



Chain of Custody Form

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Page 1 of 1

Customer Information				Project Information				ALS Project Manager:				ALS Work Order #:					
Customer Information				Project Information				Parameter/Method Request for Analysis									
Purchase Order	Project Name	Lovington Lea Refining-Monthly	A	BTEX (8021)													
Work Order	Project Number		B	Arions (300) NO3, NO2													
Company Name	Bill To Company	Navajo Refining Company	C	Ammonia													
Send Report To	Invoice Attn	Darrell Moore	D	TKN													
Address	Address	501 East Main	E	Oil & Grease													
City/State/Zip	City/State/Zip	Artesia, NM 80211	F	TDS													
Phone	Phone	(505) 748-3311	G	Sulfide													
Fax	Fax	(505) 746-5421	H	Total Metals (see below)													
e-Mail Address	e-Mail Address		I														
			J														
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	City Waste Water	8/25/10	9	W	Y	8											
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: *Steve Terry*

Relinquished by: *Steve Terry*

Relinquished by:

Shipment Method

Time: 9:30 Date: 8/25/10

Time: Date:

Time: Date:

Required Turnaround Time: (Check Box)

☒ Std 10 Wk. Days ☐ 15 Wk. Days ☐ 20 Wk. Days ☐ Other

Notes: 10 Day TAT

QC Package: (Check One Box Below)

☒ Level II Std QC ☐ TRAP Check/Std

☐ Level III Std QC/Raw Data ☐ TRAP Level IV

☐ Level IV SW/34/CLP ☐ Other

Results Due Date:

Results Due Date:

Results Due Date:

Logged by (Laboratory):

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₈ 6-NaHSO₄ 7-Other: 8-4°C 9-5035

Cooler ID

Cooler Temp:

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ALS Laboratory Group

Date: 12-Jul-10

Client: Navajo Refining Company
Project: Lovington Lea Refining-Monthly
Sample ID: City Waste Water
Collection Date: 6/23/2010 08:30 AM

Work Order: 1006785
Lab ID: 1006785-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: KKP
Benzene	0.055		0.0010	mg/L	1	7/1/2010 11:53 AM
Toluene	0.054		0.0010	mg/L	1	7/1/2010 11:53 AM
Ethylbenzene	0.062		0.0010	mg/L	1	7/1/2010 11:53 AM
Methyl tert-butyl ether	ND		0.0050	mg/L	1	7/1/2010 11:53 AM
Xylenes, Total	0.11		0.0030	mg/L	1	7/1/2010 11:53 AM
Surr: 4-Bromofluorobenzene	110		77-129	%REC	1	7/1/2010 11:53 AM
Surr: Trifluorotoluene	84.7		75-130	%REC	1	7/1/2010 11:53 AM
METALS			SW6020			Prep Date: 6/25/2010 Analyst: ALR
Chromium	0.0235		0.0100	mg/L	2	6/26/2010 08:31 AM
ANIONS			E300			Analyst: DM
Nitrate/Nitrite (as N)	ND		1.00	mg/L	10	6/24/2010 05:38 PM
Surr: Selenate (surr)	102		85-115	%REC	10	6/24/2010 05:38 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: JBA
Nitrogen, Ammonia (as N)	4.07		0.125	mg/L	5	7/6/2010
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	6.74		2.00	mg/L	1	6/29/2010
SULFIDE			SM4500 S2-F			Analyst: IAB
Sulfide	9.60		1.00	mg/L	1	6/28/2010 03:00 PM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: JLC
Total Dissolved Solids (Residue, Filterable)	2,580		10.0	mg/L	1	6/24/2010 12:00 PM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: TDW
Nitrogen, Total Kjeldahl	13.4		1.00	mg/L	1	7/7/2010 06:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

[illegible]

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ALS Laboratory Group

Date: 04-Aug-10

Client: Navajo Refining Company

Project: Lovington Lea Refining-Monthly

Work Order: 1007852

Sample ID: City Waste Water

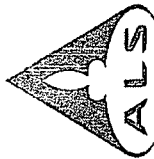
Lab ID: 1007852-01

Collection Date: 7/27/2010 08:30 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: KKP
Benzene	0.031		0.0010	mg/L	1	7/30/2010 11:06 AM
Toluene	0.025		0.0010	mg/L	1	7/30/2010 11:06 AM
Ethylbenzene	0.032		0.0010	mg/L	1	7/30/2010 11:06 AM
Xylenes, Total	0.070		0.0030	mg/L	1	7/30/2010 11:06 AM
Surr: 4-Bromofluorobenzene	110		77-129	%REC	1	7/30/2010 11:06 AM
Surr: Trifluorotoluene	108		75-130	%REC	1	7/30/2010 11:06 AM
ANIONS			E300			Analyst: DM
Nitrogen, Nitrate (As N)	0.205		0.100	mg/L	1	7/28/2010 12:59 PM
Nitrogen, Nitrite (As N)	4.96		0.100	mg/L	1	7/28/2010 12:59 PM
Surr: Selenate (surr)	101		85-115	%REC	1	7/28/2010 12:59 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: IAB
Nitrogen, Ammonia (as N)	9.80		0.625	mg/L	25	7/30/2010 02:00 PM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	3.45		2.00	mg/L	1	8/2/2010
SULFIDE			SM4500 S2-F			Analyst: IAB
Sulfide	1.60		1.00	mg/L	1	8/2/2010 01:30 PM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: JLC
Total Dissolved Solids (Residue, Filterable)	3,030		10.0	mg/L	1	7/28/2010
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: TDW
Nitrogen, Total Kjeldahl	84.6		1.00	mg/L	1	8/3/2010 06:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Page 1 of 1

Customer Information				Project Information				ALS Project Manager: <u>WBSL</u> Parameter/Method Request for Analysis																															
Project Name Levington Lea Refining-Monthly				Project Number A				BTEX (0021)																															
Bill To Company Navajo Refining Company				Invoice Attn Darril Moore				Total Metals (000) <u>000</u>																															
Address 501 East Main				City/State/Zip Artesia, NM 80211				Anions (300) NO3, NO2																															
Phone (505) 748-3311				Phone (505) 748-3311				Aminonia																															
Fax (505) 748-5421				Fax (505) 748-5421				TKN																															
e-Mail Address				e-Mail Address				Oil & Grease																															
Sample Description City Waste Water				Date 7-27-10				Time 8:30				Matrix W				Pres. Y				# Bottles 8				A J															
1				2				3				4				5				6				7				8				9				10			
Sampler(s) Please Print & Sign <u>Steve Terry</u>				Shipment Method <u>Spill Recovery</u>				Required Turnaround Time <u>10 Days</u>				(Check Box)				Results Due Date <u>8/6/10</u>																							
Relinquished by: <u>Steve Terry</u>				Date: 7-27-10				Time: 9:30				Received by Laboratory: <u>[Signature]</u>				Notes: 10 Day TAT				Cooler Temp. <u>50</u>				Cooler ID <u>001</u>				QC Package: (Check One Box Below) ☐ Level II Std. GC ☐ Level III Std. GC/Row Data ☐ Level IV Std. GC/Row Data ☐ Level V Std. GC/Row Data											
Relinquished by:				Date:				Time:				Checked by Laboratory: <u>[Signature]</u>																											
Logged by (Laboratory):				Date:				Time:																															
Preservative Key:				1-HClO ₄ 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₃ 7-Other 8-4°C 9-5035																																			

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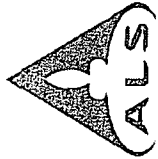
Date: 09-Sep-10

Client: Navajo Refining Company
Project: Lovington Lea Refining - Monthly
Sample ID: City Waste Water
Collection Date: 8/26/2010 08:30 AM

Work Order: 1008871
Lab ID: 1008871-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: IGF
Benzene	0.064		0.0010	mg/L	1	9/3/2010 12:30 PM
Toluene	0.028		0.0010	mg/L	1	9/3/2010 12:30 PM
Ethylbenzene	0.021		0.0010	mg/L	1	9/3/2010 12:30 PM
Methyl tert-butyl ether	ND		0.0050	mg/L	1	9/3/2010 12:30 PM
Xylenes, Total	0.071		0.0030	mg/L	1	9/3/2010 12:30 PM
Surr: 4-Bromofluorobenzene	119		77-129	%REC	1	9/3/2010 12:30 PM
Surr: Trifluorotoluene	122		75-130	%REC	1	9/3/2010 12:30 PM
ANIONS			E300			Analyst: JBA
Nitrate/Nitrite (as N)	ND		1.00	mg/L	10	8/27/2010 09:45 PM
Surr: Selenate (surr)	104		85-115	%REC	10	8/27/2010 09:45 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: IAB
Nitrogen, Ammonia (as N)	6.53		0.250	mg/L	10	9/3/2010 11:00 AM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	8.00		2.00	mg/L	1	9/8/2010 10:00 AM
SULFIDE			SM4500 S2-F			Analyst: IAB
Sulfide	4.80		1.00	mg/L	1	9/1/2010 11:00 AM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: JLC
Total Dissolved Solids (Residue, Filterable)	3,220		10.0	mg/L	1	8/31/2010
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: TDW
Nitrogen, Total Kjeldahl	13.4		2.50	mg/L	1	9/1/2010 10:00 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Page 1 of 1

Customer Information				Project Information				ALS Work Order # <u>0048871</u>											
Project Name				Levington Lea Refining-Monitory				Parameter/Method Request for Analysis											
Project Number																			
Bill To Company				Navajo Refining Company															
Invoice Attn				Darrell Moore															
Address				501 East Main															
City/State/Zip				Artesia NM 88011															
Phone				(505) 740-3311															
Fax				(505) 740-5421															
e-Mail Address																			
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	City Waste Water	8-24-10	8:30	W	Y	8													
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
STEVE TERRY	Gene Terry						
Received by:	Date: 8-24-10	Time: 9:30	Received by (Laboratory):	Date: 8-24-10	Time: 08:42	QC Package: (Check One Box Below)	
Relinquished by:	Date:	Time:	Checked by (Laboratory):	Date:	Time:		
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	Date:	Time:		
Relinquished by:	Date:	Time:	Checked by (Laboratory):	Date:	Time:		
Preservative Key: 1-HCl, 2-HNO ₃ , 3-H ₂ SO ₄ , 4-NaOH, 5-Na ₂ S ₂ O ₃ , 6-NaHSO ₃ , 7-Other, 8-4°C, 9-5035							

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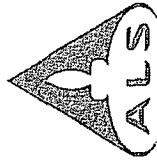
Date: 08-Oct-10

Client: Navajo Refining Company
Project: Lovington Lea Refining - Monthly
Sample ID: City Waste Water
Collection Date: 9/28/2010 08:30 AM

Work Order: 1009938
Lab ID: 1009938-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: IGF
Benzene	0.016		0.0010	mg/L	1	10/6/2010 07:55 PM
Toluene	0.0048		0.0010	mg/L	1	10/6/2010 07:55 PM
Ethylbenzene	0.023		0.0010	mg/L	1	10/6/2010 07:55 PM
Methyl tert-butyl ether	ND		0.0050	mg/L	1	10/6/2010 07:55 PM
Xylenes, Total	0.069		0.0030	mg/L	1	10/6/2010 07:55 PM
Surr: 4-Bromofluorobenzene	123		77-129	%REC	1	10/6/2010 07:55 PM
Surr: Trifluorotoluene	128		75-130	%REC	1	10/6/2010 07:55 PM
ANIONS			E300			Analyst: DM
Nitrogen, Nitrate (As N)	0.311		0.100	mg/L	1	9/29/2010 11:09 PM
Nitrogen, Nitrite (As N)	0.540		0.100	mg/L	1	9/29/2010 11:09 PM
Surr: Selenate (surr)	100		85-115	%REC	1	9/29/2010 11:09 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: IAB
Nitrogen, Ammonia (as N)	6.14		0.250	mg/L	10	10/6/2010 11:00 AM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	24.4		2.00	mg/L	1	10/7/2010 11:00 AM
SULFIDE			SM4500 S2-F			Analyst: IAB
Sulfide	14.4		1.00	mg/L	1	10/4/2010 11:00 AM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: JLC
Total Dissolved Solids (Residue, Filterable)	2,600		10.0	mg/L	1	10/4/2010 09:00 AM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: TDW
Nitrogen, Total Kjeldahl	24.0		2.50	mg/L	1	10/6/2010 04:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Customer Information				Project Information				ALS Project Manager: <u>WAS</u>				ALS Work Order #: <u>10356</u>					
Purchase Order	Project Name	Lovington Lea Refining-Monthly	A	BTEX (8021)	Parameter/Method Request for Analysis												
Work Order	Project Number		B	-Total Metals (80207000) Select													
Company Name	Bill To Company	Navajo Refining Company	C	Anions (300) NO3, NO2													
Send Report To	Invoice Attn	Darrell Moore	D	Ammonia													
Address	Address	501 East Main	E	TKN													
City/State/Zip	City/State/Zip	Artesia, NM 88211	F	Oil & Grease													
Phone	Phone	(505) 748-3311	G	TDS													
Fax	Fax	(505) 748-5421	H	Sulfide													
e-Mail Address	e-Mail Address		I														
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	City Water	9/28/10	8:30	W	Y	8											
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Sampler(s) Please Print & Sign: <u>Steve Terry</u>				Shipment Method				Required Turnaround Time: (Check Box)				Results Due Date:					
Relinquished by: <u>Steve Terry</u>				Time: <u>9:00</u>				Other				24 Hour					
Relinquished by: <u>R.N.P.</u>				Time: <u>0900</u>				5 Wk Days				10 Day TAT.					
Logged by (Laboratory):				Received by (Laboratory):				Notes:				QC Package: (Check One Box Below)					
Date: <u>9/28/10</u>				Time: <u>0900</u>				Cooler ID:				Cooler Temp.					
Date: <u>9/28/10</u>				Time: <u>0900</u>				Checked by (Laboratory):				Level II Std QC					
Date: <u>9/28/10</u>				Time: <u>0900</u>				6-NaOH				Level III Std QC/Raw Data					
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O8 6-NaHSO3 7-Other				8-4°C 9-5035				10 Day TAT.				Level IV SW846/CLP					
												Other / EDD					

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Date: 09-Nov-10

Client: Navajo Refining Company

Project: Lovington Lea refining-Monthly

Sample ID: City Waste Water

Collection Date: 10/27/2010 01:20 PM

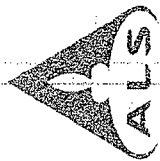
Work Order: 10101014

Lab ID: 10101014-01

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: IGF
Benzene	0.0026		0.0010	mg/L	1	11/5/2010 03:42 PM
Toluene	0.0012		0.0010	mg/L	1	11/5/2010 03:42 PM
Ethylbenzene	0.0098		0.0010	mg/L	1	11/5/2010 03:42 PM
Methyl tert-butyl ether	ND		0.0050	mg/L	1	11/5/2010 03:42 PM
Xylenes, Total	0.033		0.0030	mg/L	1	11/5/2010 03:42 PM
Surr: 4-Bromofluorobenzene	111		77-129	%REC	1	11/5/2010 03:42 PM
Surr: Trifluorotoluene	115		75-130	%REC	1	11/5/2010 03:42 PM
ANIONS			E300			Analyst: DM
Nitrate/Nitrite (as N)	ND		0.100	mg/L	1	10/28/2010 07:02 PM
Surr: Selenate (surr)	90.3		85-115	%REC	1	10/28/2010 07:02 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: IAB
Nitrogen, Ammonia (as N)	1.96		0.0500	mg/L	2	11/5/2010 03:00 PM
OIL AND GREASE			E1664			Analyst: JLC
Oil and Grease	ND		2.00	mg/L	1	11/8/2010 02:00 PM
SULFIDE			SM4500 S2-F			Analyst: IAB
Sulfide	6.00		1.00	mg/L	1	11/2/2010 04:00 PM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: JLC
Total Dissolved Solids (Residue, Filterable)	2,700		10.0	mg/L	1	10/29/2010 03:00 PM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: TDW
Nitrogen, Total Kjeldahl	17.0		1.00	mg/L	1	11/1/2010 01:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.



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Page 1 of 1

Customer Information				Project Information				ALS Project Manager:				ALS Work Order #:					
Project Name				Lovington Lea Refining-Monthly				Parameter/Method Request for Analysis				1010104					
Project Number								ETEX (8021)									
Bill To Company				Navajo Refining Company				Antonia (300) NO3, NO2									
Invoice Attn				Darrell Moore				Antonia									
Address				501 East Main				TKN									
City/State/Zip				Artesia, NM 88211				TDS									
Phone				(505) 748-3311				Sulfide									
Fax				(505) 748-5421													
e-Mail Address																	
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	City Waste Water	10-27-2010	1:20pm	W	Y	8	✓										
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sample(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
Rein Cracked	Rein Cracked			☒ Std 10 Wk Days	☐ 5 Wk Days	☐ 2 Wk Days	☐ 1 Wk Days
Relinquished by:	Rein Cracked	Date:	Time:	Notes:		10 Day TAT	
Relinquished by:	Rein Cracked	Date:	Time:	Received by (Laboratory):		Cooler Temp.	
Relinquished by:	Rein Cracked	Date:	Time:	Checked by (Laboratory):		Cooler ID	
Preservative Key:	1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O8 6-NaHSO4 7-Other	8-4°C 9-5035		QC Package: (Check One Box Below)		Level II Std QC ☐ Level III Std QC/Raw Data ☐ Level IV SWH46/CLP ☐ Other/EDD ☐	

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ALS Environmental

Date: 10-Dec-10

Client: Navajo Refining Company
 Project: Lovington Lea Refining-Monthly
 Sample ID: City Waste Water
 Collection Date: 11/23/2010 10:00 AM

Work Order: 1011887
 Lab ID: 1011887-01
 Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX			SW8021B			Analyst: IGF
Benzene	0.012		0.0010	mg/L	1	12/2/2010 06:20 PM
Toluene	0.0063		0.0010	mg/L	1	12/2/2010 06:20 PM
Ethylbenzene	0.021		0.0010	mg/L	1	12/2/2010 06:20 PM
Xylenes, Total	0.052		0.0030	mg/L	1	12/2/2010 06:20 PM
Surr: 4-Bromofluorobenzene	111		77-129	%REC	1	12/2/2010 06:20 PM
Surr: Trifluorotoluene	112		75-130	%REC	1	12/2/2010 06:20 PM
ANIONS			E300			Analyst: DM
Nitrogen, Nitrate (As N)	0.193		0.100	mg/L	1	11/24/2010 05:42 PM
Nitrogen, Nitrite (As N)	0.261		0.100	mg/L	1	11/24/2010 05:42 PM
Surr: Selenate (surr)	101		85-115	%REC	1	11/24/2010 05:42 PM
AMMONIA AS N			SM4500 NH3-B-F			Analyst: IAB
Nitrogen, Ammonia (as N)	0.964		0.0250	mg/L	1	12/1/2010 11:00 AM
OIL AND GREASE			E1664			Analyst: JBA
Oil and Grease	5.64		2.00	mg/L	1	12/8/2010 02:00 PM
SULFIDE			SM4500 S2-F			Analyst: IAB
Sulfide	2.00		1.00	mg/L	1	11/30/2010 09:30 AM
TOTAL DISSOLVED SOLIDS			M2540C			Analyst: JLC
Total Dissolved Solids (Residue, Filterable)	3,300		10.0	mg/L	1	11/24/2010 10:00 AM
TOTAL KJELDAHL L NITROGEN			M4500 NH3 D			Analyst: TDW
Nitrogen, Total Kjeldahl	18.6		1.00	mg/L	1	12/1/2010 01:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Customer Information				Project Information				ALS Project Manager:				ALS Work Order #:					
Purchase Order	Work Order	Company Name	Send Report To	Project Name	Project Number	Bill To Company	Invoice Attn	Lovington Lea Refining-Monthly	A	BTEX (8021)	Parameter/Method Request for Analysis						
		Navajo Refining Company							B	Total Metals (See Act)							
		Darrell Moore						Navajo Refining Company	C	Anions (300) NO3, NO2							
		501 East Main						Darrell Moore	D	Ammonia							
		Address						501 East Main	E	TKM							
		City/State/Zip							F	Oil & Grease							
		Phone						Artesia, NM 88211	G	TDS							
		Fax						(505) 748-3311	H	Sulfide							
		e-Mail Address						(505) 746-5421	I								
									J								
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	City Waste Water	11-23-10	10:00	W	Y	8											
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Steve Terry

Relinquished by: Steve Terry

Relinquished by: Steve Terry

Date: 11/23/10

Date: 10:15

Date: 11/23/10

Date: 10:15

Time: 10:15

Time: 10:15

Time: 10:15

Time: 10:15

Shipment Method

Received by (Laboratory): MMW

Checked by (Laboratory): MMW

Received by: Steve Terry

Required Turnaround Time: (Check Box)

☒ Std: 10 Wk Days

☐ Other: 2 Wk Days

☐ 24 Hour

Notes: 10 Day TAT

QC Package: (Check One Box Below)

☒ Level II Std QC

☐ Level III Std QC/RHW Data

☐ Level IV SW346/CLP

☐ Other / EDD

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NAOH 5-Na2S2O3 6-NAHSO3 7-Other 8-4°C 9-5035

TRRP Checklist

☐ TRRP Level IV

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