

GW - 014

C-141s

Chavez, Carl J, EMNRD

From: Combs, Robert [Robert.Combs@hollyfrontier.com]
Sent: Wednesday, February 08, 2012 5:36 PM
To: Chavez, Carl J, EMNRD
Subject: RE: T-401/T-1215 Spill Cleanup

Carl,
Thanks so much for your help with this. I will start sending you our documentation ASAP so we can work to close these incidents.
Thanks again,
Robert

Robert Combs

Environmental Specialist
The HollyFrontier Companies
P.O. Box 159
Artesia, NM 88211-0159
office: 575-746-5382
cell: 575-308-2718
fax: 575-746-5451
Robert.Combs@hollyfrontier.com

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From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Wednesday, February 08, 2012 9:41 AM
To: Combs, Robert
Subject: RE: T-401/T-1215 Spill Cleanup

Robert:

You should have the OCD's path forward on the releases.

Only the OCD is involved with the Lea Refinery (Tk-1215), while the NMED should be involved with the OCD on the Artesia Refinery (Tk-401) release.

Please contact me to discuss. Thank you.

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: Combs, Robert [mailto:Robert.Combs@hollyfrontier.com]
Sent: Friday, February 03, 2012 3:05 PM
To: Chavez, Carl J, EMNRD
Subject: RE: T-401/T-1215 Spill Cleanup

Carl,
Thanks for the feedback; I look forward to your response.
Thanks,
Robert

Robert Combs

Environmental Specialist
The HollyFrontier Companies
P.O. Box 159
Artesia, NM 88211-0159
office: 575-746-5382
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From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Friday, February 03, 2012 12:24 PM
To: Combs, Robert
Cc: Lackey, Johnny
Subject: RE: T-401/T-1215 Spill Cleanup

Robert:

I'm trying to get to this after returning to the office from sick leave. I will follow-up with you next week on Tuesday and/or Wednesday.

Thank you.

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

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From: Combs, Robert [<mailto:Robert.Combs@hollyfrontier.com>]
Sent: Wednesday, February 01, 2012 5:21 PM
To: Chavez, Carl J, EMNRD
Cc: Lackey, Johnny
Subject: RE: T-401/T-1215 Spill Cleanup

Carl,

Have you had a chance to look for any communications with Darrell regarding clean-up activities around these tanks? We are nearing the end of the maintenance activities and I would like to make sure that we have followed your recommendations.

Thanks,

Robert

Robert Combs

Environmental Specialist
The HollyFrontier Companies
P.O. Box 159
Artesia, NM 88211-0159
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From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Tuesday, January 24, 2012 9:51 AM
To: Combs, Robert
Cc: Lackey, Johnny
Subject: RE: T-401/T-1215 Spill Cleanup

Robert:

Good morning. The releases are filed on OCD Online for the refineries (see below):

Lea Refinery (GW-014):
[C-141 Files](#)

Artesia Refinery (GW-028):
[C-141 Files](#)

I will follow-up by forwarding e-mails that I have in my mail folder for the above spills. Thank you.

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
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From: Combs, Robert [<mailto:Robert.Combs@hollyfrontier.com>]
Sent: Monday, January 23, 2012 4:54 PM
To: Chavez, Carl J, EMNRD
Cc: Lackey, Johnny
Subject: T-401/T-1215 Spill Cleanup

Carl,

As I'm sure you've seen Johnny's previous message about Darrell, his absence leaves several details for us to sort out. Would you mind helping me get up to speed on the cleanup requirements for the T-401 (Artesia) and T-1215 (Lovington) spills?

If you don't mind, I will probably be coming to you with questions as they arise.

Thanks,
Robert

Robert Combs

Environmental Specialist
The HollyFrontier Companies
P.O. Box 159
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office: 575-746-5382
cell: 575-308-2718
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Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, January 04, 2012 7:48 AM
To: 'Moore, Darrell'
Cc: Lackey, Johnny; Welch, Bill; Crockett, Kevin; Lunsford, Chuck; VonGonten, Glenn, EMNRD; Gonzales, Elidio L, EMNRD
Subject: RE: TK 1215 Spill (Crude Bottoms (Asphalt/Vacuum Gas Oil))

Darrell:

Good morning. So, there is no second floor. I've copied EL Gonzales in case they have a staff person in the area today that can stop by.

I think we need to bore down as deep as possible. Also, the tank should be retrofitted with a double bottom w/ leak detection in accordance with the OCD permit. Or, the tank can be lifted and an acceptable liner material may be placed underneath and keyed into the berm w/ tank set on top. Thanks.

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

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From: Moore, Darrell [<mailto:Darrell.Moore@hollyfrontier.com>]
Sent: Tuesday, January 03, 2012 10:37 AM
To: Chavez, Carl J, EMNRD
Cc: Lackey, Johnny; Welch, Bill; Crockett, Kevin; Lunsford, Chuck
Subject: RE: TK 1215 Spill

Carl

After getting inside Tk 1215 at Lovington, it has been determined that the tank DOES NOT have a second floor. We have water cut coupons into the floor in the areas where holing was discovered. We plan to go inside the tank and dig in the area these coupons have been removed to sample the ground beneath the tank. We propose to do this sampling beneath the tank tomorrow January 4, 2012. If OCD would like to witness this sampling and/or split samples, we would like to start about 9 am.

From: Moore, Darrell
Sent: Monday, December 05, 2011 1:36 PM
To: 'Chavez, Carl J, EMNRD'
Subject: RE: TK 1215 Spill

Carl

We have finished our cleanup of this spill and have done borings in the spill area to insure cleanup. That report with boring detail and analysis along with a final C-141, pictures, waste disposal records, etc. should be to you early next week. The tank leaked as a result of a hole in the floor. On the plus side, the tank DOES have a second floor beneath the first floor and the leak was detected thru weep holes. We are in the process of scanning the floor to detect any other weak spots. Those areas along with the leaking area will be/have been repaired per API-653 standards. We feel confident that there is very little, if any, contamination under the tank due to the secondary floor.

Therefore, once the floor is completely repaired, the tank will be buttoned back up....hydrotested to ensure mechanical integrity and put back in service.

If there are any questions, please contact me at the email address above or at 575-746-5281.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, August 02, 2011 4:44 PM
To: Moore, Darrell; mleighton@lovington.org
Cc: Lackey, Johnny; Combs, Robert; Strange, Aaron; Crockett, Kevin; Welch, Bill; Hutchings, Charles
Subject: RE: TK 1215 Spill

Ok. Thank you.

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/index.htm>

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

From: Moore, Darrell [mailto:Darrell.Moore@hollyfrontier.com]
Sent: Tuesday, August 02, 2011 3:10 PM
To: Chavez, Carl J, EMNRD; mleighton@lovington.org
Cc: Lackey, Johnny; Combs, Robert; Strange, Aaron; Crockett, Kevin; Welch, Bill; Hutchings, Charles
Subject: TK 1215 Spill

Carl and Michael

Attached, please find the C-141 for the spill from TK 1215 that occurred yesterday at Lovington. The tank is essentially empty as of noon today. We are continuing clean up of contaminated soils and investigating what happened to the tank. We will be sending a final C-141 once cleanup is finished. That final C-141 will include sample analysis, photos, and borehole data to determine the horizontal and vertical extent that the spill reached.

If there are any questions concerning this submission, please call me at 575-746-5281.

Darrell Moore
Environmental Manager for Water and Waste
The HollyFrontier Companies
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, December 15, 2011 3:38 PM
To: 'Strange, Aaron'; mleighton@lovington.org
Cc: Crockett, Kevin; Lackey, Johnny; Combs, Robert; Moore, Darrell; VonGonten, Glenn, EMNRD
Subject: RE: 2011-12-10 Frac Tank Spill

Aaron:

Please make sure to provide documentation of cleanup for this release, i.e., photos, bottom hole samples, and disposal documentation, in the final C-141.

How much longer will the temporary frac tank be used? It appears that the operator needs to replace the frac tank ASAP.

Thank you.

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/>

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

From: Strange, Aaron [<mailto:Aaron.Strange@hollyfrontier.com>]
Sent: Thursday, December 15, 2011 2:38 PM
To: Chavez, Carl J, EMNRD; mleighton@lovington.org
Cc: Crockett, Kevin; Lackey, Johnny; Combs, Robert; Moore, Darrell
Subject: 2011-12-10 Frac Tank Spill

Carl and Mike,

Please see the attached C-141.

Thank you,
Aaron

Aaron Strange
Environmental Technician, Senior

Environmental Department
Navajo Refining Co, LLC
Artesia NM
Off: (575) 746-5468
Cell: (575) 703-5057

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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
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Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Waste Water (in the process of being stripped by air)	Volume of Release: ~ 15 barrels	Volume Recovered: ~ 0 barrels
Source of Release: Frac tank (temporary replacement for TK-1209B Strip Tank while it is being repaired)	Date and Hour of Occurrence: 12/10/2011 ~ 08:30	Date and Hour of Discovery: 12/10/2011 ~ 08:45
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Called Carl Chavez with the OCD in Santa Fe (505-476-3490, however there was no answer and could not leave a message. Called the OCD Lovington Office (575-393-6161 ext. 111), however the voicemail was full. Left a voicemail with the operator's answering machine at the OCD Lovington Office. Sent an email to Michael Leighton the City Manager of Lovington, and to Carl Chavez.	
By Whom? Estefani Hammond (by phone) and Aaron Strange (by email).	Date and Hour: 12/10/2011 at ~ 10:30 to the OCD Santa Fe office by phone, 12/10/2011 at ~10:35 to the OCD Lovington office by phone, 10/12/2011 at ~07:51 to the OCD Santa Fe by email, and 10/12/2011 at ~ 07:51 to the City Manager of Lovington by email.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

Describe Cause of Problem and Remedial Action Taken.*

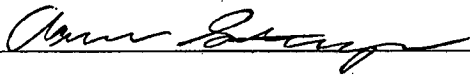
At ~ 08:30 a frac tank overflowed waste water into a secondary containment which then overflowed onto the ground. A vacuum truck pulled out of the secondary containment to prevent more of the water from overflowing onto the ground, however ~15 barrels made it to the ground was not recovered. The frac tank liner inside the tank is breaking apart and plugged off P-307 suction strainer screen causing the spill. Operators are cleaning the suction screen once a week to prevent further incidents. The Frac tank is being used to temporarily replace the TK-1209B Strip Tank while it is being repaired. It was in the process of stripping the water with air at the time of the spill.

Describe Area Affected and Cleanup Action Taken.*

The area affected was at the Frac tank which is just West of Tank 1209B. Approximately 15 barrels of water was not recovered. There are no sign of the spill on the ground; no oily staining. The spill area will be excavated and place into bins for disposal.

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: 	Approved by District Supervisor:		
Printed Name: Aaron Strange			
Title: Sr. Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: aaron.strange@hollycorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 12/15/2011 Phone: 575-703-5057			

Chavez, Carl J, EMNRD

From: Strange, Aaron [Aaron.Strange@hollyfrontier.com]
Sent: Monday, December 12, 2011 7:51 AM
To: Chavez, Carl J, EMNRD; mleighton@lovington.org
Cc: Envir
Subject: FW: 2011-12-10 Waster water spill to bare ground ~15 barrels

Carl and Mike,

Please see the email below. A C-141 will be filled out and forwarded to the OCD and City of Lovington.

Aaron Strange
Environmental Technician, Senior
Off: (575) 746-5468
Cell: (575) 703-5057

From: Hammond, Estefani
Sent: Saturday, December 10, 2011 10:59 AM
To: McKee, Michael; Boans, Robert; Welch, Bill; Hernandez, Eloy; Crockett, Kevin; Hodges, James; Hackmann, Kenneth
Cc: Combs, Gabriela; Combs, Robert; Hammond, Estefani; Hernandez, Carrie; Lackey, Johnny; Moore, Darrell; Strange, Aaron
Subject: 2011-12-10 Waster water spill to bare ground ~15 barrels

On 12/10/2011 the Environmental Department was notified by the Lovington control room of a waste water spill to bare ground of ~15 barrels. The spill occurred from a frac tank that was being used to replace Tank 1209B. The pump malfunctioned and was unable to pull the level of the frac tank down and the tank overfilled. A vacuum truck picked up the spill.

Because the volume was greater than 5 barrels I made the following required notifications:

- OCD Santa Fe (505-476-3490) **no answer and no answering machine therefore could not leave a message**
- OCD Local (575-393-6161 ext.111) **message system was full therefore could not leave a message**
- Left a message with the operator's answering machine.

We may need to try to telephone again on Monday to verify that OCD received the message.

Thanks,

Estefani Bannuelos-Hammond

Environmental Specialist III
The HollyFrontier Companies
Navajo Refining Co., L.L.C. | P.O. Box 159 | Artesia, NM 88211-0159
575.746.5398 direct | 575.308.6009 mobile
Estefani.Hammond@HollyFrontier.com

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Chavez, Carl J, EMNRD

From: Leking, Geoffrey R, EMNRD
Sent: Monday, December 12, 2011 7:38 AM
To: Chavez, Carl J, EMNRD
Subject: Navajo

Carl

Navajo, Lovington experienced a wastewater leak this weekend per a phone message left by Stephanie Hammond. Apparently she tried to leave you a message, but stated that your voice mail was turned off? She tried to leave an initial message here, but was using Larry Johnson's old extension. She finally left it with Patricia's voice mail at the front desk. I called her this morning to indicate we had received her notification. She estimated that 15 barrels of wastewater was released and a vac truck was called and picked up most of the release.

She also stated that there had been a flash fire at the Artesia refinery and will call Dist. 2 and you on this.

Geoff

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, December 06, 2011 2:47 PM
To: 'Moore, Darrell'
Subject: RE: TK 1215 Spill

Darrell:

Ok. I'll look for the report. Thank you.

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
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From: Moore, Darrell [<mailto:Darrell.Moore@hollyfrontier.com>]
Sent: Monday, December 05, 2011 1:36 PM
To: Chavez, Carl J, EMNRD
Subject: RE: TK 1215 Spill

Carl

We have finished our cleanup of this spill and have done borings in the spill area to insure cleanup. That report with boring detail and analysis along with a final C-141, pictures, waste disposal records, etc. should be to you early next week. The tank leaked as a result of a hole in the floor. On the plus side, the tank DOES have a second floor beneath the first floor and the leak was detected thru weep holes. We are in the process of scanning the floor to detect any other weak spots. Those areas along with the leaking area will be/have been repaired per API-653 standards. We feel confident that there is very little, if any, contamination under the tank due to the secondary floor.

Therefore, once the floor is completely repaired, the tank will be buttoned back up....hydrotested to ensure mechanical integrity and put back in service.

If there are any questions, please contact me at the email address above or at 575-746-5281.

From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Tuesday, August 02, 2011 4:44 PM
To: Moore, Darrell; mleighton@lovington.org
Cc: Lackey, Johnny; Combs, Robert; Strange, Aaron; Crockett, Kevin; Welch, Bill; Hutchings, Charles
Subject: RE: TK 1215 Spill

Ok. Thank you.

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

Sent: Tuesday, August 02, 2011 3:10 PM

To: Chavez, Carl J, EMNRD; mleighton@lovington.org

Cc: Lackey, Johnny; Combs, Robert; Strange, Aaron; Crockett, Kevin; Welch, Bill; Hutchings, Charles

Subject: TK 1215 Spill

Carl and Michael

Attached, please find the C-141 for the spill from TK 1215 that occurred yesterday at Lovington. The tank is essentially empty as of noon today. We are continuing clean up of contaminated soils and investigating what happened to the tank. We will be sending a final C-141 once cleanup is finished. That final C-141 will include sample analysis, photos, and borehole data to determine the horizontal and vertical extent that the spill reached.

If there are any questions concerning this submission, please call me at 575-746-5281.

Darrell Moore
Environmental Manager for Water and Waste
The HollyFrontier Companies
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollyfrontier.com]
Sent: Tuesday, August 02, 2011 3:10 PM
To: Chavez, Carl J, EMNRD; mleighton@lovington.org
Cc: Lackey, Johnny; Combs, Robert; Strange, Aaron; Crockett, Kevin; Welch, Bill; Hutchings, Charles
Subject: TK 1215 Spill
Attachments: Release Notification.pdf

Carl and Michael

Attached, please find the C-141 for the spill from TK 1215 that occurred yesterday at Lovington. The tank is essentially empty as of noon today. We are continuing clean up of contaminated soils and investigating what happened to the tank. We will be sending a final C-141 once cleanup is finished. That final C-141 will include sample analysis, photos, and borehole data to determine the horizontal and vertical extent that the spill reached.

If there are any questions concerning this submission, please call me at 575-746-5281.

Darrell Moore
Environmental Manager for Water and Waste
The HollyFrontier Companies
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Michael Leighton [mleighton@lovington.org]
Sent: Monday, August 01, 2011 8:39 AM
To: 'Moore, Darrell'; Chavez, Carl J, EMNRD
Cc: 'Lackey, Johnny'; wduncan@lovington.org; mdelacruz@lovington.org; 'Patrick McMahon'
Subject: RE: Tk 1215

OK

From: Moore, Darrell [mailto:Darrell.Moore@hollyfrontier.com]
Sent: Monday, August 01, 2011 7:41 AM
To: Moore, Darrell; Chavez, Carl J, EMNRD; mleighton@lovington.org
Cc: Lackey, Johnny
Subject: RE: Tk 1215

Carl and Michael

The tank with the suspected hole is Tk 1215 not Tk 815...we are moving the contents to Tk 1214....not Tk 814

From: Moore, Darrell
Sent: Monday, August 01, 2011 7:35 AM
To: 'Chavez, Carl J, EMNRD'; mleighton@lovington.org
Cc: Lackey, Johnny
Subject: Tk 1215

Carl and Michael

Last night (August 1, 2011 at 1 am) we were informed by operators at our Lovington Plant that they had noticed a small pool of oil near Tk 815. This tank is a slop oil tank near the center of the plant just south of the old control room. We suspect the tank may have a hole in the bottom and we are emptying the tank into Tk 814 so we can investigate. A C-141 will be filled out and I will keep you abreast of our findings.

Darrell Moore
Environmental Manager for Water and Waste
The HollyFrontier Companies
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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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 August 1, 2011

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 Lea Refining Co	Contact Darrell Moore	
Address 7401 South Main Lovington NM 88260	Telephone No. 575-746-5281	
Facility Name	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
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Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Crude Bottoms (Asphalt, vacuum gas oil)	Volume of Release est. 350 bbls	Volume Recovered 280 bbls
Source of Release Tk 1215	Date and Hour of Occurrence 8/1/11 1 am	Date and Hour of Discovery 8/1/11 1 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? Carl Chavez by email	
By Whom? Darrell Moore	Date and Hour 8/1/11 7:35 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*


Describe Cause of Problem and Remedial Action Taken.*

At 1 am on August 1, 2011, during routine rounds, an operator at the Lovington facility noticed a small pool of hydrocarbon on the south side of Tk 1215 estimated at 3 bbls.. He notified environmental and it was determined that the tank may have a hole in the floor. We then started emptying the tank into Tk 1214. The tank, which is a 20,000 bbl tank, was about ¾ full. By 7 am the leak had spread to almost all the way around the tank. We think that the heat of the day was making the product, which is an asphalt and vacuum gas oil mixture, more mobile. We did not immediately report the spill because we thought at the time it was a small 3 bbl leak from a pinhole in the floor of the tank.

Describe Area Affected and Cleanup Action Taken.*

The area affected is inside the dike that contains Tk 1214 and Tk 1215. The spill has almost entirely encircled Tk 1215 and then run southeast inside the dike and pooled up southeast of Tk 1215. Two vacuum trucks were called and began vacuuming up the spilled material. In addition we immediately started emptying Tk 1215 into Tk 1214. We also built small dikes to contain the spilled material into smaller areas. Tk 1215 should be empty by noon on August 2, 2011. We will then finish the vacuuming operation and begin picking up contaminated soil and placing into roll-off bins. Once we have picked up contaminated soil we will do drilling and sampling to insure cleanup.

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: Environmental Manager for Water and Waste		Approval Date:	Expiration Date:
E-mail Address: Darrell.moore@hollyfrontier.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8/2/11	Phone: 575-746-5281		

Chavez, Carl J, EMNRD

From: Jones, Brad A., EMNRD
Sent: Tuesday, April 26, 2011 10:02 AM
To: Chavez, Carl J, EMNRD; VonGonten, Glenn, EMNRD
Subject: Emailing: AP News Fire Put Navajo Refinery at Risk.htm

AP Associated Press

Get AP Mobile for your phone at APnews.com

Fire Put Navajo Refinery at Risk

ALBUQUERQUE JOURNAL

Published: Yesterday

LOVINGTON -- A fast-moving grass fire burning in southeastern New Mexico came close enough to threaten part of the Navajo Refinery near Lovington.

A spokesman for Dallas-based Holly Corp., which owns the refiner and another by the same name in Artesia, said the Lovington location was "clear of hazard" by midafternoon.

Authorities say the wind-driven fire broke out Monday morning near Lovington. It has jumped two state highways and has charred an estimated 25,000 acres of private and state land.

State Forestry spokesman Dan Ware said firefighters are trying to stop the blaze at N.M. 18. If the flames jump that road, several more structures could be threatened.

Ware said N.M. 238, 483 and 18 were closed.

The fire was about 17 miles long and 3 miles wide Monday.

Firefighting efforts were being hampered by low humidity and gusting winds.

Elsewhere, near Queen, about 40 miles southwest of Carlsbad, authorities evacuated two structures near where a wind-driven fire had burned 10,000 acres.

The fire broke out Sunday near a forest road five miles west of Queen in an area of grass, brush and piñon trees.

Fire officials said the blaze was threatening three structures, and two were evacuated. The cause is under investigation.

The fire was burning in steep, rocky and inaccessible terrain in the Guadalupe Mountains of the Lincoln National Forest and had burned onto Bureau of Land Management land as well as state and private land.

Firefighters also attacked the blaze from the air most of Sunday, but officials said extremely gusty conditions made their efforts unsuccessful.

Winds gusted up to 55 mph.

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Chavez, Carl J, EMNRD

From: Strange, Aaron [aaron.strange@hollycorp.com]
Sent: Friday, April 01, 2011 1:41 PM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD; Hill, Larry, EMNRD;
mleighton@lovington.org
Cc: Moore, Darrell; Lackey, Johnny
Subject: C-141 spills
Attachments: 2011-03-17 Spill Waste Water.pdf; 2011-03-17 Spill Waste Water.pdf

Carl, Randy, Buddy, and Mike

Please see the attached C-141s.

Thank you,
Aaron

Aaron Strange
Environmental Technician, Senior

Environmental Department
Navajo Refining Co, LLC
Artesia NM
Off: (575) 746-5468
Cell: (575) 703-5057

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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
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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
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Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Crude oil	Volume of Release: ~ 5 barrels	Volume Recovered: ~ 0 barrels
Source of Release: Sump at the Hobbs manifold (crude inlet).	Date and Hour of Occurrence: 03/18/2011 ~ 23:45	Date and Hour of Discovery: 03/18/2011 ~ 23:45
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Left a voicemail with Carl Chavez with the OCD in Santa Fe, spoke to El Gonzales with the OCD Lovington Office (575-370-3186) and left a voicemail with Jeff Lecking (575-393-6161 ext. 113)	
By Whom? Gabriela Combs	Date and Hour: 03/19/2011 at ~00:01 to the OCD Santa Fe office, and 03/19/2011 at ~ 00:52 to the OCD Lovington office.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

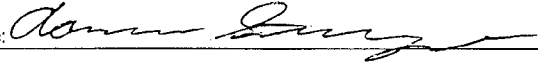
Describe Cause of Problem and Remedial Action Taken.*

On 03/18/2011 at ~ 23:45 the sump at the Hobbs manifold (crude inlet) ran over onto the ground. The pump did not turn on until an operator shook the level post at the sump. It then started to pump and stopped the spill.

Describe Area Affected and Cleanup Action Taken.*

The area affected was at the crude oil sump at the Hobbs manifold (crude inlet). Approximately Five barrels of crude ran over the sump and onto the ground. A vacuum truck was called out but the spill had already soaked into the ground. Safety and Environmental Solutions will delineate the spill and collected soil samples 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 <input type="checkbox"/>
Date: 04/1/2011	Phone: 575-703-5057		

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Revised October 10, 2003

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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
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Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Non Haz Waste Water	Volume of Release: ~ 40 barrels	Volume Recovered: ~ 0 barrels
Source of Release: Tank 1209B	Date and Hour of Occurrence: 03/17/2011 ~ 22:55	Date and Hour of Discovery: 03/17/2011 ~ 22:55
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Left a voicemail and email with Carl Chavez with the OCD in Santa Fe, left a voicemail with the OCD Lovington Office (575-370-3186), sent an email to Michael Leighton the City Manager of Lovington, and left a voicemail with the NMED.	
By Whom? Darrell Moore and Gabriela Combs	Date and Hour: 03/17/2011 at ~ 23:47 to the OCD Santa Fe office, 03/17/2011 at ~23:49 to the OCD Lovington office, 03/17/2011 at ~23:55 to the NMED, and 03/18/2011 at ~ 07:04 to the City Manager of Lovington.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

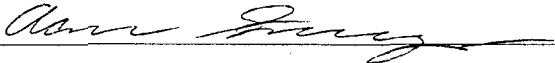
Describe Cause of Problem and Remedial Action Taken.*

On 03/17/2011 at ~ 22:55 Tank 1209B overflowed approximately 40 barrels of waste water onto the ground. The effluent pump on the tank was running, however a broken check valve caused the tank to fill up faster than it could be pumped out. The tank was pumped down to prevent further spilling and the check valve has been replaced.

Describe Area Affected and Cleanup Action Taken.*

The area affected was at Tank 1209B at the wastewater separator and flowed past monitor well #6 and to the south. The vacuum truck for the plant was brought to the spill however the water had absorbed into the ground, therefore no water was recovered. There are no sign of the spill on the ground; no oily staining or wet areas. Safety and Environmental Solutions will delineate the spill and collected soil samples 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: 	<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 <input type="checkbox"/>
Date: 04/01/2011	Phone: 575-703-5057		

C-141 Notification (3/17/2011)

Navajo Refining Company- Lovington Refinery (GW-014):

Gabriela Combs (575) 365-8365 of Navajo Refining Company called on 3/17/2011 23:47 to report clear water from API Separator (possibly haz. Waste w/ NRC reporting requirements?) into tanks was released. The release was discovered at about 23:45 and was greater than 5 bbls. The line leaked along reducer where pipeline size decreased. The spill was contained and a vacuum truck had been contacted to remove fluids. A C-141 Form with more details will be submitted soon.

Chavez, Carl J, EMNRD

From: Strange, Aaron [aaron.strange@hollycorp.com]
Sent: Friday, March 04, 2011 4:01 PM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD; Hill, Larry, EMNRD;
mleighton@lovington.org
Cc: Moore, Darrell; Lackey, Johnny
Subject: C-141
Attachments: 2011-02-27 Spill Waste Water.pdf

Carl, Randy, Buddy, and Michael,

Please see the attached C-141

Thank you,
Aaron

Aaron Strange
Environmental Technician, Senior

Environmental Department
Navajo Refining Co, LLC
Artesia NM
Off: (575) 746-5468
Cell: (575) 703-5057

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Revised October 10, 2003

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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
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Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Waste Water	Volume of Release: ~ 10 barrels	Volume Recovered: ~ 0 barrels
Source of Release: Tank 1209B	Date and Hour of Occurrence: 02/27/2011 ~ 05:30	Date and Hour of Discovery: 02/27/2011 ~ 05:30
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Sent an email to Michael Leighton the City Manager of Lovington, sent an email to Carl Chavez with the OCD in Santa Fe, left a voicemail for Larry Johnson with the OCD Hobbs Office.	
By Whom? Johnny Lackey	Date and Hour: 02/28/2011 at ~11:57 to the City Manager of Lovington, 02/28/2011 at ~11:57 to OCD Santa Fe office, 02/28/2011 at ~12:05 to the OCD Hobbs office.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

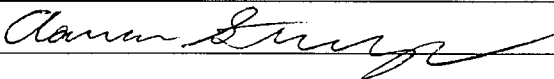
Describe Cause of Problem and Remedial Action Taken.*

On 02/27/2011 at ~ 06:15 Tank 1209B overflowed approximately 10 barrels of waste water onto the ground. The tank overflowed because a partial power failure in the plant that resulted in the loss of several pumps including the waste water pump from Tank 1209B.

Describe Area Affected and Cleanup Action Taken.*

The area affected was at Tank 1209B at the wastewater separator and flowed past monitor well #6 and to the south. There are no sign of the spill on the ground; no oily staining or wet areas. Some water was absorbed into the ground and/or evaporated due to the extremely high wind in the area; therefore there was no free standing water to recover. Safety and Environmental Solutions has started the delineation of the spill and have collected water samples 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 <input type="checkbox"/>
Date: 03/04/2011	Phone: 575-703-5057		

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Monday, February 21, 2011 7:37 AM
To: Chavez, Carl J, EMNRD
Cc: Michael Leighton; Lackey, Johnny; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD
Subject: RE: Tank TK-104A Bottom Sampling

Carl

There was NO flow back when the section of the tank bottom was removed. We have monitored the area for LEL's and get zero. There is absolutely nothing (vapors, stain, etc) that would indicate any leak from the tank.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Friday, February 18, 2011 4:27 PM
To: Moore, Darrell
Cc: Michael Leighton; Lackey, Johnny; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD
Subject: RE: Tank TK-104A Bottom Sampling

Darrell:

Ok on the date and time.

One noticeable item on the analytical lab results was the detection limit on the GRO is required to be lowered to the BTEX detection limit to meet OCD data quality objectives.

Also, could you please respond to the items below:

- Did Navajo note any flow-back when the section of tank bottom was removed? If so, please describe any vapors, odors, etc. that may indicate kerosene is present below the tank. Also, Navajo should conduct ambient air monitoring in the early afternoon at the removed section of tank bottom and report the results.
- If there is a down gradient monitor well from Tank 104A, a ground water sample should be collected and analyzed for TPH and BTEX.

Thank you.

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/index.htm>

"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@hollycorp.com]
Sent: Friday, February 18, 2011 2:29 PM
To: Chavez, Carl J, EMNRD
Cc: Michael Leighton; Lackey, Johnny; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD
Subject: RE: Tank TK-104A Bottom Sampling

Carl et al,

We will sample this tank again at 10 am on monday Feb. 21, 2011. Anyone interested in witnessing can meet us at the Lovington facility.

Sent from my Palm Pre on the Now Network from Sprint

On Feb 16, 2011 5:02 PM, Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us> wrote:

Darrell, et al.:

The OCD and City of Lovington have completed our review of the TPH analytical data submitted from ALS Environmental.

Observations based on the recent investigation and sampling event

- 1) The operator observed flow-back into the tank from the soil below the tank. This led to OCD requiring further inspection with sampling from beneath the tank.
- 2) A section of tank bottom was removed with a high pressure water jetting or cutting machine. OCD is concerned that the water jetting may have flushed some of the volatiles from the interval being sampled.
- 3) The TPH concentrations observed in both laboratory analytical samples exceed the OCD's TPH limits for Spills and Release Guidance.

Path Forward:

- 1) Did Navajo note any flow-back when the section of tank bottom was removed? If so, please describe any vapors, odors, etc. that may indicate kerosene is present below the tank. Also, Navajo should conduct ambient air monitoring in the early afternoon at the removed section of tank bottom and report the results.
- 2) Now that conditions have stabilized and dried out from the high pressure jetting or cutting, we require Navajo to collect a final soil sample for TPH (similar method of analysis as previous samples) collected at least 2 feet below ground level within the cut section of tank bottom to determine whether LNAPL is present and the concentration.

- 3) If there is a down gradient monitor well from Tank 104A, a ground water sample should be collected and analyzed for TPH and BTEX.
- 4) Forward the analytical data for a final review and determination of how to proceed in this matter.

Please contact me if you have questions. Thank you.

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/index.htm>

(Pollution Prevention and Waste Minimization Guidance is under "About Us- Environmental Bureau"
<http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>)

From: Moore, Darrell [<mailto:Darrell.Moore@hollycorp.com>]
Sent: Friday, February 11, 2011 1:50 PM
To: Chavez, Carl J, EMNRD; Leking, Geoffrey R, EMNRD
Cc: Michael Leighton; Lackey, Johnny
Subject: RE: Tank TK-104A

Gentlemen

Enclosed, please find the results from our sampling of the soil underneath Tank 104A at Lovington. As Mr. Leking can attest, the material directly under the tank floor was asphalt. We had to dig thru the asphalt to get any kind of soil sample. You will notice that we have some minor hits in the results. I feel very confident that the hits we got were a direct result of the asphalt under the tank and not a leak in the tank. The holes in the floor, if they were actually holes at all, were pinhole size.

If there are any questions concerning this submission, please contact me at 575-746-5281.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, February 10, 2011 9:19 AM
To: Leking, Geoffrey R, EMNRD; Moore, Darrell
Cc: Michael Leighton
Subject: RE: Tank TK-104A

Darrell:

If you want to send it via e-mail, please include Mr. Leighton (City of Lovington). Thanks.

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/index.htm>

(Pollution Prevention and Waste Minimization Guidance is under "About Us- Environmental Bureau"
<http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>)

From: Leking, Geoffrey R, EMNRD
Sent: Thursday, February 10, 2011 8:46 AM
To: Moore, Darrell
Cc: Chavez, Carl J, EMNRD
Subject: Tank TK-104A

Darrell

Could you send Carl and I the results from the sampling event? Thank you.

Geoffrey Leking

Environmental Engineer

NMOCD-Hobbs

1625 N. French Drive

Hobbs, NM 88240

Office: (575) 393-6161 Ext. 113

Cell: (575) 399-2990

email: geoffreyr.leking@state.nm.us

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Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, March 03, 2011 4:20 PM
To: Moore, Darrell
Cc: 'Miguel De La Cruz'; VonGonten, Glenn, EMNRD; 'Lackey, Johnny'
Subject: Navajo Refining Company, Lovington Refinery (GW-014) Follow-up Information Request
Attachments: Recent C-141 Follow-up 3-3-2011 .pdf

Darrell:

The City of Lovington and OCD (agencies) would like commend Navajo Refining Company (NRC) for its efforts in the investigations and monitor well network to meet the requirements of the discharge permit (permit). The agencies will be going over the permit again later this month (it expires on 10/30/2011) to make sure NRC and the agencies are up to date with deadlines and any requirements that we may not be focused on at present.

The agencies have reviewed the OCD Online file system and reports submitted by the NRC to date. The reports from 2010 to present related to the installation of new ground water monitoring wells, ground water monitoring, follow-up on Attachment 2 in the permit with C-141 investigations, and most recent C-141s in the file were reviewed for completeness.

The agencies have the following information requests:

GW Monitoring:

The new MWs 15 – 29, in addition to MWs 1 -14 (Note: MWs 1 – 11 were recently replaced or deepened) need to be incorporated in the ground water monitoring program and ground water sampling needs to be completed for this year's annual report due in April of 2011. The agencies notice that while the new monitor wells were installed, we have not received ground water quality data from them yet or received notification of the next sampling event. The agencies realize that the annual report is due in April. Therefore, the agencies require the date of ground water monitoring and sampling so we may ensure that ground water data will be included in the report. You may recall receiving some messages from the OCD regarding a decision from NRC on whether to develop a Facility-Wide Ground Water Monitoring Program (FWGWMP) similar to the Artesia Refinery to determine well sampling schedules, etc., but OCD records indicate that NRC did not reply.

Environmental Site Assessment (November 2010) Follow-up:

The agencies notice that benzene was detected in MW-13 above the regulatory limit for the first time. The agencies suspect that the Tank 1214 C-141 release may explain this detection?

Although NRC provided photos, and bore hole analytical data with a summary of excavation volumes removed (one instance no volume was specified) there were no final waste disposal facility signed C-138 waste manifest forms with volumes of soils received and provided to support the excavated volumes of contaminated soils summarized in the report for the C-141 investigations. Therefore, the agencies are requesting this information by COB April 5, 2011. We also request the final signed C-138 from the OCD permitted facility for all corrective actions to be included with the final C-141 report documentation from now on.

Recent C-141 Follow-up:

Please refer to the attached C-141 follow-up documents where the agencies are requiring the final C-141 Reports with documentation of corrective actions taken by April 5, 2011. Also, similar to the section above,

any excavation volumes of contaminated soils disposed at an OCD permitted facility must be supported by a signed C-138 from the receiving facility that verifies the volume removed.

Please contact me if you have questions.

Thank you.

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/oed/index.htm>

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

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Form C-141
Revised October 10, 2003

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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
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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?	<input type="checkbox"/> Yes x No x Not Required				
By Whom?	If YES, To Whom?				
Was a Watercourse Reached?	<input type="checkbox"/> Yes x No				
If YES, Volume Impacting the Watercourse.					

If a Watercourse was Impacted, Describe Fully.*

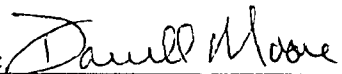
Describe Cause of Problem and Remedial Action Taken.*

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.

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:	
Date: 8/16/10 Phone: 575-748-3311		Attached <input type="checkbox"/>	

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Release Notification and Corrective Action

OPERATOR

x 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
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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? <input type="checkbox"/> Yes x No x Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> 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: <i>Darrell Moore</i>	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 <input type="checkbox"/>
Date: 8/16/10	Phone: 575-748-3311		

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, August 10, 2010 7:30 AM
To: 'Moore, Darrell'; Michael Leighton
Cc: Lackey, Johnny; Strange, Aaron; VonGonten, Glenn, EMNRD
Subject: RE: Spill at Lovington

Darrell:

What is the Tank No. and chemical contents of the tank that the spill occurred from? 5000 mmhos/cm specific conductivity is elevated. Some sampling consistent with the chemical contents of tank is likely required for this "Minor Release" to confirm that the 20.6.2.3103 NMAC and/or 20.6.2.7 NMAC Toxic Pollutants were not present. Based on the chemical contents of the tank, the OCD expects some samples to be collected to determine whether some excavation work needs to be conducted for this "Minor Release". Thanks.

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/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Monday, August 09, 2010 2:23 PM
To: Chavez, Carl J, EMNRD; Michael Leighton
Cc: Lackey, Johnny; Strange, Aaron
Subject: Spill at Lovington

Carl and Mike

Steve Terry notified me at 1:50 pm today that a water valve in our water softening unit at the Lovington facility had malfunctioned and overran a tank. The spill consists of 10 bbl of water with a conductivity of 5000 mmho/cm. The spill is located near the RO Unit and didn't spill enough to over run the road which is directly west of the unit. The spilled water has soaked in so no standing water was available to be vacuumed up.

A spill report will be filled out by Aaron Strange and sent to you in a timely manner.

If there are any questions, please contact me at 575-746-5281.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Strange, Aaron [aaron.strange@hollycorp.com]
Sent: Wednesday, July 07, 2010 11:38 AM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD; Hill, Larry, EMNRD
Cc: Moore, Darrell; Lackey, Johnny
Subject: C-141 for TK-1204 Spill at Lovington
Attachments: 2010-06-22 Spill TK-1204 C-141.pdf

Carl, Randy, and Buddy,

Please see the attached C-141 form.

Thanks,

Aaron Strange
Environmental Technician, Senior
Environmental Department
Navajo Refining Co, LLC
Artesia NM
Off: (575) 746-5468
Cell: (575) 703-5057

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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
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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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: NA	

If a Watercourse was Impacted, Describe Fully.* NA

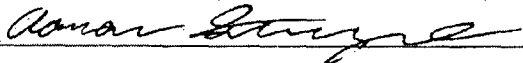
Describe Cause of Problem and Remedial Action Taken.*

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 <input type="checkbox"/>
Date: 7/07/10	Phone: 575-703-5057	

From: Lackey, Johnny [mailto:Johnny.Lackey@hollycorp.com]
Sent: Tuesday, April 20, 2010 12:51 PM
To: Chavez, Carl J, EMNRD
Cc: Whatley, Michael; Moore, Darrell; Schmidlen, Jeff; Douglas_Wilson@Praxair.com
Subject: NAVAJO UNDERGROUND LINES

Carl,

As you are aware, Navajo has employed Praxair Services, Inc. (Praxair) to set up a comprehensive tank leak detection program throughout the Artesia and Lovington refineries for the majority of our product storage tanks. (The OCD has approved this technology for tank leak detection at Navajo's refineries).

Navajo recently assumed operating responsibilities for 41 pipeline segments located within the Artesia Refinery from Holly Energy Partners (they provide pipeline and terminal services for Holly Corp.), and each of these segments have short runs of underground piping that will be added to our underground line testing program. Navajo also assumed operating responsibilities for some Holly Energy Partner's pipelines at Lovington also. Navajo is in the process of identifying these lines and they will be added to the underground line testing program at Lovington.

Praxair provides leak detection technology for underground pipe testing. To test Praxair's technology for underground piping leak detection, Navajo proactively had Praxair install monitors on selected segments of piping that we assumed operating responsibilities from Holly Energy Partner's. Praxair injected their tracer into these selected segments (13 lines) and their sampling results identified two lines that indicated a leak was present (See attached Praxair Report). Both lines that had suspected leaks are included in the package of assets acquired from Holly Energy Partners. The lines with potential leaks are as follows:

- 1) A section of pipe near Texas Street and just northeast of Tank 413 (Sketch 853)
- 2) A section just south of Tank 115 (Sketch 708).

Both lines were "day lighted" and very small leaks (**drips**) were discovered. There was no saturation of the soil around these leaks and no free product was present. The leaks were repaired.

Navajo is very encouraged with the results of this technology and this would allow Navajo to test the pipes "online" without the use of water for hydrotesting and the resultant disposal of the water.

The Praxair process would let Navajo test the line segments that cannot be removed from service without a scheduled outage allowing testing of these lines within the discharge permit time frame without refinery disruption. This process eliminates the potential for product or oily water release if there is a failure during pressure testing or hydrostatic testing of the lines.

Attached is a spreadsheet listing the additional lines to be added to our test schedule, copies of the isometric drawings for each line segment (The sketch number on the spreadsheet references the corresponding isometric drawing) and Praxair's Report detailing the trial test results mentioned above.

Navajo requests approval from the OCD to utilize Praxair's Leak Detection Technology for underground pipe testing at our Artesia and Lovington refineries. Navajo and Praxair will be happy to meet with the OCD in Santa Fe to present this technology in detail.

Thanks,

Johnny Lackey
Environmental Manager
Navajo Refining Company, L.L.C.
Office - 575-746-5490
Cell - 972-261-8075
Fax - 575-746-5451
Johnny.Lackey@hollycorp.com

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Navajo Refining Lea Plant	Contact	Darrell Moore
Address	7406 S. Main Lovington, NM 88260	Telephone No.	575-746-5281
Facility Name	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	Gas Oil	Volume of Release	25 bbls	Volume Recovered	15 bbls
Source of Release	Date and Hour of Occurrence		Date and Hour of Discovery		
Was Immediate Notice Given?		July 26, 2009 2:00 pm		July 26, 2009 2:00 pm	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required		If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?		If YES, Volume Impacting the Watercourse.			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Tk 1214 was run over during normal operations. Crews were working in the area and noticed the tank running over and it was shut down immediately.

Describe Area Affected and Cleanup Action Taken.*
Area affected is a strip about 150 ft east of the tank and about 10 ft wide. All contamination stayed inside the tank berm. Contaminated soil was picked up and vacuum truck recovered about 15 bbls of the spilled material.

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			
Title: Environmental Manager for Water and Waste	Approval Date:	Expiration Date:	
E-mail Address: Darrell.moore@hollycorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: July 28, 2009 746-5281	Phone: 575-		

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, March 01, 2011 6:33 AM
To: 'Lackey, Johnny'; Moore, Darrell
Cc: Michael Leighton; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD; Terry, Steve; Hernandez, Eloy; Hutchings, Charles; Whatley, Michael
Subject: RE: Tank TK-104A Bottom Sampling

Ok. Samples confirm no release, but there was apparently some pitting observed from the removed section. The City of Lovington and OCD recommend a double bottom for the tank; however, the City of Lovington and OCD have agreed to the application of the Praxair Method for tank releases at the facility.

This will be an area of interest to investigate with the Praxair method of tank leak detection and from monitoring wells at the facility. As per the OCD's February 26, 2010 communique with terms and conditions for the Praxair method approval and the operator's agreement to accept to terms of OCD approval, the City of Lovington and OCD are now requesting the date when the Praxair probes will be installed around the above ground tanks at the facility to comply with the OCD's terms and conditions for approving the method in lieu of retrofitting all of the existing above ground tanks with secondary containment.

It is very important that the operator now comply with installation of probes with a date for that the Praxair Method to be applied at the facility to the above ground tanks.

Thank you.

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/index.htm>

"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: Lackey, Johnny [<mailto:Johnny.Lackey@hollycorp.com>]
Sent: Monday, February 28, 2011 10:09 AM
To: Chavez, Carl J, EMNRD; Moore, Darrell
Cc: Michael Leighton; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD; Terry, Steve; Hernandez, Eloy; Hutchings, Charles; Whatley, Michael
Subject: RE: Tank TK-104A Bottom Sampling

Attached are the latest results from sampling of the soil beneath Tank 104A at Navajo's Lovington (Lea) Refinery. Both samples (at one and two foot depths) show non-detect for TPH and GRO. Navajo will proceed with completing work on Tank 104-A in preparation for placing this tank back in service.

Johnny Lackey
Environmental Manager
Navajo Refining Company, L.L.C.
Office - 575-746-5490
Cell - 972-261-8075
Fax - 575-746-5451
Johnny.Lackey@hollycorp.com

Chavez, Carl J, EMNRD

From: Lackey, Johnny [Johnny.Lackey@hollycorp.com]
Sent: Monday, February 28, 2011 11:57 AM
To: Chavez, Carl J, EMNRD; Michael Leighton
Cc: Terry, Steve; Hernandez, Eloy
Subject: LOVINGTON WASTE WATER SPILL

At 6:15 PM on February 27, 2011 the Lovington Refinery notified Navajo Environmental of a waste water spill at Tank 1209B in Lovington. A partial power failure in the plant resulted in the loss of several pumps including the waste water pump from Tank 1209B. This resulted in Tank 1209B overflowing approximately 10 barrels of waste water onto the ground. Some water was absorbed into the ground and/or evaporated due to the extremely high wind in the area; therefore there was no free standing water to recover. Soil samples will be collected and analyzed. Appropriate cleanup and disposal of material will be scheduled and the C-141 Form submitted.

I also left a voice message for Larry Johnson, OCD District 1 in Hobbs.

Johnny Lackey
Environmental Manager
Navajo Refining Company, L.L.C.
Office - 575-746-5490
Cell - 972-261-8075
Fax - 575-746-5451
Johnny.Lackey@hollycorp.com

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From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, February 24, 2011 8:25 AM
To: Moore, Darrell
Cc: Michael Leighton; Lackey, Johnny; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD
Subject: RE: Tank TK-104A Bottom Sampling

Darrell:

Have your lab provide us with the lowest detection limits that their lab is capable of meeting for the OCD to consider. A detection limit of 490 ppm is too high. Thanks.

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

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Thursday, February 24, 2011 8:18 AM
To: Chavez, Carl J, EMNRD
Cc: Michael Leighton; Lackey, Johnny; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD
Subject: RE: Tank TK-104A Bottom Sampling

Carl

Our lab is confused about what you are asking. The responsitivity that they get on their instruments for BTEX and GRO does not allow them to have limits identical. Also, GRO is calibrating a range rather than individual compounds.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, February 17, 2011 9:52 AM
To: Chavez, Carl J, EMNRD; Moore, Darrell
Cc: Michael Leighton; Lackey, Johnny; Miguel De La Cruz; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD
Subject: RE: Tank TK-104A Bottom Sampling

Darrell, et al.:

The OCD also notices the extremely elevated detection limit on the GRO analyses that were submitted. The GRO detection limit should be on the order of the detection limits used for BTEX.... Thank you.

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/index.htm>

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

From: Chavez, Carl J, EMNRD

Sent: Wednesday, February 16, 2011 5:02 PM

To: 'Moore, Darrell'

Cc: Michael Leighton; Lackey, Johnny; 'Miguel De La Cruz'; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD

Subject: RE: Tank TK-104A Bottom Sampling

Darrell, et al.:

The OCD and City of Lovington have completed our review of the TPH analytical data submitted from ALS Environmental.

Observations based on the recent investigation and sampling event

- 1) The operator observed flow-back into the tank from the soil below the tank. This led to OCD requiring further inspection with sampling from beneath the tank.
- 2) A section of tank bottom was removed with a high pressure water jetting or cutting machine. OCD is concerned that the water jetting may have flushed some of the volatiles from the interval being sampled.
- 3) The TPH concentrations observed in both laboratory analytical samples exceed the OCD's TPH limits for Spills and Release Guidance.

Path Forward:

- 1) Did Navajo note any flow-back when the section of tank bottom was removed? If so, please describe any vapors, odors, etc. that may indicate kerosene is present below the tank. Also, Navajo should conduct ambient air monitoring in the early afternoon at the removed section of tank bottom and report the results.
- 2) Now that conditions have stabilized and dried out from the high pressure jetting or cutting, we require Navajo to collect a final soil sample for TPH (similar method of analysis as previous samples) collected at least 2 feet below ground level within the cut section of tank bottom to determine whether LNAPL is present and the concentration.
- 3) If there is a down gradient monitor well from Tank 104A, a ground water sample should be collected and analyzed for TPH and BTEX.
- 4) Forward the analytical data for a final review and determination of how to proceed in this matter.

Please contact me if you have questions. Thank you.

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

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

(Pollution Prevention and Waste Minimization Guidance is under "About Us- Environmental Bureau"

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

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

Sent: Friday, February 11, 2011 1:50 PM

To: Chavez, Carl J, EMNRD; Leking, Geoffrey R, EMNRD

Cc: Michael Leighton; Lackey, Johnny

Subject: RE: Tank TK-104A

Gentlemen

Enclosed, please find the results from our sampling of the soil underneath Tank 104A at Lovington. As Mr. Leking can attest, the material directly under the tank floor was asphalt. We had to dig thru the asphalt to get any kind of soil sample. You will notice that we have some minor hits in the results. I feel very confident that the hits we got were a direct result of the asphalt under the tank and not a leak in the tank. The holes in the floor, if they were actually holes at all, were pinhole size.

If there are any questions concerning this submission, please contact me at 575-746-5281.

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

Sent: Thursday, February 10, 2011 9:19 AM

To: Leking, Geoffrey R, EMNRD; Moore, Darrell

Cc: Michael Leighton

Subject: RE: Tank TK-104A

Darrell:

If you want to send it via e-mail, please include Mr. Leighton (City of Lovington). Thanks.

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/index.htm>

(Pollution Prevention and Waste Minimization Guidance is under "About Us- Environmental Bureau"

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

From: Leking, Geoffrey R, EMNRD

Sent: Thursday, February 10, 2011 8:46 AM

To: Moore, Darrell

Cc: Chavez, Carl J, EMNRD

Subject: Tank TK-104A

Darrell

Could you send Carl and I the results from the sampling event? Thank you.

Geoffrey Leking

Environmental Engineer

NMOCD-Hobbs

1625 N. French Drive

Hobbs, NM 88240

Office: (575) 393-6161 Ext. 113

Cell: (575) 399-2990

email: geoffreyr.leking@state.nm.us

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25-Feb-2011

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

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

Re: TANK 104-A

Work Order: 1102680

Dear Darrell,

ALS Environmental received 2 samples on 23-Feb-2011 08:55 AM 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 11.

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 10430 Glendon Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 531-5556 | FAX (281) 531-5887

CONTACT US AT 1-800-441-4338 (In TX 713-531-5556) | E-MAIL: info@alsglobal.com | Web: www.alsglobal.com

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS Environmental

Date: 25-Feb-11

Client: Navajo Refining Company
Project: TANK 104-A
Work Order: 1102680

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>
1102680-01	Tank 104-A 1' Deep	Soil		2/21/2011 11:00	2/23/2011 08:55	<input type="checkbox"/>
1102680-02	Tank 104-A 2' Deep	Soil		2/21/2011 11:00	2/23/2011 08:55	<input type="checkbox"/>

ALS Environmental

Date: 25-Feb-11

Client: Navajo Refining Company

Project: TANK 104-A

Work Order: 1102680

Case Narrative

Batch R105891, Method 8015_GRO_S, Sample 1102680-02AMSD: RPD OK

ALS Environmental

Date: 25-Feb-11

Client: Navajo Refining Company

Project: TANK 104-A

Work Order: 1102680

Sample ID: Tank 104-A 1' Deep

Lab ID: 1102680-01

Collection Date: 2/21/2011 11:00 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>						
TPH AND MISCELLANEOUS GCFID			SW8015M		Prep Date: 2/24/2011	Analyst: SE
TPH (Diesel Range)	ND		49	mg/Kg	1	2/25/2011 12:11 PM
TPH (Motor Oil Range)	ND		49	mg/Kg	1	2/25/2011 12:11 PM
Surr: 2-Fluorobiphenyl	88.7		70-130	%REC	1	2/25/2011 12:11 PM
GASOLINE RANGE ORGANICS			SW8015			Analyst: LAJ
Gasoline Range Organics	ND		0.050	mg/Kg	1	2/25/2011 11:54 AM
Surr: 4-Bromofluorobenzene	109		70-130	%REC	1	2/25/2011 11:54 AM

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

ALS Environmental

Date: 25-Feb-11

Client: Navajo Refining Company

Project: TANK 104-A

Work Order: 1102680

Sample ID: Tank 104-A 2' Deep

Lab ID: 1102680-02

Collection Date: 2/21/2011 11:00 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 2/24/2011	Analyst: SE
TPH (Diesel Range)	ND		49	mg/Kg	1	2/25/2011 01:09 PM
TPH (Motor Oil Range)	ND		49	mg/Kg	1	2/25/2011 01:09 PM
Surr: 2-Fluorobiphenyl	73.8		70-130	%REC	1	2/25/2011 01:09 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: LAJ
Gasoline Range Organics	ND		0.050	mg/Kg	1	2/25/2011 12:09 PM
Surr: 4-Bromofluorobenzene	95.5		70-130	%REC	1	2/25/2011 12:09 PM

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

ALS Environmental

Date: 25-Feb-11

Client: Navajo Refining Company
 Work Order: 1102680
 Project: TANK 104-A

QC BATCH REPORT

Batch ID: 50324 Instrument ID FID-8 Method: SW8015M

MBLK	Sample ID: FBLKS3-110224-50324					Units: mg/Kg		Analysis Date: 2/25/2011 11:51 AM		
Client ID:	Run ID: FID-8_110224B				SeqNo: 2290338		Prep Date: 2/24/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	ND	50								
TPH (Motor Oil Range)	ND	50								
Surr: 2-Fluorobiphenyl	25.53	0	25	0	102	70-130	0			

LCS	Sample ID: FLCSS3-110224-50324				Units: mg/Kg		Analysis Date: 2/25/2011 11:12 AM			
Client ID:	Run ID: FID-8_110224B				SeqNo: 2290336		Prep Date: 2/24/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	229	50	250	0	91.6	70-130	0			
TPH (Motor Oil Range)	222.8	50	250	0	89.1	70-130	0			
Surr: 2-Fluorobiphenyl	24.52	0	25	0	98.1	70-130	0			

LCSD	Sample ID: FLCSDS3-110224-50324					Units: mg/Kg		Analysis Date: 2/25/2011 11:32 AM		
Client ID:	Run ID: FID-8_110224B				SeqNo: 2290337		Prep Date: 2/24/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	223.7	50	250	0	89.5	70-130	229	2.33	30	
TPH (Motor Oil Range)	215.7	50	250	0	86.3	70-130	222.8	3.24	30	
Surr: 2-Fluorobiphenyl	23.11	0	25	0	92.4	70-130	24.52	5.95	30	

MS	Sample ID: 1102680-01AMS				Units: mg/Kg		Analysis Date: 2/25/2011 12:30 PM			
Client ID: Tank 104-A 1' Deep			Run ID: FID-8_110224B		SeqNo: 2290340		Prep Date: 2/24/2011		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	252.2	49	245.6	0	103	70-130	0			
TPH (Motor Oil Range)	205.4	49	245.6	0	83.7	70-130	0			
Surr: 2-Fluorobiphenyl	23.15	0	24.56	0	94.3	70-130	0			

MSD	Sample ID: 1102680-01AMSD					Units: mg/Kg		Analysis Date: 2/25/2011 12:50 PM		
Client ID: Tank 104-A 1' Deep			Run ID: FID-8_110224B			SeqNo: 2290341		Prep Date: 2/24/2011		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	245.6	49	245.3	0	100	70-130	252.2	2.65	30	
TPH (Motor Oil Range)	229.1	49	245.3	0	93.4	70-130	205.4	10.9	30	
Surr: 2-Fluorobiphenyl	24.95	0	24.53	0	102	70-130	23.15	7.48	30	

The following samples were analyzed in this batch:

1102680-01A 1102680-02A

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

Client: Navajo Refining Company
 Work Order: 1102680
 Project: TANK 104-A

QC BATCH REPORT

Batch ID: R105891 Instrument ID FID-9 Method: SW8015

MBLK Sample ID: GBLKS-022511-R105891 Units: mg/Kg Analysis Date: 2/25/2011 11:26 AM

Client ID: Run ID: FID-9_110225A SeqNo: 2290349 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	0.1067	0.0050	0.1	0	107	70-130	0			

LCS Sample ID: GLCSS-022511-R105891 Units: mg/Kg Analysis Date: 2/25/2011 10:56 AM

Client ID: Run ID: FID-9_110225A SeqNo: 2290347 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	1.104	0.050	1	0	110	70-130	0			
Surr: 4-Bromofluorobenzene	0.112	0.0050	0.1	0	112	70-130	0			

LCSD Sample ID: GLCSSD-022511-R105891 Units: mg/Kg Analysis Date: 2/25/2011 11:11 AM

Client ID: Run ID: FID-9_110225A SeqNo: 2290348 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	1.116	0.050	1	0	112	70-130	1.104	1.09	30	
Surr: 4-Bromofluorobenzene	0.1115	0.0050	0.1	0	112	70-130	0.112	0.38	30	

MS Sample ID: 1102680-02AMS Units: mg/Kg Analysis Date: 2/25/2011 12:24 PM

Client ID: Tank 104-A 2' Deep Run ID: FID-9_110225A SeqNo: 2290352 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	1.027	0.050	1	0	103	70-130	0			
Surr: 4-Bromofluorobenzene	0.1152	0.0050	0.1	0	115	70-130	0			

MSD Sample ID: 1102680-02AMSD Units: mg/Kg Analysis Date: 2/25/2011 12:39 PM

Client ID: Tank 104-A 2' Deep Run ID: FID-9_110225A SeqNo: 2290353 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	0.9967	0.050	1	0	99.7	70-130	1.027	3.03	30	
Surr: 4-Bromofluorobenzene	0.113	0.0050	0.1	0	113	70-130	0.1152	1.98	30	

The following samples were analyzed in this batch: 1102680-01A 1102680-02A

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

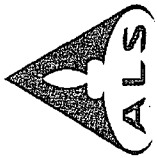
Client: Navajo Refining Company
Project: TANK 104-A
WorkOrder: 1102680

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



ALS Laboratory Group
10450 Standliff 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: <u>ALS Work Order #</u> <u>102680</u>											
Parameter/Method Request for Analysis				Project Name				Parameter/Method Request for Analysis											
Purchase Order				Project Number				Parameter/Method Request for Analysis											
Company Name				Bill To Company				Parameter/Method Request for Analysis											
Send Report To				Invoice Attn				Parameter/Method Request for Analysis											
Address				Address				Parameter/Method Request for Analysis											
City/State/Zip				City/State/Zip				Parameter/Method Request for Analysis											
Phone				Phone				Parameter/Method Request for Analysis											
Fax				Fax				Parameter/Method Request for Analysis											
e-Mail Address				e-Mail Address				Parameter/Method Request for Analysis											
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	TANK 104-A 1' DEEP	2-21-11	11:00	DIET	N	1													
2	TANK 104-A 2' DEEP	2-21-11	11:00	DIRT	N	1													
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
STEVE HINTERK	FEEDBACK						
Relinquished by:	Date: 2-22-11	Time: 10:00	Received by:	Date: 2/23/11	Time: 18:55	Notes: 10 Day TAT	
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	Date:	Time:	Notes:	
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, 9-50/35°C	Cooler ID:	Cooler Temp:	OC Package: (Check One Box Below)	Notes:	

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

Sample Receipt Checklist

Client Name: **NAVAJO REFINING**

Date/Time Received: **23-Feb-11 08:55**

Work Order: **1102680**

Received by: **SAY**

Checklist completed by Salvador A. Yanez 23-Feb-11
eSignature Date

Reviewed by: Jay Lynn F Thibault 24-Feb-11
eSignature Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.1c</u> <u>002</u>		
Cooler(s)/Kit(s):	<u>0047</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

**ALS Environmental**

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

Date: 2
Name: 4
Company:

CUSTODY SEAL

22-11 Time: 10:00
STEVE H TERRY
NAVAJO-LIVINGSTON

Seal Broken By:

Date:

2/23/11

1102680

This portion can be removed for recipient's records.

FedEx Tracking Number 865910938404Order's Name KATHY TRUETT Phone 070 296-5821Company NAVAJO REFINING CO (LEA)Address 7406 S MAIN STCity LIVINGSTON State NM ZIP 88260

Our Internal Billing Reference

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, February 16, 2011 5:02 PM
To: 'Moore, Darrell'
Cc: Michael Leighton; Lackey, Johnny; 'Miguel De La Cruz'; VonGonten, Glenn, EMNRD; Hill, Larry, EMNRD
Subject: RE: Tank TK-104A Bottom Sampling

Darrell, et al.:

The OCD and City of Lovington have completed our review of the TPH analytical data submitted from ALS Environmental.

Observations based on the recent investigation and sampling event

- 1) The operator observed flow-back into the tank from the soil below the tank. This led to OCD requiring further inspection with sampling from beneath the tank.
- 2) A section of tank bottom was removed with a high pressure water jetting or cutting machine. OCD is concerned that the water jetting may have flushed some of the volatiles from the interval being sampled.
- 3) The TPH concentrations observed in both laboratory analytical samples exceed the OCD's TPH limits for Spills and Release Guidance.

Path Forward:

- 1) Did Navajo note any flow-back when the section of tank bottom was removed? If so, please describe any vapors, odors, etc. that may indicate kerosene is present below the tank. Also, Navajo should conduct ambient air monitoring in the early afternoon at the removed section of tank bottom and report the results.
- 2) Now that conditions have stabilized and dried out from the high pressure jetting or cutting, we require Navajo to collect a final soil sample for TPH (similar method of analysis as previous samples) collected at least 2 feet below ground level within the cut section of tank bottom to determine whether LNAPL is present and the concentration.
- 3) If there is a down gradient monitor well from Tank 104A, a ground water sample should be collected and analyzed for TPH and BTEX.
- 4) Forward the analytical data for a final review and determination of how to proceed in this matter.

Please contact me if you have questions. Thank you.

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/oed/index.htm>
(Pollution Prevention and Waste Minimization Guidance is under "About Us- Environmental Bureau"
<http://www.emnrd.state.nm.us/oed/environmental.htm#environmental>)

From: Moore, Darrell [<mailto:Darrell.Moore@hollycorp.com>]
Sent: Friday, February 11, 2011 1:50 PM
To: Chavez, Carl J, EMNRD; Leking, Geoffrey R, EMNRD
Cc: Michael Leighton; Lackey, Johnny
Subject: RE: Tank TK-104A

Gentlemen

Enclosed, please find the results from our sampling of the soil underneath Tank 104A at Lovington. As Mr. Leking can attest, the material directly under the tank floor was asphalt. We had to dig thru the asphalt to get any kind of soil sample. You will notice that we have some minor hits in the results. I feel very confident that the hits we got were a direct result of the asphalt under the tank and not a leak in the tank. The holes in the floor, if they were actually holes at all, were pinhole size.

If there are any questions concerning this submission, please contact me at 575-746-5281.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, February 10, 2011 9:19 AM
To: Leking, Geoffrey R, EMNRD; Moore, Darrell
Cc: Michael Leighton
Subject: RE: Tank TK-104A

Darrell:

If you want to send it via e-mail, please include Mr. Leighton (City of Lovington). Thanks.

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/index.htm>
(Pollution Prevention and Waste Minimization Guidance is under "About Us- Environmental Bureau"
<http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>)

From: Leking, Geoffrey R, EMNRD
Sent: Thursday, February 10, 2011 8:46 AM
To: Moore, Darrell
Cc: Chavez, Carl J, EMNRD
Subject: Tank TK-104A

Darrell

Could you send Carl and I the results from the sampling event? Thank you.

Geoffrey Leking
Environmental Engineer
NMOCD-Hobbs
1625 N. French Drive
Hobbs, NM 88240
Office: (575) 393-6161 Ext. 113
Cell: (575) 399-2990
email: geoffreyr.leking@state.nm.us

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or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.



08-Feb-2011

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

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

Re: Kerosene samples

Work Order: 1102086

Dear Darrell,

ALS Environmental received 2 samples on 03-Feb-2011 10:45 AM 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 16.

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

Sincerely,

JayLynn F Thibault

Electronically approved by: Glenda H. Ramos

JayLynn F Thibault
Project Manager



Certificate No: T104704231-09A-TX

ADDRESS 10450 Standliff Rd, Suite 210 Houston, Texas 77059-4358 | PHONE (281) 530-5656 | FAX (281) 530-5387

POSTED TO: 03/02/2011 10:45 AM | 03/02/2011 10:45 AM | 03/02/2011 10:45 AM | 03/02/2011 10:45 AM | 03/02/2011 10:45 AM



RIGHT SOLUTIONS RIGHT PARTNERS

ALS Environmental

Date: 08-Feb-11

Client: Navajo Refining Company**Project:** Kerosene samples**Work Order:** 1102086**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>
1102086-01	TK104A #1			1/28/2011 15:15	2/3/2011 10:45	<input type="checkbox"/>
1102086-02	TK104A #2			1/28/2011 15:25	2/3/2011 10:45	<input type="checkbox"/>

ALS Environmental*Date: 08-Feb-11***Client:** Navajo Refining Company**Project:** Kerosene samples**Work Order:** 1102086**Case Narrative**

A kerosene standard was analyzed to determine if there was any present in the sample. These chromatograms are attached at the end of the report for your review.

ALS Environmental

Date: 08-Feb-11

Client: Navajo Refining Company

Project: Kerosene samples

Work Order: 1102086

Sample ID: TK104A #1

Lab ID: 1102086-01

Collection Date: 1/28/2011 03:15 PM

Matrix:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID			SW8015M		Prep Date: 2/3/2011	Analyst: SE
Client Product	See Attached		490	mg/Kg	10	2/7/2011 01:58 PM
TPH (Gasoline Range)	ND		490	mg/Kg	10	2/7/2011 01:58 PM
TPH (Diesel Range)	610		490	mg/Kg	10	2/7/2011 01:58 PM
TPH (Motor Oil Range)	1,700		980	mg/Kg	10	2/7/2011 01:58 PM
Surr: 2-Fluorobiphenyl	109		70-130	%REC	10	2/7/2011 01:58 PM
Surr: Trifluoromethyl benzene	94.7		70-130	%REC	10	2/7/2011 01:58 PM

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

ALS Environmental

Date: 08-Feb-11

Client: Navajo Refining Company

Project: Kerosene samples

Work Order: 1102086

Sample ID: TK104A #2

Lab ID: 1102086-02

Collection Date: 1/28/2011 03:25 PM

Matrix:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID			SW8015M		Prep Date: 2/3/2011	Analyst: SE
Client Product	See Attached		490	mg/Kg	10	2/7/2011 02:30 PM
TPH (Gasoline Range)	ND		490	mg/Kg	10	2/7/2011 02:30 PM
TPH (Diesel Range)	930		490	mg/Kg	10	2/7/2011 02:30 PM
TPH (Motor Oil Range)	2,100		970	mg/Kg	10	2/7/2011 02:30 PM
Surr: 2-Fluorobiphenyl	127		70-130	%REC	10	2/7/2011 02:30 PM
Surr: Trifluoromethyl benzene	104		70-130	%REC	10	2/7/2011 02:30 PM

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

ALS Environmental

Date: 08-Feb-11

Client: Navajo Refining Company
Work Order: 1102086
Project: Kerosene samples

QC BATCH REPORT

Batch ID: **49807** Instrument ID **FID-11** Method: **SW8015M**

MBLK Sample ID: **FBLKS2-110203-49807** Units: **mg/Kg** Analysis Date: **2/7/2011 12:24 PM**
 Client ID: Run ID: **FID-11_110203B** SeqNo: **2271570** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Client Product	ND	5.0								
TPH (Gasoline Range)	ND	50								
TPH (Diesel Range)	ND	50								
TPH (Motor Oil Range)	ND	50								
Surr: 2-Fluorobiphenyl	24.47	0	25	0	97.9	70-130	0			
Surr: Trifluoromethyl benzene	23.83	0	25	0	95.3	70-130	0			

LCS Sample ID: **FLCSS2-110203-49807** Units: **mg/Kg** Analysis Date: **2/7/2011 11:21 AM**
 Client ID: Run ID: **FID-11_110203B** SeqNo: **2271568** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Gasoline Range)	239	50	250	0	95.6	70-130	0			
TPH (Diesel Range)	301.7	50	250	0	121	70-130	0			
Surr: 2-Fluorobiphenyl	28.18	0	25	0	113	70-130	0			
Surr: Trifluoromethyl benzene	25.21	0	25	0	101	70-130	0			

LCSD Sample ID: **FLCSDS2-110203-49807** Units: **mg/Kg** Analysis Date: **2/7/2011 11:52 AM**
 Client ID: Run ID: **FID-11_110203B** SeqNo: **2271569** Prep Date: **2/3/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Gasoline Range)	220.6	50	250	0	88.2	70-130	239	8	30	
TPH (Diesel Range)	299.9	50	250	0	120	70-130	301.7	0.595	30	
Surr: 2-Fluorobiphenyl	26.47	0	25	0	106	70-130	28.18	6.26	30	
Surr: Trifluoromethyl benzene	23.86	0	25	0	95.4	70-130	25.21	5.52	30	

The following samples were analyzed in this batch: 1102086-01A 1102086-02A

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

ALS Environmental

Date: 08-Feb-11

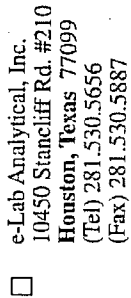
Client: Navajo Refining Company
Project: Kerosene samples
WorkOrder: 1102086

**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



Chain of Custody Form

☐ e-Lab Analytical, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185



Customer Information						Project Information						Parameter/Method Request for Analysis															
Purchase Order	Project Name					Bio-Rad Instrumental					Total Cyanide (9012)																
Work Order	Project Number										Phenolics																
Company Name	Bill to Company					Navajo Refining Company					pH																
Sent Report to	Invoice Attn:					Darrell Moore					TDS																
Address	Address					P.O. Box 159					TSS																
City/State/Zip	City/State/Zip					Artesia, NM 88211					Fecal Coliform																
Phone	Phone					(505) 748-3311					e-coli																
Fax	Fax					(505) 748-5421					Radium 226 & 228																
e-Mail Address	e-Mail Address																										
No.	Sample Description					Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Hold
1																											
2	TK 104 A #1					7/22/11	3:15	Soil	-																		
3	TK 104 A #2					7/23/11	3:25	Soil	-																		
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Shipment Method: _____

Required Turnaround Time: (Check Box)
☒ Sid 10 WK Days ☐ 5 WK Days ☐ 2 WK Days Other: ASAP
 Results Due Date: _____

Received by: Darrell Moore Date: 7/11/11 Time: 14:30
 Received by (Laboratory): _____
 Checked by (Laboratory): _____
 G-NaHSO₃: _____ 5-Na₂SO₃: _____ 4-NaOH: _____
 T-HCl: _____ 2-HNO₃: _____ 3-H₂SO₄: _____
 Preservative Key: _____

Notes: 10 Day TAT.

QC Package: (Check One Box Below)
☒ Level II Std QC ☐ TRRP Check List
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SWB&CLP ☐ Other

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.

2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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ALS Environmental

Sample Receipt Checklist

Client Name: **NAVAJO REFINING**

Date/Time Received: **03-Feb-11 10:45**

Work Order: **1102086**

Received by: **SAY**

Checklist completed by Raymond N Gamba 03-Feb-11
eSignature Date

Reviewed by: Lay Lynn F Thibault 07-Feb-11
eSignature Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>1.6c</u> <u>002</u>		
Cooler(s)/Kit(s):	<u>2132</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

PROB 11026656

ORIGIN ID: ROWA
BRITTANI SOUTHERLAND
NAVAJO
501 E MAIN ST

SHIP DATE: 01FEB11
ACTWGT: 5.0 LB MAN
CAD: 634483/CAFE2471

ARTESIA, NM 882109440
UNITED STATES US

BILL RECIPIENT

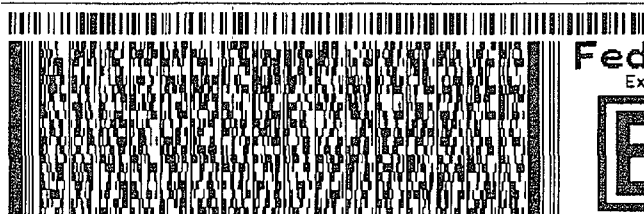
TO

ALS LABORATORY GROUP
10450 STANCLIFF RD., SUITE 210

HOUSTON TX 77099

(281) 530-5656

DEPT: ENVIRONMENTAL DEPT.



J10101009010154

TRKH
0201

4347 1018 9500

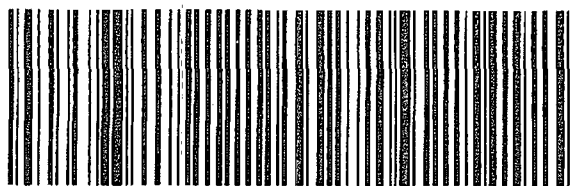
WED - 02 FEB A2
PRIORITY OVERNIGHT

AB SGRA

77099

TX-US
IAH

Part # 1561-4B-431 RIT2 05/10



506C1/B2C2/DR47

Data File: \\alsus008\target\chem\FID-8.i\110207.b\FID80005.D
Date : 07-FEB-2011 13:26

Client ID:

Sample Info: KER500

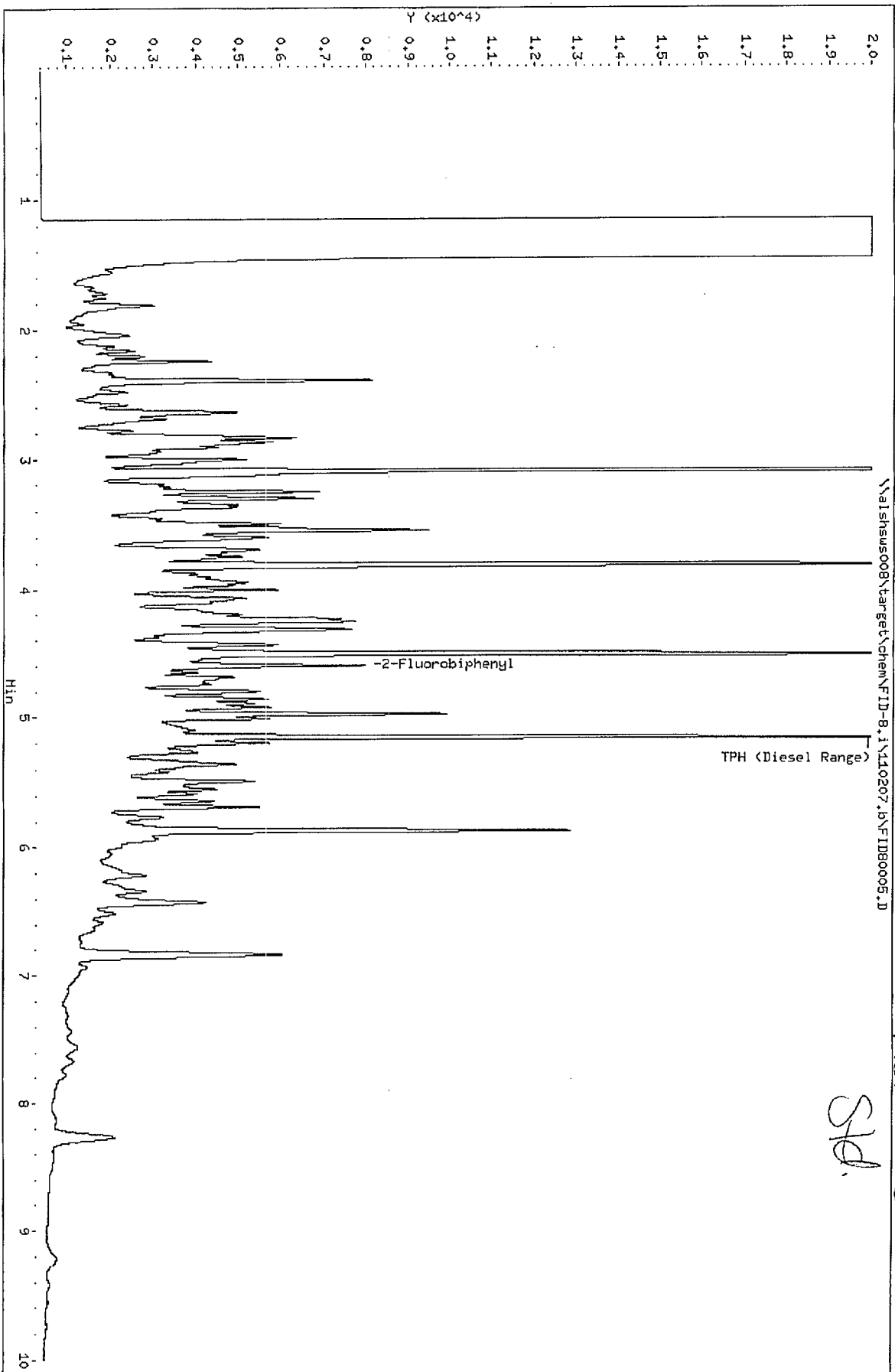
Purge Volume: 30.0

Column Phase: RTX-5

Instrument: FID-8.i

Operator: AJS HQU

Column diameter: 530.00



Kerosene
Std.

Data File: \\alsus008\target\chem\FID-8.i\110207.b\FID80014.D
Date : 07-FEB-2011 15:26

Client ID:

Sample Info: 1102086-01A

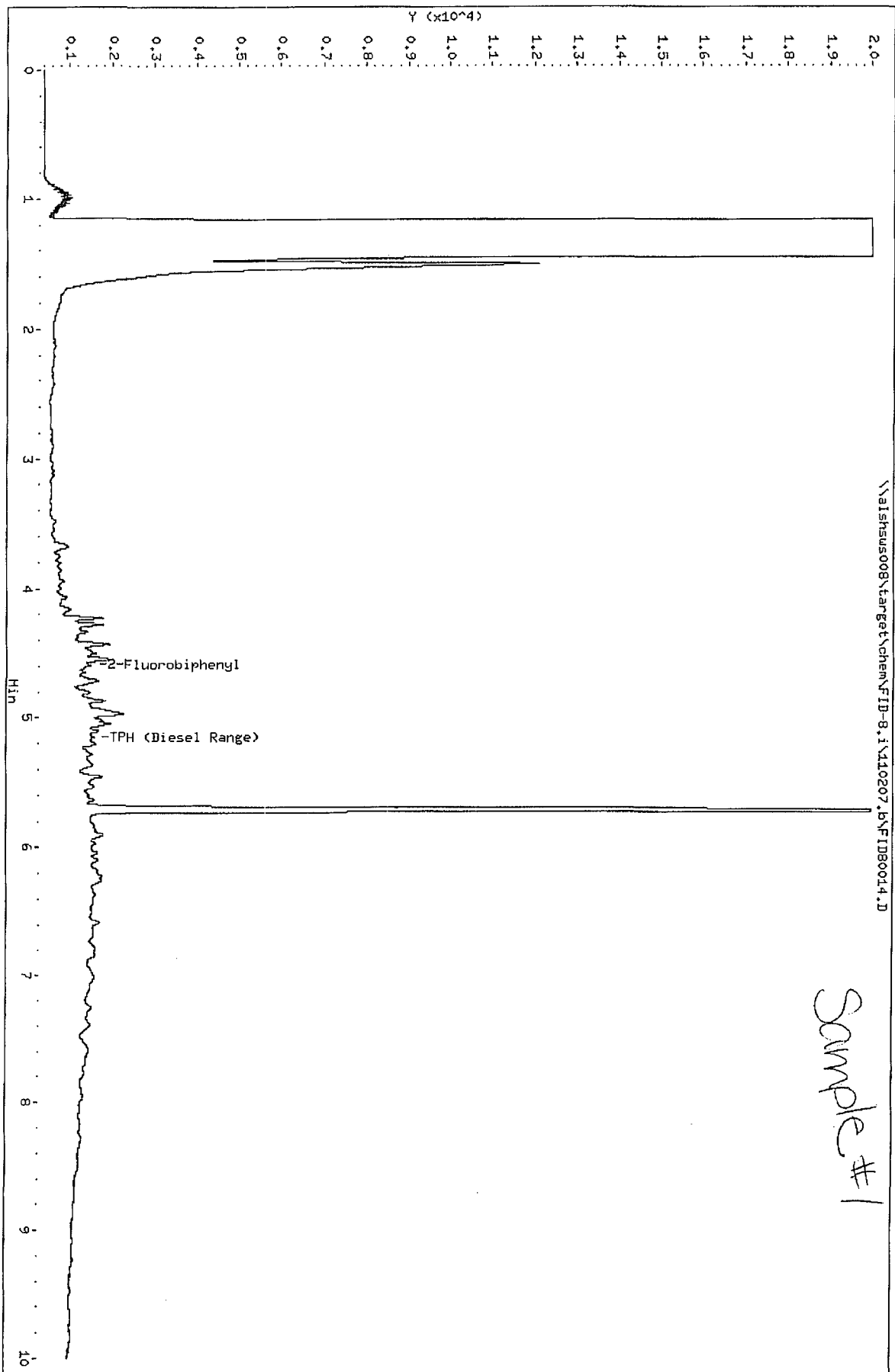
Column phase: RTX-5

Instrument: FID-8.i

Operator: ALS HQU

Column diameter: 530.00

Page 2



Data File: \\alshsus008\target\chem\FID-8.i\110207.b\FID80015.D

Date : 07-FEB-2011 15:38

Client ID:

Sample Info: 1102086-02A

Column Phase: RTX-5

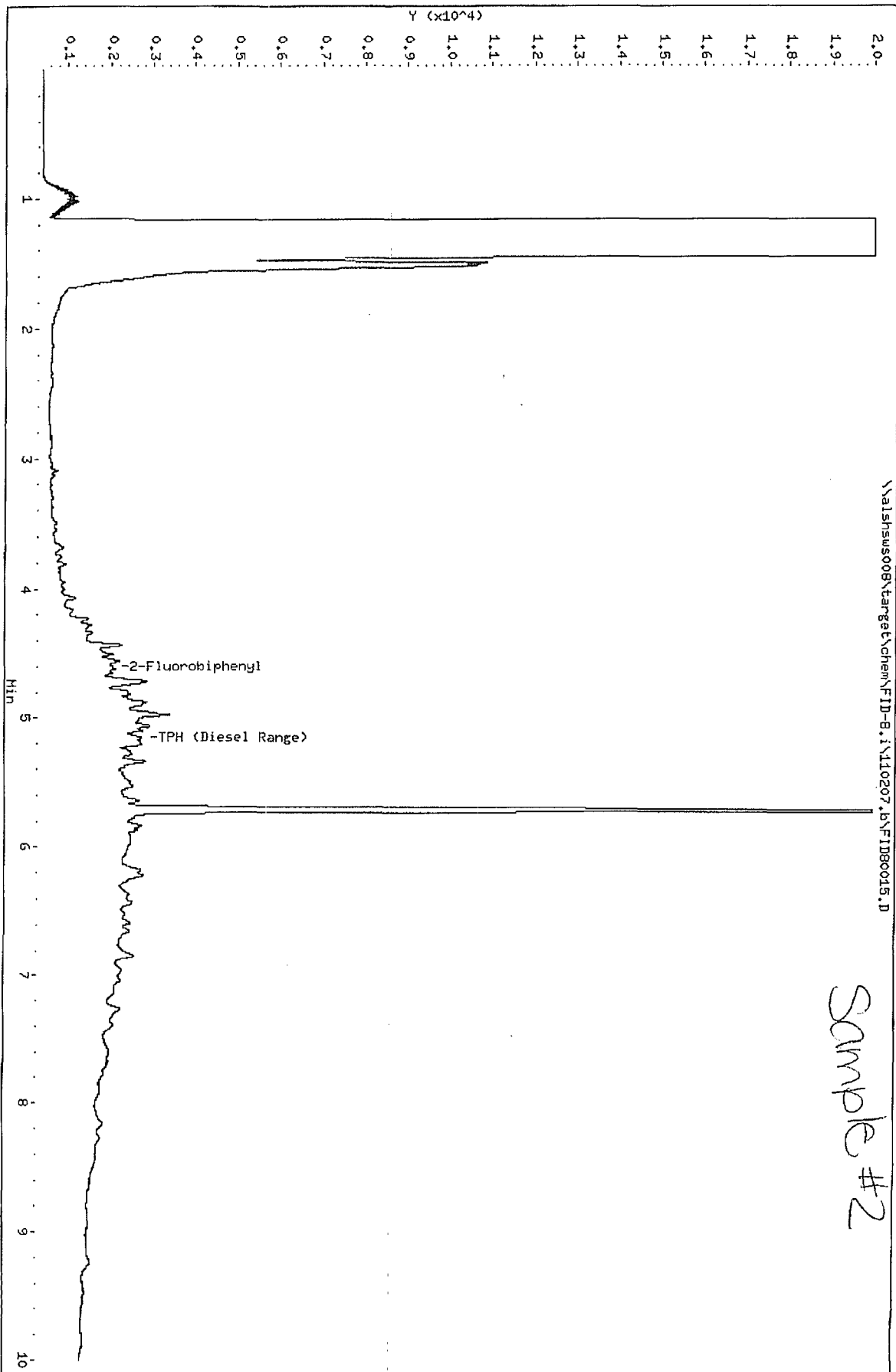
Instrument: FID-8.i

Operator: ALS HQ

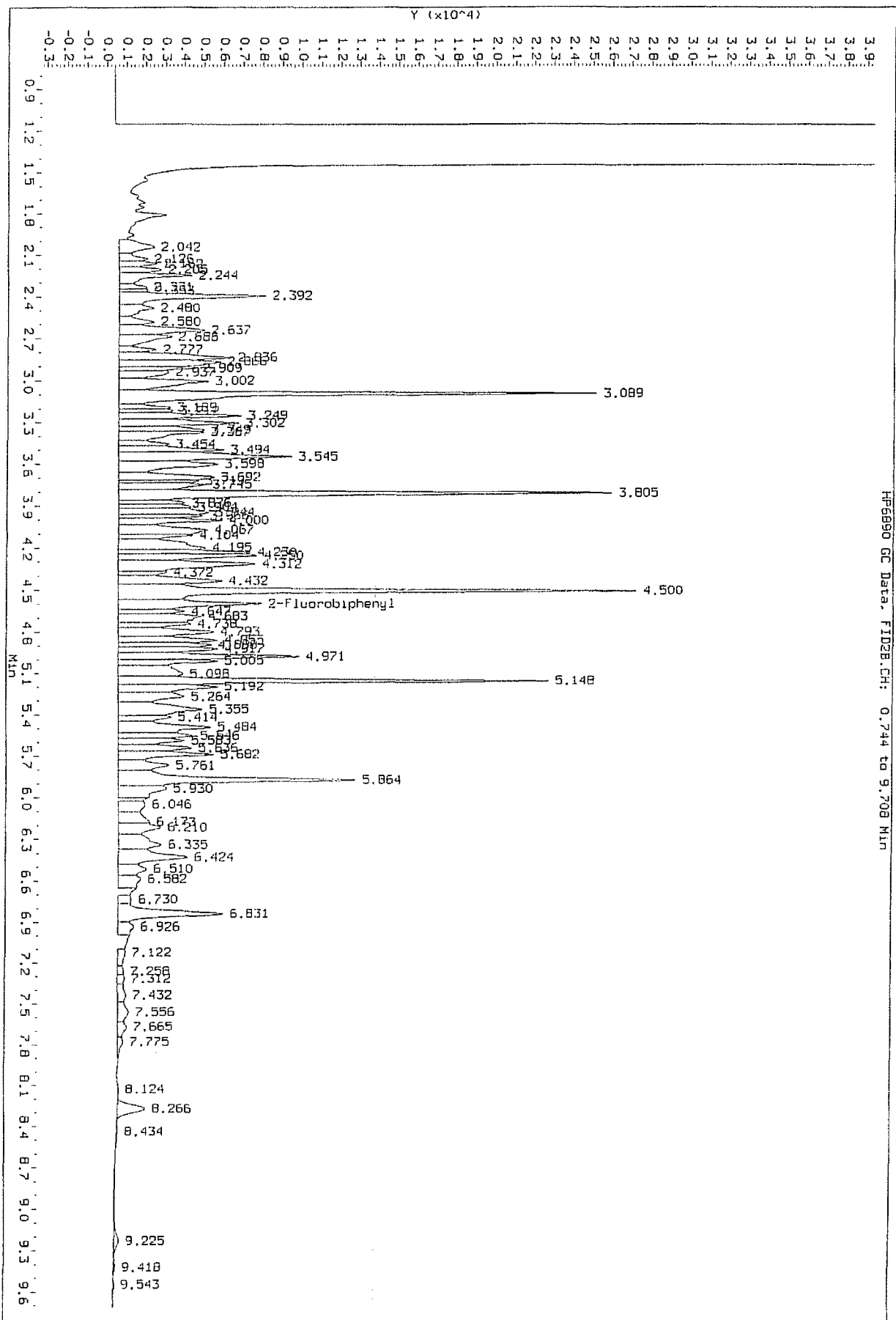
Column diameter: 530.00

\\alshsus008\target\chem\FID-8.i\110207.b\FID80015.D

Sample #2

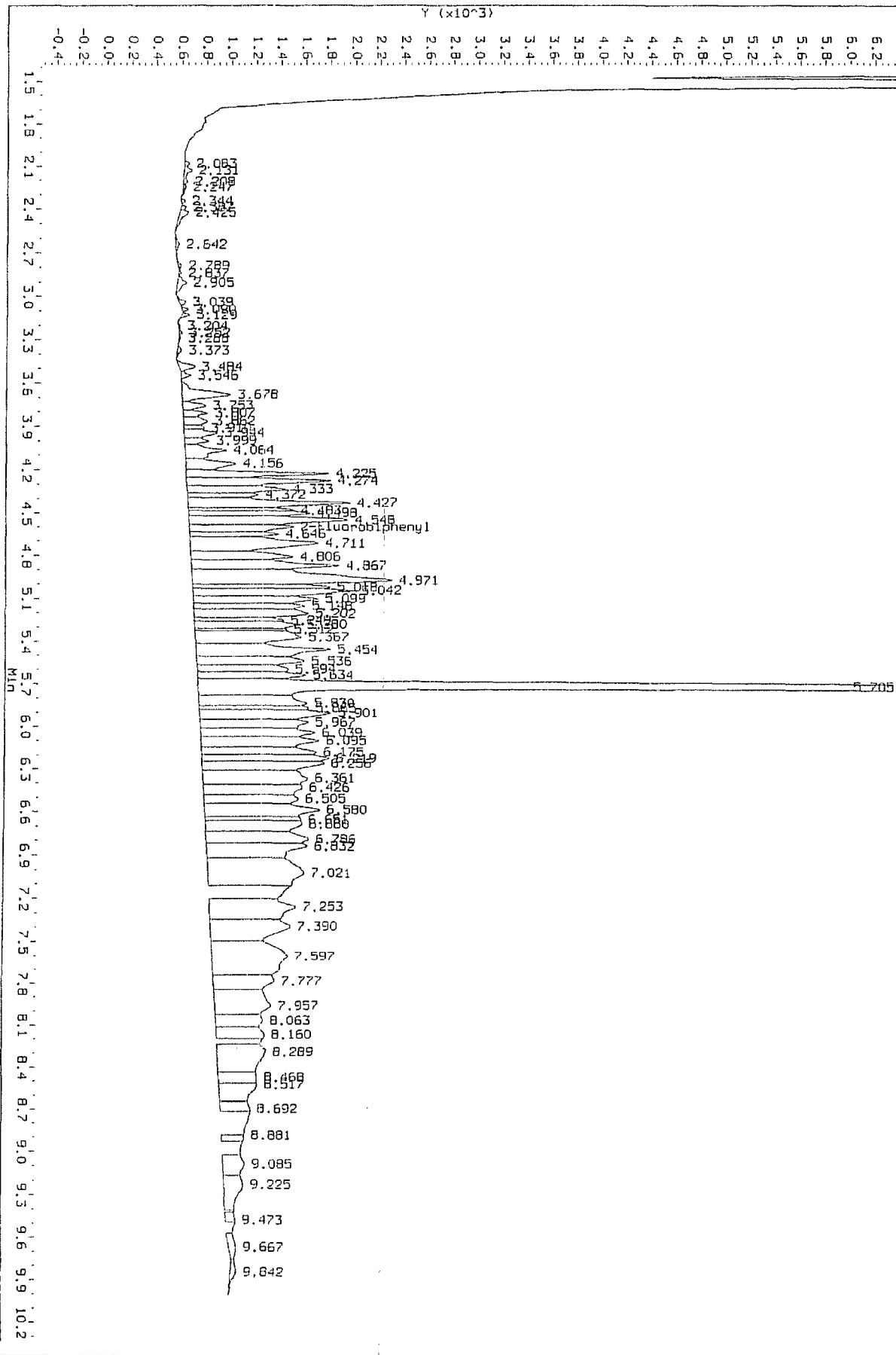


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Injection Date: 07-FEB-2011 13:26
Instrument: FID-8.1
Client Sample ID:

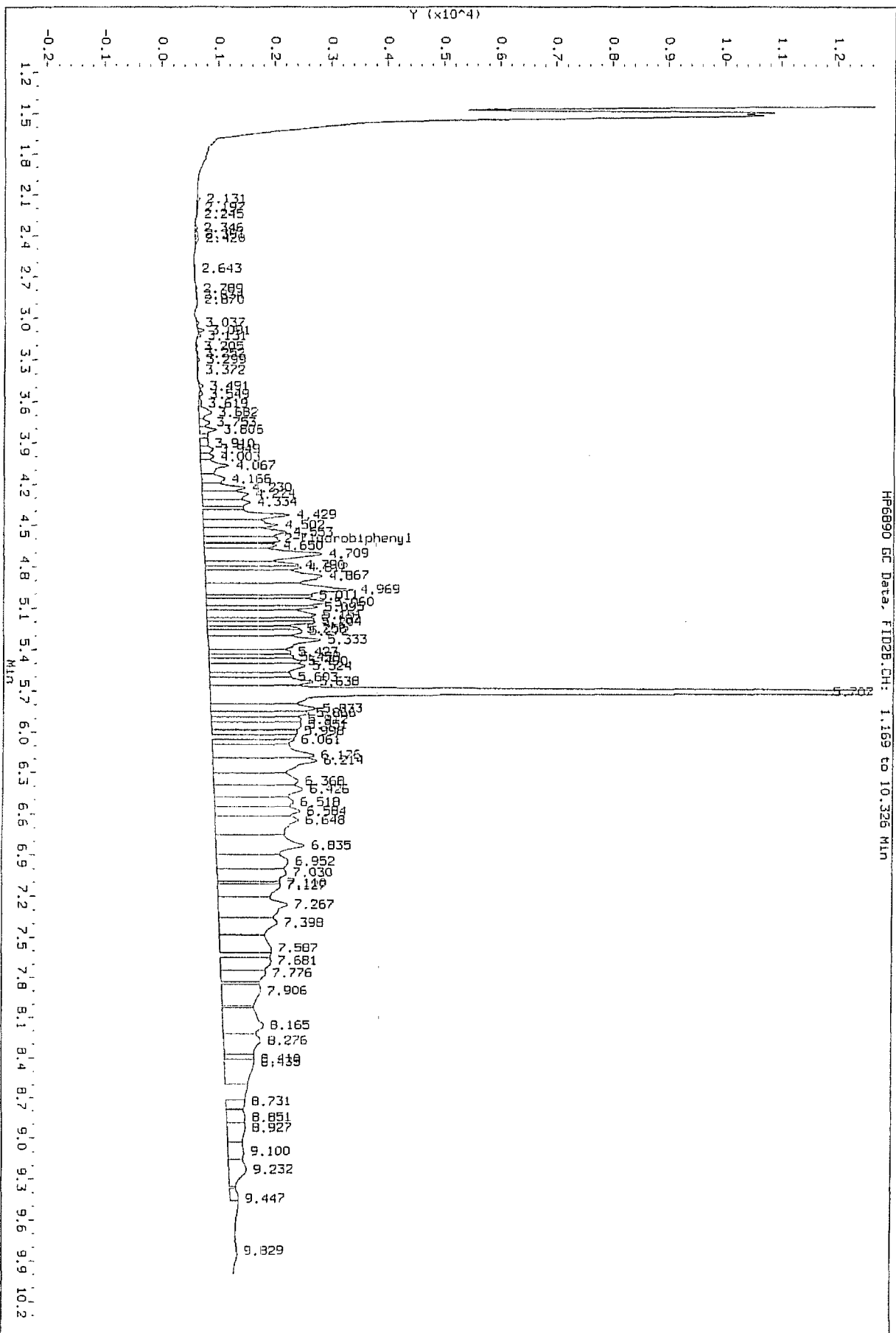


Data File: \\slshws008\target\chem\FID-B.1\110207.b\FIDB0014.D
Injection Date: 07-Feb-2011 15:26
Instrument: FID-B.1
Client Sample ID:

HP6890 GC Data, FID2B.CH: 1.393 to 10.320 Min



Data File: \\alshws008\target\chem\FID-8.1\10207.b\FID80015.D
Injection Date: 07-FEB-2011 15:38
Instrument: FID-8.1
Client Sample ID:



Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Saturday, January 29, 2011 10:18 AM
To: Moore, Darrell; Chavez, Carl J, EMNRD; mleighton@lovington.org
Cc: Lackey, Johnny
Subject: HOLLY PIPELINE SPILL

Carl,

At Lovington, we had a spill of 20 bbls of gas oil due to a malfunction of a Relief Valve. We are picking up what we can with vacuum trucks and have front end loaders picking up the contaminated soil. We will send the C-141 monday.

Sent from my Palm Pre on the Now Network from Sprint

On Jan 27, 2011 10:16 AM, Moore, Darrell <Darrell.Moore@hollycorp.com> wrote:

See below.

From: Hutchings, Charles
Sent: Thursday, January 27, 2011 10:15 AM
To: Moore, Darrell; Terry, Steve
Subject: TK-104A Water Jet Cutting

Contractor will arrive today around 5 pm. We will start the water jetting on Jan 28, 2011 sometime after 8 am.

Charles Hutchings

Asst. Maintenance Superintendent

Navajo Refining Company

P.O. Box 2110

7406 South Main

Lovington, NM 88260

(575) 396-5821 Office

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Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Thursday, January 27, 2011 8:01 AM
To: Chavez, Carl J, EMNRD; mleighton@lovington.org
Subject: RE: TK 104A Lovington

Update on Tank 104A

There were some communication issues with the previous email I sent out. After following up with our crews in Lovington, here is the full story:

Tank 104A was being cleaned as part of our normal schedule of cleaning tanks. It was emptied and cleaned. The floor and walls were then washed using a high pressure washer. The water from that wash procedure was then squiggied out and the floor was allowed to dry. The "stain" that I mentioned in the previous email is inside the tank on the steel floor of the tank. Something is seeping back up thru two holes in the floor. We don't know if the tank had these two holes BEFORE we started cleaning the tank....or if the pressure washing caused the two holes. Both holes are what we describe as pinholes. The "stain" is mostly (maybe all) water.

We are going to cut out that section of the floor of the tank and then we can hopefully see if there is a hydrocarbon leak under that area. If the City of Lovington and/or OCD would like to send someone to look at that area once we cut the floor out, we would be glad to accommodate them.

I'll keep you updated on any new information.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Wednesday, January 26, 2011 4:20 PM
To: Moore, Darrell
Subject: RE: TK 104A Lovington

Thank you.

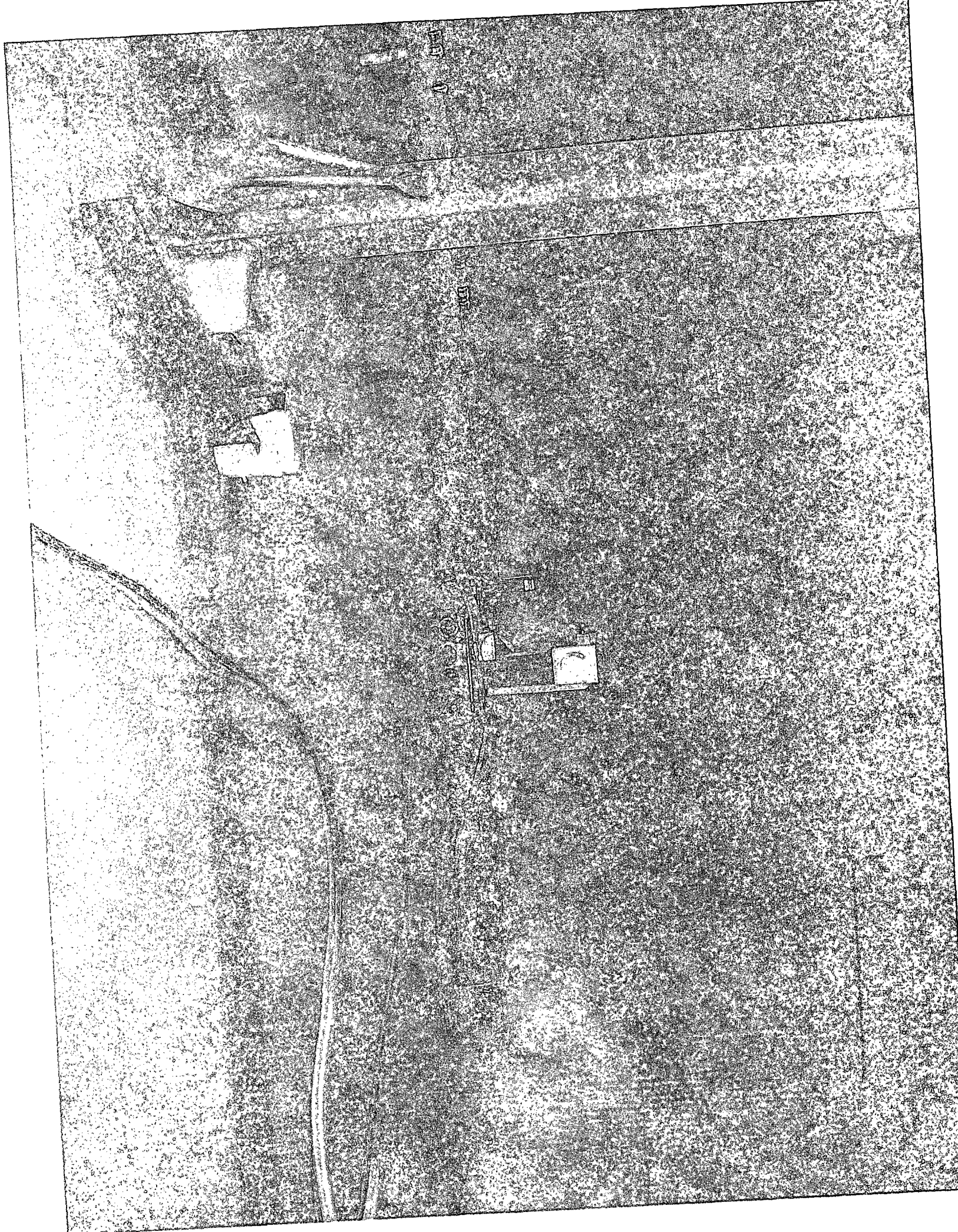
Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

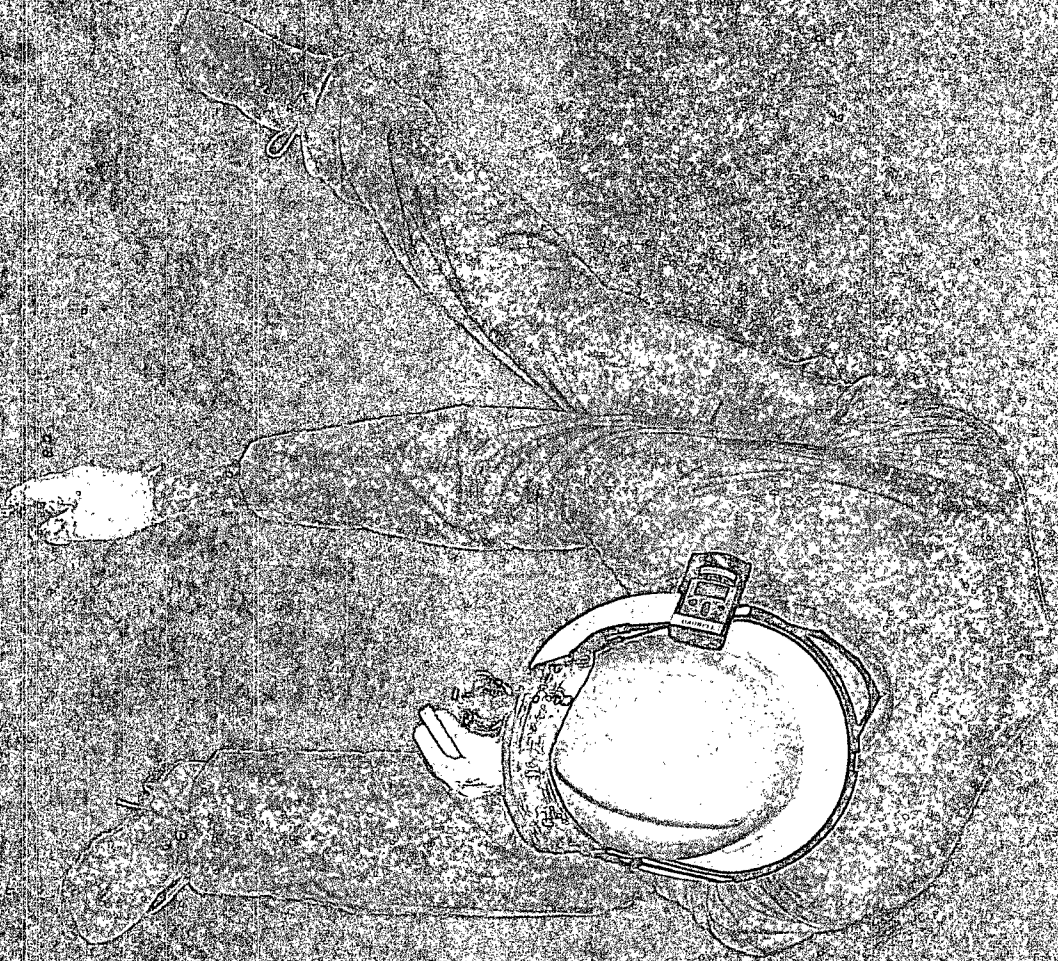
From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Wednesday, January 26, 2011 8:28 AM
To: Chavez, Carl J, EMNRD; mleighton@lovington.org; Lackey, Johnny
Subject: TK 104A Lovington

Gentlemen

During routine inspections, it was noticed that there was a stain near TK 104A in Lovington (which is in Kerosene service). The tank will be emptied and inspected for leaks. This tank is on the south end of the plant. Navajo will provide updates as soon as possible.

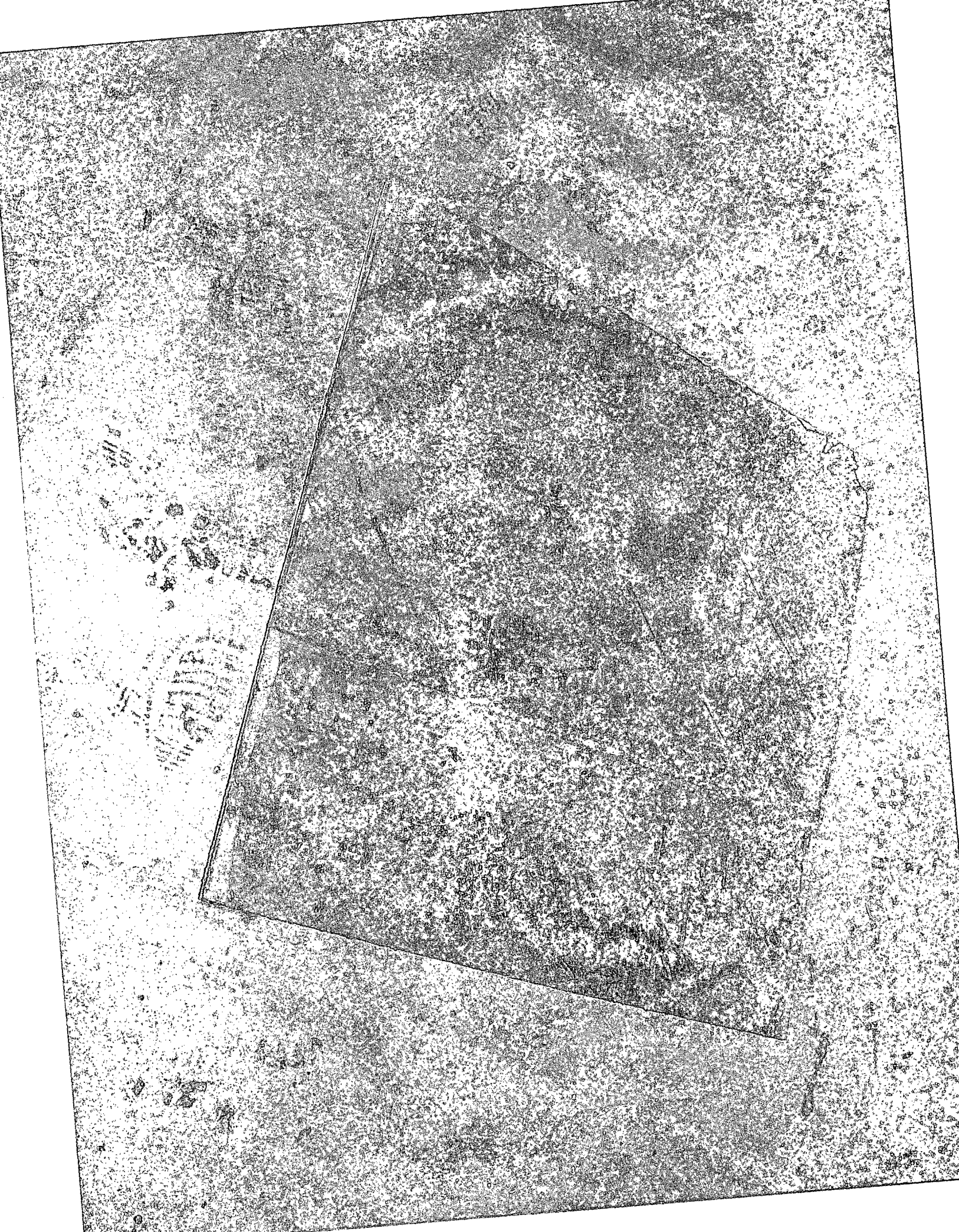
Darrell Moore











Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Thursday, January 27, 2011 8:01 AM
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Subject: RE: TK 104A Lovington

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Tank 104A was being cleaned as part of our normal schedule of cleaning tanks. It was emptied and cleaned. The floor and walls were then washed using a high pressure washer. The water from that wash procedure was then squiggied out and the floor was allowed to dry. The "stain" that I mentioned in the previous email is inside the tank on the steel floor of the tank. Something is seeping back up thru two holes in the floor. We don't know if the tank had these two holes BEFORE we started cleaning the tank....or if the pressure washing caused the two holes. Both holes are what we describe as pinholes. The "stain" is mostly (maybe all) water.

We are going to cut out that section of the floor of the tank and then we can hopefully see if there is a hydrocarbon leak under that area. If the City of Lovington and/or OCD would like to send someone to look at that area once we cut the floor out, we would be glad to accommodate them.

I'll keep you updated on any new information.

From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Wednesday, January 26, 2011 4:20 PM
To: Moore, Darrell
Subject: RE: TK 104A Lovington

Thank you.

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/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [<mailto:Darrell.Moore@hollycorp.com>]
Sent: Wednesday, January 26, 2011 8:28 AM
To: Chavez, Carl J, EMNRD; mleighton@lovington.org; Lackey, Johnny
Subject: TK 104A Lovington

Gentlemen

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Darrell Moore

Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
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Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Strange, Aaron [aaron.strange@hollycorp.com]
Sent: Friday, October 15, 2010 4:09 PM
To: Chavez, Carl J, EMNRD; Monzeglio, Hope, NMENV; Dade, Randy, EMNRD; Hill, Larry, EMNRD
Cc: Moore, Darrell; Lackey, Johnny
Subject: C-141 final report
Attachments: 2010-10-03 H-102 Fire.pdf

Carl, Randy, Buddy, and Hope,

Please see the attached C-141.

Thanks,

Aaron Strange
Environmental Technician, Senior

Environmental Department
Navajo Refining Co, LLC
Artesia NM
Off: (575) 746-5468
Cell: (575) 703-5057

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State of New Mexico
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Oil Conservation Division
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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
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Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release: Fire (Naphtha inside of H-102)	Volume of Release: NA	Volume Recovered: NA
Source of Release: Leaking tub (Naphtha) inside the reboiler (H-102)	Date and Hour of Occurrence: 10/03/10 ~ 03:15	Date and Hour of Discovery: 10/03/10 ~ 04:15
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? Gabriela Combs	Date and Hour: 10/03/2010 at ~04:50 to Larry Johnson Carl Chavez (Local OCD), 10/03/2010 at ~04:53 to Hope Monzeglio (NMED), and 10/03/2010 at ~04:57 to Carl Chavez (OCD Santa Fe).	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

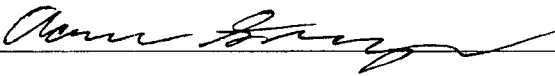
Describe Cause of Problem and Remedial Action Taken.*

On 10/03/2010 at ~ 04:15 a fire was noticed coming out of the inspection doors of the convection section of H-102. Earlier at ~ 03:00 the refinery experienced a power loss that caused the pumps to go down that pump to H-102. These pumps were brought back up at ~ 03:11. It is possible that when these pumps shutdown after the power loss, the sudden loss of flow, followed by a sudden increase of flow upon the pump restart may have produced a hydraulic shock on the weakened area of the tube, contributing to form the observed hole. As a result, the naphtha product leaked outside the tube, starting the fire in the convection section of the reboiler. The leaking tube was removed and replaced.

Describe Area Affected and Cleanup Action Taken.*

The area affected was inside convection section of the reboiler (H-102). A tube ruptured and leaked naphtha which started the fire. The fire was extinguished with foam at ~ 04:50. No hydrocarbons spilled on the ground. Only foam on the concrete, which was directed to the sewer. The fire was contained inside the reboiler's box at all times. There were no injuries or other damages. Smoke was visible out of the H-102 stack.

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 <input type="checkbox"/>
Date: 10/15/2010	Phone: 575-703-5057		

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Monday, August 16, 2010 3:16 PM
To: Johnson, Larry, EMNRD; Chavez, Carl J, EMNRD
Cc: Michael Leighton; Strange, Aaron
Subject: Waste Water Overflow at Lea Refinery
Attachments: Waste Water Overflow.pdf

Gentlemen

Attached, please find the C-141 for an overrun of our waste water system last Tuesday during the heavy rainstorm in that area.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

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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
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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?	<input type="checkbox"/> Yes x No x Not Required				
By Whom?	If YES, To Whom?				
Was a Watercourse Reached?	<input type="checkbox"/> Yes x No				
If YES, Volume Impacting the Watercourse.					

If a Watercourse was Impacted, Describe Fully.*

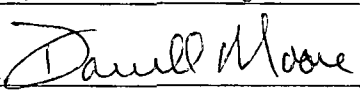
Describe Cause of Problem and Remedial Action Taken.*

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 NMOC 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 NMOC 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, NMOC 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 <input type="checkbox"/>
Date: 8/16/10	Phone: 575-748-3311		

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Monday, August 16, 2010 3:11 PM
To: Johnson, Larry, EMNRD; Chavez, Carl J, EMNRD
Cc: Michael Leighton
Subject: Soft Water Spill
Attachments: Soft Water Spill.pdf

Gentlemen

Attached is the C-141 for a spill of soft water we had at the Lovington Refinery.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Revised October 10, 2003

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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
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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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

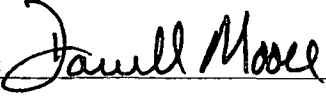
Describe Cause of Problem and Remedial Action Taken.*

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: 	<u>OIL CONSERVATION DIVISION</u>		
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 <input type="checkbox"/>
Date: 8/16/10	Phone: 575-748-3311		

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, August 10, 2010 7:30 AM
To: 'Moore, Darrell'; Michael Leighton
Cc: Lackey, Johnny; Strange, Aaron; VonGonten, Glenn, EMNRD
Subject: RE: Spill at Lovington

Darrell:

What is the Tank No. and chemical contents of the tank that the spill occurred from? 5000 mmhos/cm specific conductivity is elevated. Some sampling consistent with the chemical contents of tank is likely required for this "Minor Release" to confirm that the 20.6.2.3103 NMAC and/or 20.6.2.7 NMAC Toxic Pollutants were not present. Based on the chemical contents of the tank, the OCD expects some samples to be collected to determine whether some excavation work needs to be conducted for this "Minor Release". Thanks.

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/oecd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Monday, August 09, 2010 2:23 PM
To: Chavez, Carl J, EMNRD; Michael Leighton
Cc: Lackey, Johnny; Strange, Aaron
Subject: Spill at Lovington

Carl and Mike

Steve Terry notified me at 1:50 pm today that a water valve in our water softening unit at the Lovington facility had malfunctioned and overran a tank. The spill consists of 10 bbl of water with a conductivity of 5000 mmho/cm. The spill is located near the RO Unit and didn't spill enough to over run the road which is directly west of the unit. The spilled water has soaked in so no standing water was available to be vacuumed up.

A spill report will be filled out by Aaron Strange and sent to you in a timely manner.

If there are any questions, please contact me at 575-746-5281.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Strange, Aaron [aaron.strange@hollycorp.com]
Sent: Wednesday, July 07, 2010 11:38 AM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD; Hill, Larry, EMNRD
Cc: Moore, Darrell; Lackey, Johnny
Subject: C-141 for TK-1204 Spill at Lovington
Attachments: 2010-06-22 Spill TK-1204 C-141.pdf

Carl, Randy, and Buddy,

Please see the attached C-141 form.

Thanks,

Aaron Strange
Environmental Technician, Senior

Environmental Department
Navajo Refining Co, LLC
Artesia NM
Off: (575) 746-5468
Cell: (575) 703-5057

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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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

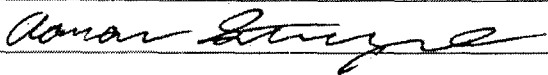
Describe Cause of Problem and Remedial Action Taken.*

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 NMOC 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 NMOC 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, NMOC 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 <input type="checkbox"/>
Date: 7/07/10	Phone: 575-703-5057	

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, April 21, 2010 4:18 PM
To: 'Strange, Aaron'
Cc: Chavez, Carl J, EMNRD
Subject: Release Notifications & C-141s for Navajo Refining Company (GW-14 and GW-28)

Aaron:

OCD would appreciate notification e-mails with a copy to the OCD District Supervisor on releases with an indication of whether a C-141 Form is to follow. As I mentioned at refineries, where the discovery of leakage from pipelines, tanks, etc. are not known, it is best to take the conservative approach to reporting all of these type of spills/releases where the volume is not known. And on all fire and explosions, Navajo Refining Company seem to be following the permit condition on reporting, etc. Thank you.

Please contact me if you have questions. Thank you.

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/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, April 21, 2010 4:34 PM
To: 'Lackey, Johnny'
Cc: VonGonten, Glenn, EMNRD; Monzeglio, Hope, NMENV
Subject: RE: NAVAJO UNDERGROUND LINES

Johnny:

Sorry, I don't think OCD is very comfortable with an approach to leak detection at pipelines where the refinery implements a repair or replacement without corrective actions or investigation to determine the extent of the contamination, but attempts to rely on downgradient monitoring wells, recovery systems, or the addition of a monitor well to detect any contamination from leaky pipelines or infrastructure at a refinery.

If allowed, this would be allowing the refinery to openly contaminate the water resources of the state. However, this method with active investigation and corrective action to remediate or remove point source(s) contamination may address this concern, but otherwise, OCD would be allowing Navajo Refining Company to openly contaminate New Mexico's water resources. OCD cannot allow this.

Regarding the discovery of pipeline releases, yes C-141s are needed and I notice that while the contents of Tank 413 (older distillate tank) is listed in your most recent submittal of above ground tank schedule for the discharge permit, Tank 115 and its information has not been updated on our above ground tank schedule. What does Tank 115 contain and how old is it? Please update the tank list and tank diagram to include all updated tanks that are missing from the existing table in the OCD file by May 5, 2010 so we may keep the tank list and any new updated tank diagrams showing the location of each new tank installed by the refinery. Thank you.

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/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Lackey, Johnny [mailto:Johnny.Lackey@hollycorp.com]
Sent: Wednesday, April 21, 2010 4:10 PM
To: Chavez, Carl J, EMNRD
Cc: Whatley, Michael; Moore, Darrell; Douglas_Wilson@Praxair.com
Subject: RE: NAVAJO UNDERGROUND LINES

Thanks for the prompt reply Carl.

The ultrasonic testing that you refer to is offered through Praxair's Alliance Partner, IMPro Technologies. This is the Guided Wave UT Technology (GWUT) that Navajo initially considered but decided this was not the best solution for our leak detection needs. Praxair also offers the Tracer Tight leak detection system which is the process Navajo is asking the OCD to evaluate for approval. It is our belief that the TracerTight Leak Detection system is the most sensitive and most appropriate method to test underground piping within the refineries.

The ultimate advantage of the TracerTight leak detection is the identification of a true failure at the onset, when the failure mechanism is very small and produces little effect to the environment. The sensitivity of TracerTight system, 0.05 gallons per hour, cannot be matched by either hydrostatic testing or GWUT inspection. It would be probable that leaks missed by these two other methods would continue to increase in size and produce contamination levels detrimental to the environment. Not to mention the disruption in refinery operations and water waste during hydrostatic testing methods.

Navajo is best served both environmentally and operationally by the TracerTight leak detection methods. This benefit is also compounded by the fact that buried piping can be tested in conjunction with tank testing already in progress. Any associated piping downstream from an inoculated tank is testable using the TracerTight method. If a leak is detected through use of this technology, the line is dug up, if a leak is confirmed it is repaired and areas around the leak are UT'd to determine if there are additional areas that may need further investigation, repair or replacement of that segment of line.

Navajo will submit the C-141 forms for these leaks. The leaks have been repaired. We currently have monitor wells and recovery trenches down gradient from these leaks.

Johnny Lackey
Environmental Manager
Navajo Refining Company, L.L.C.
Office - 575-746-5490
Cell - 972-261-8075
Fax - 575-746-5451
Johnny.Lackey@hollycorp.com

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From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Wednesday, April 21, 2010 6:55 AM
To: Lackey, Johnny
Cc: Whatley, Michael; Moore, Darrell; Schmidlen, Jeff; Douglas_Wilson@Praxair.com
Subject: RE: NAVAJO UNDERGROUND LINES

Johnny:

Good morning. The OCD is in receipt of your request for approval of the Praxair technology and is evaluating your request. I am curious as to why Navajo is also not including the ultrasonic wall thickness (Impro) monitoring that complimented Praxair's technology at the time OCD received joint presentations from Praxair and Impro. Is Navajo forgetting the Impro services component of pipeline testing to determine when wall thickness decreases to a point of repair and/or replacement?

Also, OCD will be checking the chemicals in the associated tanks referenced in the leaky pipelines as over time these leaks become point sources for ground water contamination and depending on the days, months, years, etc. Therefore, by receipt of this e-mail, please submit a C-141 for the releases so Navajo and OCD can track corrective actions performed to fix the leaks. Also, if Navajo did not dig out around the leaks to remove the source of contamination, it should proposed monitoring of the ground water downgradient at a minimum to determine if there is a ground water contamination problem downgradient from the leaky lines.

Thank you.

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/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Lackey, Johnny [mailto:Johnny.Lackey@hollycorp.com]
Sent: Tuesday, April 20, 2010 12:51 PM
To: Chavez, Carl J, EMNRD
Cc: Whatley, Michael; Moore, Darrell; Schmidlen, Jeff; Douglas_Wilson@Praxair.com
Subject: NAVAJO UNDERGROUND LINES

Carl,

As you are aware, Navajo has employed Praxair Services, Inc. (Praxair) to set up a comprehensive tank leak detection program throughout the Artesia and Lovington refineries for the majority of our product storage tanks. (The OCD has approved this technology for tank leak detection at Navajo's refineries).

Navajo recently assumed operating responsibilities for 41 pipeline segments located within the Artesia Refinery from Holly Energy Partners (they provide pipeline and terminal services for Holly Corp.), and each of these segments have short runs of underground piping that will be added to our underground line testing program. Navajo also assumed operating responsibilities for some Holly Energy Partner's pipelines at Lovington also. Navajo is in the process of identifying these lines and they will be added to the underground line testing program at Lovington.

Praxair provides leak detection technology for underground pipe testing. To test Praxair's technology for underground piping leak detection, Navajo proactively had Praxair install monitors on selected segments of piping that we assumed operating responsibilities from Holly Energy Partner's. Praxair injected their tracer into these selected segments (13 lines) and their sampling results identified two lines that indicated a leak was present (See attached Praxair Report). Both lines that had suspected leaks are included in the package of assets acquired from Holly Energy Partners. The lines with potential leaks are as follows:

- 1) A section of pipe near Texas Street and just northeast of Tank 413 (Sketch 853)
- 2) A section just south of Tank 115 (Sketch 708).

Both lines were "day lighted" and very small leaks (**drips**) were discovered. There was no saturation of the soil around these leaks and no free product was present. The leaks were repaired.

Navajo is very encouraged with the results of this technology and this would allow Navajo to test the pipes "online" without the use of water for hydrotesting and the resultant disposal of the water.

The Praxair process would let Navajo test the line segments that cannot be removed from service without a scheduled outage allowing testing of these lines within the discharge permit time frame without refinery disruption. This process eliminates the potential for product or oily water release if there is a failure during pressure testing or hydrostatic testing of the lines.

Attached is a spreadsheet listing the additional lines to be added to our test schedule, copies of the isometric drawings for each line segment (The sketch number on the spreadsheet references the corresponding isometric drawing) and Praxair's Report detailing the trial test results mentioned above.

Navajo requests approval from the OCD to utilize Praxair's Leak Detection Technology for underground pipe testing at our Artesia and Lovington refineries. Navajo and Praxair will be happy to meet with the OCD in Santa Fe to present this technology in detail.

Thanks,

Johnny Lackey
Environmental Manager
Navajo Refining Company, L.L.C.
Office - 575-746-5490
Cell - 972-261-8075
Fax - 575-746-5451
Johnny.Lackey@hollycorp.com

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Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, October 09, 2009 9:54 AM
To: 'Moore, Darrell'; 'mleighton@lovington-nm.org'; 'hsncpbm@leaco.net'
Cc: Lackey, Johnny; Terry, Steve
Subject: RE: Navajo Lea Refinery Delineation Report

Received. The agencies will consider this an attachment to the Section 21(A) Environmental Status of the GW-014 discharge permit. Thanks.

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/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Friday, October 09, 2009 8:34 AM
To: Chavez, Carl J, EMNRD; 'mleighton@lovington-nm.org'; 'hsncpbm@leaco.net'
Cc: Lackey, Johnny; Terry, Steve
Subject: FW: Navajo Lea Refinery Delineation Report

This e mail was also sent on July 20, 2009 to all concerned. This delineation was for the spill where the bleeder valves were left open upon start up of the unit after turnaround.

From: Moore, Darrell
Sent: Monday, July 20, 2009 1:45 PM
To: 'Chavez, Carl J, EMNRD'; 'hsncpbm@leaco.net'; 'mleighton@lovington-nm.org'
Subject: FW: Navajo Lea Refinery Delineation Report

Carl,

Please find attached the delineation report for a spill at our Lovington facility that was reported to OCD on February 21, 2009. The C-141 is attached.

From: Susana Rodriguez [mailto:office2@sesi-nm.com]
Sent: Friday, June 12, 2009 2:06 PM
To: Moore, Darrell
Subject: Navajo Lea Refinery Delineation Report

Mr. Moore:

Attached please find the delineation report/work plan for the Lea Refinery. This is the first spill in which three separate areas were affected. If you have any comments or concerns please let me know.

Thank you,

Susana Rodriguez
Administrative Assistant

Safety & Environmental Solutions, Inc.

office: 575.397.0510

fax: 575.393.4388

office2@sesi-nm.com

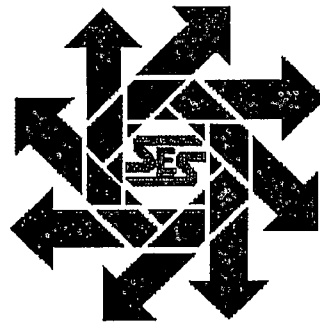
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**Navajo Refining Company
Lea Refinery
Delineation Report/Work Plan
Section 36, Township 16S, Range 36E
Lea County, New Mexico**

May 29, 2009



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

Safety and Environmental Solutions, Inc. (SESI) was engaged by Lea Refining Company to perform delineation services at the Lea Refinery. There were three (3) separate areas located inside of the refinery boundary that were affected and all were near operating facilities.

III. Surface and Ground Water

The closest groundwater of record listed with the New Mexico office of the state engineer is located in the same section, range and township. The depth of water in this well was 55'.

IV. Soils

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

V. Work Performed

On February 26-27, 2009 SESI installed a total of six (6) soil borings inside the spill areas (three separate areas) to determine the vertical extent of contamination.

AREA 1

Borehole #1 was drilled to a depth of 25', Borehole #2 was drilled to a depth of 20'.

AREA 2

Boreholes #3 and Borehole #4 were drilled to a depth of 15' and Borehole #5 was drilled to a depth of 10'.

AREA 3

Borehole #6 was drilled to a depth of 15'.

Samples were retrieved in 5' intervals from all boreholes. All samples were properly preserved and transported under Chain of Custody to Argon Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Total Petroleum Hydrocarbons (EPA Method 8015) and BTEX (EPA Method SW-846-8260).

The results of the analysis are as follows:

Sample ID	TPH (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)
AREA 1 - South							
BH#1 Surface	3880	ND	3600	ND	0.32	2.6	5.1
BH#1 5'	88	ND	80	ND	0.24	1.5	2.4
BH#1 10'	220	30	190	ND	0.054	1.7	2.2

BH#1 15'	390	50	340	ND	0.43	6.8	9.7
BH#1 20'	ND	ND	ND	ND	ND	ND	ND
BH#1 25'	ND	ND	ND	ND	ND	ND	ND
BH#2 Surface	3190	ND	3000	ND	2.4	10	17
BH#2 5'	460	30	430	ND	0.24	1.2	2.5
BH#2 10'	50	ND	50	ND	ND	ND	ND
BH#2 15'	ND	ND	ND	ND	ND	ND	ND
BH#2 20'	ND	ND	ND	ND	ND	ND	ND
AREA 2							
BH#3 Surface	20200	ND	12000	ND	0.090	0.60	1.3
BH#3 5'	20	ND	20	ND	ND	ND	ND
BH#3 10'	ND	ND	ND	ND	ND	ND	ND
BH#3 15'	ND	ND	ND	ND	ND	ND	ND
BH#4 Surface	41600	480	34000	ND	4.6	16	26
BH#4 5'	450	ND	360	ND	ND	0.12	2.8
BH#4 10'	ND	ND	ND	ND	ND	ND	ND
BH#4 15'	ND	ND	ND	ND	ND	ND	ND
BH#5 Surface	24800	ND	20000	ND	ND	2.0	5.7
BH#5 5'	14	ND	14	ND	ND	ND	ND
BH#5 10'	ND	ND	ND	ND	ND	ND	ND
AREA 3 - North							
BH#6 Surface	2110	350	1300	1.8	30	31	42
BH#6 5'	440	50	390	ND	ND	ND	1.4
BH#6 10'	24	ND	24	ND	ND	ND	ND
BH#6 15'	ND	ND	ND	ND	ND	ND	ND

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

The results for all areas indicate there was minimal vertical migration and BTEX readings are below regulatory limits.

VI. Action Plan

It is recommended for both Area 1 and Area 2 to be excavated 6-10" below ground surface for the removal of the most highly contaminated and/or saturated material. For Area 3 the top 4' to 5' of contaminated soil be removed by excavation. The excavated soils will be transported to an NMOCD approved facility for disposal. The excavations will then be backfilled with clean soils.

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

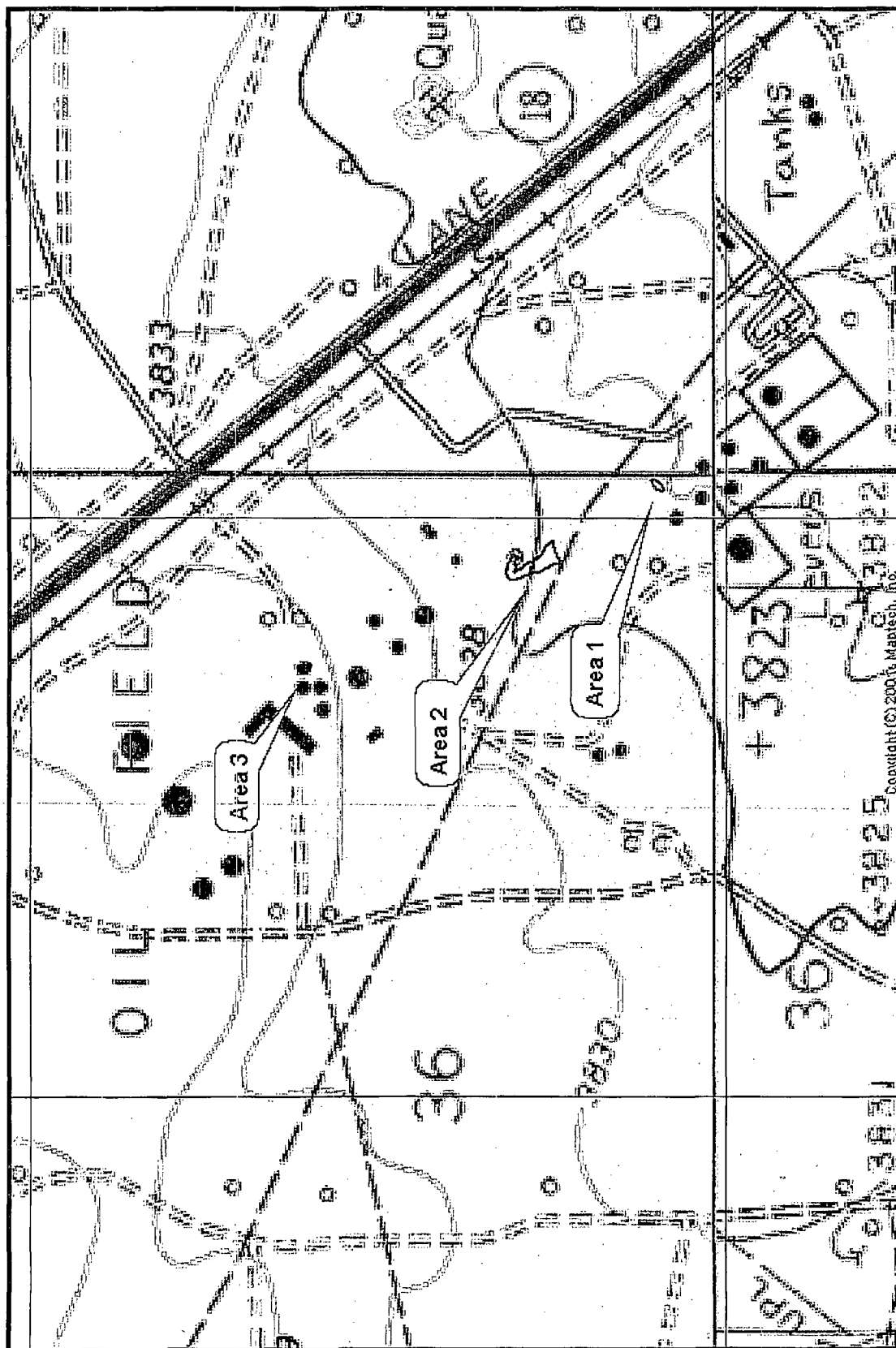


Figure 2
Site Plan

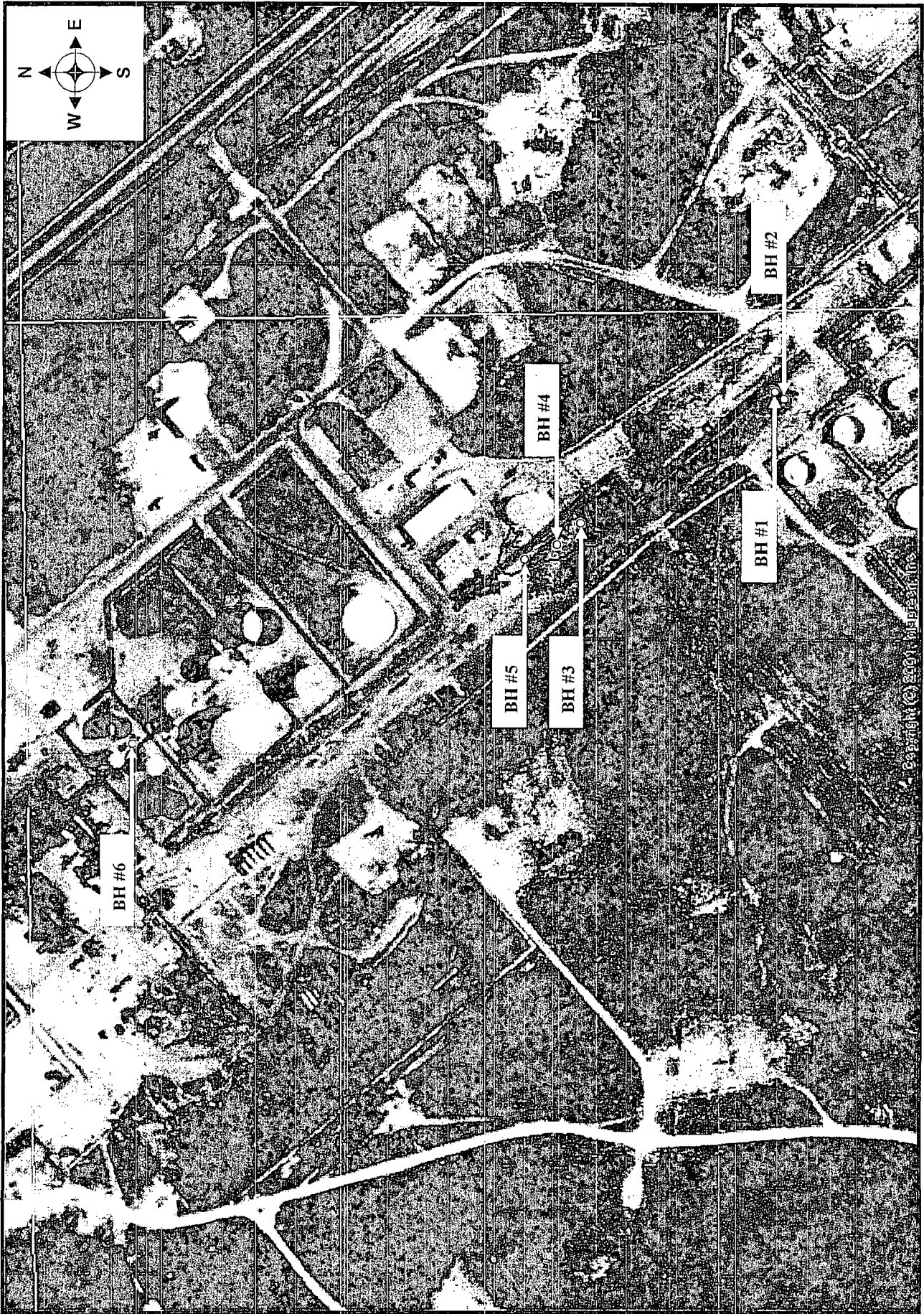


Figure 3

Logs of Boring



Safety & Environmental
Solutions, Inc.

LOG OF BORING BH-1

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
South Location
N32° 52' 33.08", W103° 17' 58.11"

Date, Time Started : 02/26/09, 0845
Date, Time Complete : 02/26/09, 1030
Hole Diameter : 9 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-67

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 ft. Surface sample taken. Dark rock (caliche), staining with H/C odor	D902014-01	3,880	<0.20	0.32	2.6	2.6
1											
2	CB	0									
3					0.5-5 ft. CALICHE, white, hard, coarse H/C odor						
4											
5			CA			D902014-02	88	<0.10	0.24	1.5	1.5
6											
7	CB	14			5-8 ft. CALICHE, H/C odor, no staining						
8											
9					8-10 ft. CALICHE, sandy, white, sand fine grained, with cobbles, no staining, H/C odor						
10						D902014-03	220	<0.10	0.064	1.7	1.7
11											
12	CB	14			10-15 ft. SAND, tan-brown, fine grained, with minimal rock fragments, H/C odor, no staining						
13											
14											
15			SP			D902014-04	390	<0.10	0.43	6.8	6.8
16											
17	CB	13			15-20 ft. SAND, tan-brown, fine grained, no H/C staining or odor						
18											
19											
20						D902014-05	<10	<0.005	<0.005	<0.005	<0.005
21											
22	CB	42	SP/SS		20-25 ft. SAND, tan-brown, fine grained, with sandstone layers, no H/C staining or odor						
23											
24											
25						D902014-05	<10	<0.005	<0.005	<0.005	<0.005

Notes: Boring backfilled with 9 bags bentonite, hydrated.



Safety & Environmental
Solutions, Inc.

LOG OF BORING BH-2

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
South Location
N32° 52' 32.88", W103° 17' 58.32"

Date, Time Started : 02/26/09, 1230
Date, Time Complete : 02/26/09, 1400
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-67

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : Isaac Kincald
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0			AR		0-0.5 ft. Surface sample taken; fill material, sand, clay, rock, dark staining with odor.	D902014-07	3,180	<0.50	2.4	10	10
1											
2	CB	0	CA/SP		0.5-5 ft. CALICHE and SAND, tan- light brown, coarse, heavy H/C odor, no staining						
3											
4											
5						D902014-08	480	<0.10	0.24	1.2	1.2
6											
7	CB	8	CA		5-8 ft. CALICHE, hard rock, light brown (whitish)						
8											
9											
10					8-10 ft. SAND, tan-light brown, coarse grained, with rock fragments.	D902014-09	50	<0.005	<0.005	<0.005	<0.005
11											
12	CB	12	SP/CA		10-15 ft. SAND, tan-light brown with rock fragments, no H/C staining or odor.						
13											
14											
15						D902014-10	<10	<0.005	<0.005	<0.005	<0.005
16											
17	CB	15	SP		15-20 ft. SAND, tan-light brown, no H/C staining or odor.						
18											
19											
20						D902014-11	<10	<0.005	<0.005	<0.005	<0.005

Notes: Boring backfilled with 9 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-3

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
Middle Location
N32° 52' 37.54", W103° 18' 1.51"

Date, Time Started : 02/26/09, 1425
Date, Time Complete : 02/26/09, 1515
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D902014-12	20,200	<0.050	0.090	0.60	0.60
1											
2	CB	0		ML	0.5-5 ft. Top soil (silt) dark black with staining and heavy H/C odor	D902014-13	20	<0.005	<0.005	<0.005	<0.005
3											
4											
5											
6											
7	CB	16			5-9 ft. Top soil (silt) dark black, staining with minimal odor						
8											
9											
10					9-10 ft. CLAY, red	D902014-14	<10	<0.005	<0.005	<0.005	<0.005
11											
12	CB	60		CL	10-14.5 ft. CLAY, red, no H/C staining or odor						
13											
14											
15					14.5-15 ft. SANDY CLAY, tan-light brown, no H/C staining or odor	D902014-15	<10	<0.005	<0.005	<0.005	<0.005
16											
17											
18											
19											
20											

Notes: Boring backfilled with 6 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-4

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
Middle Location
N32° 52' 38.06", W103° 18' 2.30"

Date, Time Started : 02/27/09, 0811
Date, Time Complete : 02/27/09, 0930
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-67

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : Brian Cuellar
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D902015-01	41,600	<0.50	4.8	16	18
1					0-2 ft. Sandy loam, light brown, heavy H/C staining and odor.						
2	CB	12		ML							
3											
4				CA/CL	2-5 ft. CALICHE with SANDY CLAY, limey white with light staining and moderate odor						
5						D902015-02	450	<0.050	<0.050	0.12	0.12
6											
7	CB	9.5									
8											
9					5-10 ft. CALICHE, limey white, very light staining and very light odor						
10						D902015-03	<10	<0.005	<0.005	<0.005	<0.005
11				CA							
12											
13	CB	--									
14											
15					10-15 ft. CALICHE, limey white, sub angular, no H/C staining or odor	D902015-04	<10	<0.005	<0.005	<0.005	<0.005
16											
17											
18											
19											
20											

Notes: Boring backfilled with 5 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-5

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
Middle Location
N32° 52' 39.22", W103° 18' 2.93"

Date, Time Started : 02/27/09, 0940
Date, Time Complete : 02/27/09, 1055
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 : Brian Cuellar
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D902015-05	24,800	<0.40	<0.40	2.0	2.0
1			ML/CA		0-2 ft. Sandy loam and rock, light brown with heavy H/C staining and odor						
2	CB	--									
3					2-5 ft. CALICHE, limy white, sub-angular, no visible staining and moderate odor. Rock bit utilized to drill through hard surface, sample from cuttings.						
4											
5						D902015-06	14	<0.005	<0.005	<0.005	<0.005
6			CA								
7	CB	16			5-10 ft. CALICHE, limy white, sub-angular, no odor or staining.						
8											
9											
10						D802015-07	<10	<0.005	<0.005	<0.005	<0.005
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Notes: Boring backfilled with 5 bags bentonite, hydrated.



Safety & Environmental
Solutions, Inc.

LOG OF BORING BH-6

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
North Location
N32° 52' 48.09", W103° 18' 7.76"

Date, Time Started : 02/27/09, 1300
Date, Time Complete : 02/27/09, 1420
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 : Brian Cuellar
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D902015-08	2,110	1.8	30	31	31
1					0-2 ft. Sandy loam and rock, heavy staining with historic staining, heavy odor 0-3 ft.						
2	CB	--		ML/CA							
3											
4					3-5 ft. CALICHE, limey white, sub-angular, no staining and light odor. Rock bit utilized to break through rock layer.	D902015-09	440	<0.10	<0.10	<0.10	<0.10
5											
6											
7	CB	--		CA	5-10 ft. CALICHE, limey white, sub-angular, no staining or apparent odor. Rock bit utilized.						
8											
9											
10						D902015-10	24	<0.005	<0.005	<0.005	<0.005
11											
12	CB	8			10-14 ft. CALICHE, limey white, sub-angular, no staining or odor.						
13											
14				SC	14-15 ft. CLAYEY SAND, reddish-brown, no H/C staining or odor	D902015-11	<10	<0.005	<0.005	<0.005	<0.005
15											
16											
17											
18											
19											
20											

Notes: Boring backfilled with bentonite, hydrated.

Appendix A

Analytical Results

argon laboratories

06 March 2009

Bob Allen
Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

RE: Navajo Lea Refinery Delineation Project Data

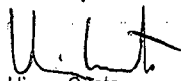
Enclosed are the results for sample(s) received on 02/27/09 16:00 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,



Hiram Cueto
Lab Manager

1227
D902015

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

ANALYSIS

TPH 8015	BTEX
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COMMENTS

SPECIAL INSTRUCTIONS:

Received By: <i>M. Welch</i>	Date: <i>2-27-07</i>	Time: <i>4 pm</i>
Received By:	Date:	Time:
Received By:	Date:	Time:

Received By: Mate

Argon Laboratories Sample Receipt Checklist

Client Name: SESI Date & Time Received: 02/27/09 16:00

Project Name: Navajo Lea Refinery Client Project Number: NAV-09-002

Received By: NF Matrix: Water ☐ Soil ☒

Sample Carrier: Client ☐ Laboratory ☒ Fed Ex ☐ UPS ☐ Other ☐

Argon Labs Project Number: D902015

Shipper Container in good condition? N/A ☐ Yes ☒ No ☐ Samples received in proper containers? Yes ☒ No ☐

Samples received under refrigeration? Yes ☒ No ☐ Samples received intact? Yes ☒ No ☐

Sufficient sample volume for requested tests? Yes ☒ No ☐

Chain of custody present? Yes ☒ No ☐ Samples received within holding time? Yes ☒ No ☐

Chain of Custody signed by all parties? Yes ☒ No ☐ Do samples contain proper preservative? N/A ☒ Yes ☐ No ☐

Chain of Custody matches all sample labels? Yes ☒ No ☐ Do VOA vials contain zero headspace? (None submitted ☒) Yes ☐ No ☐

ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW

Date Client Contacted: _____ Person Contacted: _____

Contacted By: _____ Subject: _____

Comments: _____

Action Taken: _____

ADDITIONAL TEST(S) REQUEST / OTHER

Contacted By: _____ Date: _____ Time: _____

Call Received By: _____

Comments: _____

argon laboratories


Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH #4 Surface	D902015-01	Soil	02/27/09 08:11	02/27/09 16:00
BH #4 5'	D902015-02	Soil	02/27/09 08:30	02/27/09 16:00
BH #4 10'	D902015-03	Soil	02/27/09 08:45	02/27/09 16:00
BH #4 15'	D902015-04	Soil	02/27/09 09:10	02/27/09 16:00
BH #5 Surface	D902015-05	Soil	02/27/09 09:50	02/27/09 16:00
BH #5 5'	D902015-06	Soil	02/27/09 10:05	02/27/09 16:00
BH #5 10'	D902015-07	Soil	02/27/09 10:30	02/27/09 16:00
BH #6 Surface	D902015-08	Soil	02/27/09 13:10	02/27/09 16:00
BH #6 5'	D902015-09	Soil	02/27/09 13:32	02/27/09 16:00
BH #6 10'	D902015-10	Soil	02/27/09 13:45	02/27/09 16:00
BH #6 15'	D902015-11	Soil	02/27/09 14:10	02/27/09 16:00


QC Officer Approval

Argon Laboratories, Inc.

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296

email: info@argonlabs.com

Page 1 of 10

argon laboratories

Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #4 Surface (D902015-01) Soil Sampled: 02/27/09 08:11 Received: 02/27/09 16:00							
Benzene	ND	0.50	mg/kg	100	03/03/09	8021B	
Toluene	4.6	0.50	"	"	"	"	
Ethylbenzene	16	0.50	"	"	"	"	
Xylenes (total)	26	1.0	"	"	"	"	
Surr. Rec.:		103 %			"	"	
BH #4 5' (D902015-02) Soil Sampled: 02/27/09 08:30 Received: 02/27/09 16:00							
Benzene	ND	0.050	mg/kg	10	03/03/09	8021B	
Toluene	ND	0.050	"	"	"	"	
Ethylbenzene	0.12	0.050	"	"	"	"	
Xylenes (total)	2.8	0.10	"	"	"	"	
Surr. Rec.:		104 %			"	"	
BH #4 10' (D902015-03) Soil Sampled: 02/27/09 08:45 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		86 %			"	"	
BH #4 15' (D902015-04) Soil Sampled: 02/27/09 09:10 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		88 %			"	"	

QC Officer Approval

Argon Laboratories, Inc.

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296

email: info@argonlabs.com

Page 2 of 10

argon laboratories

Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #5 Surface (D902015-05) Soil Sampled: 02/27/09 09:50 Received: 02/27/09 16:00							
Benzene	ND	0.40	mg/kg	80	03/03/09	8021B	
Toluene	ND	0.40	"	"	"	"	
Ethylbenzene	2.0	0.40	"	"	"	"	
Xylenes (total)	5.7	0.80	"	"	"	"	
Surr. Rec.:		84 %			"	"	
BH #5 5' (D902015-06) Soil Sampled: 02/27/09 10:05 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		106 %			"	"	
BH #5 10' (D902015-07) Soil Sampled: 02/27/09 10:30 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		86 %			"	"	
BH #6 Surface (D902015-08) Soil Sampled: 02/27/09 13:10 Received: 02/27/09 16:00							
Benzene	1.8	0.50	mg/kg	100	03/03/09	8021B	
Toluene	30	0.50	"	"	"	"	
Ethylbenzene	31	0.50	"	"	"	"	
Xylenes (total)	42	1.0	"	"	"	"	
Surr. Rec.:		112 %			"	"	

QC Officer Approval

Argon Laboratories, Inc.

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #6 5' (D902015-09) Soil Sampled: 02/27/09 13:32 Received: 02/27/09 16:00							
Benzene	ND	0.10	mg/kg	20	03/03/09	8021B	
Toluene	ND	0.10	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	
Xylenes (total)	1.4	0.20	"	"	"	"	
Surr. Rec.:		96 %			"	"	
BH #6 10' (D902015-10) Soil Sampled: 02/27/09 13:45 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		100 %			"	"	
BH #6 15' (D902015-11) Soil Sampled: 02/27/09 14:10 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		85 %			"	"	

QC Officer Approval

Argon Laboratories, Inc.

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #4 Surface (D902015-01) Soil Sampled: 02/27/09 08:11 Received: 02/27/09 16:00							S-09
Gasoline Range Organics	480	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	34000	200	"	"	"	"	
C29 - C35 Range Organics	7100	400	"	"	"	"	
Total Petroleum Hydrocarbons	41600	200	"	"	"	"	
BH #4 5' (D902015-02) Soil Sampled: 02/27/09 08:30 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	360	10	"	"	"	"	
C29 - C35 Range Organics	90	20	"	"	"	"	
Total Petroleum Hydrocarbons	450	10	"	"	"	"	
Surr. Rec.:		106 %			"	"	
BH #4 10' (D902015-03) Soil Sampled: 02/27/09 08:45 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		111 %			"	"	
BH #4 15' (D902015-04) Soil Sampled: 02/27/09 09:10 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #5 Surface (D902015-05) Soil Sampled: 02/27/09 09:50 Received: 02/27/09 16:00							S-09
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	20000	200	"	"	"	"	
C29 - C35 Range Organics	4700	400	"	"	"	"	
Total Petroleum Hydrocarbons	24800	200	"	"	"	"	
BH #5 5' (D902015-06) Soil Sampled: 02/27/09 10:05 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	14	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	14	10	"	"	"	"	
Surr. Rec.:		94 %			"	"	
BH #5 10' (D902015-07) Soil Sampled: 02/27/09 10:30 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		99 %			"	"	
BH #6 Surface (D902015-08) Soil Sampled: 02/27/09 13:10 Received: 02/27/09 16:00							
Gasoline Range Organics	350	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	1300	10	"	"	"	"	
C29 - C35 Range Organics	460	20	"	"	"	"	
Total Petroleum Hydrocarbons	2110	10	"	"	"	"	
Surr. Rec.:		106 %			"	"	

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #6 5' (D902015-09) Soil Sampled: 02/27/09 13:32 Received: 02/27/09 16:00							
Gasoline Range Organics	50	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	390	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	440	10	"	"	"	"	
Surr. Rec.:		93 %			"	"	
BH #6 10' (D902015-10) Soil Sampled: 02/27/09 13:45 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	24	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	24	10	"	"	"	"	
Surr. Rec.:		97 %			"	"	
BH #6 15' (D902015-11) Soil Sampled: 02/27/09 14:10 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		98 %			"	"	

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
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Batch DS00038 - EPA 5030B

Blank (DS00038-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.0410		mg/kg	0.0500		82		
Benzene	ND	0.005	"					
Toluene	ND	0.005	"					
Ethylbenzene	ND	0.005	"					
Xylenes (total)	ND	0.010	"					

LCS (DS00038-BS1)

Prepared & Analyzed: 03/03/09

Benzene	0.047		mg/kg	0.0500		94		
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LCS Dup (DS00038-BSD1)

Prepared & Analyzed: 03/03/09

Benzene	0.050		mg/kg	0.0500		100	6	
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Matrix Spike (DS00038-MS1)

Prepared & Analyzed: 03/03/09

Toluene	0.047		mg/kg	0.0500		94		
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Matrix Spike Dup (DS00038-MSD1)

Prepared & Analyzed: 03/03/09

Toluene	0.046		mg/kg	0.0500		92	2	
---------	-------	--	-------	--------	--	----	---	--

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-----	-------

Batch DS00039 - EPA 3550B

Blank (DS00039-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: <i>p</i> -Terphenyl	0.0970		mg/kg	0.100		97		
Gasoline Range Organics	ND	10	"					
Diesel Range Organics	ND	10	"					
C29 - C35 Range Organics	ND	20	"					
Total Petroleum Hydrocarbons	ND	10	"					

LCS (DS00039-BS1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	234		mg/kg	250		94		
------------------------------	-----	--	-------	-----	--	----	--	--

LCS Dup (DS00039-BSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	228		mg/kg	250		91	3	
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Matrix Spike (DS00039-MS1)


Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	240		mg/kg	250		96		
------------------------------	-----	--	-------	-----	--	----	--	--

Matrix Spike Dup (DS00039-MSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	244		mg/kg	250		98	2	
------------------------------	-----	--	-------	-----	--	----	---	--


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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Notes and Definitions

S-09 Surrogate diluted out of range due to sample dilution.
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference



QC Officer Approval

Argon Laboratories, Inc.

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06 March 2009

Bob Allen
Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

RE: Navajo Lea Refinery Delineation Project Data

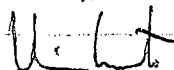
Enclosed are the results for sample(s) received on 02/27/09 16:00 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,







Hiram Cueto
Lab Manager

Argon Labs

2126 W. Marland Ave Hobbs, NM 88240
(505)397-0295 (505)397-0296 info@argonlabs.com

CHAIN OF CUSTODY

1226
D902014

Project No: 11ar-09-002 Project Title: Navajo Lea Refinery Relinquishment Location: Lea Co, nm		Client: SFF Address: 703 E Clinton Hobbs, nm 88240 Contact: 505 397-0500 Phone: Fax:		Client: Address: Bill To:			
Sampler's Name: Isaac Kincaid (print) Signature: 		TURN AROUND TIME RUSH <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> other <input type="checkbox"/> Standard (5 days) <input type="checkbox"/>					
Sample ID	Date	Time	# Containers	Matrix	ANALYSIS	COMMENTS	
BH #1 Sublot 212619	0845	0845	1	Soil			
BH #1 5'	0900	0900	1				
BH #1 10'	0930	0930	1				
BH #1 15'	0955	0955	1				
BH #1 20'	1000	1000	1				
BH #1 25'	1020	1020	1				
BH #2 Sublot 1230	1230	1230	1				
BH #2 5'	1245	1245	1				
BH #2 10'	1300	1300	1				
BH #2 15'	1345	1345	1				
BH #2 20'	1355	1355	1				
Relinquished By: 		Date: 3/26/09 Time: 5pm		Received By: 			Date: 3/26/09 Time: 5pm
Relinquished By: 		Date: 3/27/09 Time:		Received By: Natalie Branco			Date: 2-27-09 Time: 4pm
Relinquished By:		Date: Time:		Received By:			Date: Time:
SPECIAL INSTRUCTIONS:							

Agon Labs
2126 W. Marland Ave Hobbs, NM 88240







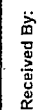
2126 W. Marland Ave Hobbs, NM 88240

(505)397-0295 (505)397-0296 info@argonlabs.com

CHAIN OF CUSTODY

1225

2502012

Project No: NAV-02-005		Project Title: Navajo Lea Refinery Detonation		Location: Lea Co, NM		Sampler's Name: Isaac Kincaid		Sampler's Signature: 		Client: Address: 555 703 E Clinton Hobbs, NM 88240		Contact: Phone: (575) 397-0570 Fax: (575) 397-0570		Bill To: Same	
RUSH		TURN AROUND TIME		Standard (5 days)		Matrix		ANALYSIS		COMMENTS					
Sample ID	Date	Time	# Containers	24 Hour	48 Hour	other									
BH#3 5' 10"	2/26/09	1430	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soil	X	X	X	X				
BH#3 5'	2/26/09	1435	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	↓	X	X	X	X				
BH#3 10'	2/26/09	1450	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	↓	X	X	X	X				
BH#3 15'	2/26/09	1500	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	↓	X	X	X	X				
<div> <div>Relinquished By: </div> <div>Relinquished By: </div> <div>Relinquished By: </div> </div> <div> <div>Received By: </div> <div>Received By: </div> <div>Received By: </div> </div> <div> <div>Date: 2/26/09 Time: 5:00 PM</div> <div>Date: 2/26/09 Time: 4:00 PM</div> <div>Date: 2/26/09 Time: 4:00 PM</div> </div> <div> <div>SPECIAL INSTRUCTIONS:</div> </div>															

Argon Laboratories Sample Receipt Checklist

Client Name: SESI Date & Time Received: 02/27/09 16:00

Project Name: Navajo Lea Refinery Client Project Number: NAV-09-002

Received By: NF Matrix: Water ☐ Soil ☒

Sample Carrier: Client ☐ Laboratory ☒ Fed Ex ☐ UPS ☐ Other ☐

Argon Labs Project Number: D902014

Shipper Container in good condition? Samples received in proper containers? Yes ☒ No ☐

N/A ☐ Yes ☒ No ☐ Samples received intact? Yes ☒ No ☐

Samples received under refrigeration? Yes ☒ No ☐ Sufficient sample volume for requested tests? Yes ☒ No ☐

Chain of custody present? Yes ☒ No ☐ Samples received within holding time? Yes ☒ No ☐

Chain of Custody signed by all parties? Yes ☒ No ☐ Do samples contain proper preservative?
N/A ☒ Yes ☐ No ☐

Chain of Custody matches all sample labels? Do VOA vials contain zero headspace?
Yes ☒ No ☐ (None submitted ☒) Yes ☐ No ☐

ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW

Date Client Contacted: _____ Person Contacted: _____

Contacted By: _____ Subject: _____

Comments: _____

Action Taken: _____

ADDITIONAL TEST(S) REQUEST / OTHER

Contacted By: _____ Date: _____ Time: _____

Call Received By: _____

Comments: _____

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
Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH #1 Surface	D902014-01	Soil	02/26/09 08:45	02/27/09 16:00
BH #1 5'	D902014-02	Soil	02/26/09 09:00	02/27/09 16:00
BH #1 10'	D902014-03	Soil	02/26/09 09:30	02/27/09 16:00
BH #1 15'	D902014-04	Soil	02/26/09 09:55	02/27/09 16:00
BH #1 20'	D902014-05	Soil	02/26/09 10:05	02/27/09 16:00
BH #1 25'	D902014-06	Soil	02/26/09 10:20	02/27/09 16:00
BH #2 Surface	D902014-07	Soil	02/26/09 10:45	02/27/09 16:00
BH #2 5'	D902014-08	Soil	02/26/09 12:45	02/27/09 16:00
BH #2 10'	D902014-09	Soil	02/26/09 13:00	02/27/09 16:00
BH #2 15'	D902014-10	Soil	02/26/09 13:45	02/27/09 16:00
BH #2 20'	D902014-11	Soil	02/26/09 13:55	02/27/09 16:00
BH #3 Surface	D902014-12	Soil	02/26/09 14:30	02/27/09 16:00
BH #3 5'	D902014-13	Soil	02/26/09 14:35	02/27/09 16:00
BH #3 10'	D902014-14	Soil	02/26/09 14:50	02/27/09 16:00
BH #3 15'	D902014-15	Soil	02/26/09 15:00	02/27/09 16:00


QC Officer Approval

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 Surface (D902014-01) Soil Sampled: 02/26/09 08:45 Received: 02/27/09 16:00							
Benzene	ND	0.20	mg/kg	40	03/03/09	8021B	
Toluene	0.32	0.20	"	"	"	"	
Ethylbenzene	2.6	0.20	"	"	"	"	
Xylenes (total)	5.1	0.40	"	"	"	"	
Surr. Rec.:		96 %			"	"	
BH #1 5' (D902014-02) Soil Sampled: 02/26/09 09:00 Received: 02/27/09 16:00							
Benzene	ND	0.10	mg/kg	20	03/03/09	8021B	
Toluene	0.24	0.10	"	"	"	"	
Ethylbenzene	1.5	0.10	"	"	"	"	
Xylenes (total)	2.4	0.20	"	"	"	"	
Surr. Rec.:		94 %			"	"	
BH #1 10' (D902014-03) Soil Sampled: 02/26/09 09:30 Received: 02/27/09 16:00							
Benzene	ND	0.025	mg/kg	5	03/03/09	8021B	
Toluene	0.054	0.025	"	"	"	"	
Ethylbenzene	1.7	0.025	"	"	"	"	
Xylenes (total)	2.2	0.050	"	"	"	"	
Surr. Rec.:		89 %			"	"	
BH #1 15' (D902014-04) Soil Sampled: 02/26/09 09:55 Received: 02/27/09 16:00							
Benzene	ND	0.20	mg/kg	40	03/03/09	8021B	
Toluene	0.43	0.20	"	"	"	"	
Ethylbenzene	6.8	0.20	"	"	"	"	
Xylenes (total)	9.7	0.40	"	"	"	"	
Surr. Rec.:		81 %			"	"	

QC Officer Approval

Argon Laboratories, Inc.

argon laboratories

Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 20' (D902014-05) Soil Sampled: 02/26/09 10:05 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		88 %			"	"	
BH #1 25' (D902014-06) Soil Sampled: 02/26/09 10:20 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		88 %			"	"	
BH #2 Surface (D902014-07) Soil Sampled: 02/26/09 10:45 Received: 02/27/09 16:00							
Benzene	ND	0.50	mg/kg	100	03/03/09	8021B	
Toluene	2.4	0.50	"	"	"	"	
Ethylbenzene	10	0.50	"	"	"	"	
Xylenes (total)	17	1.0	"	"	"	"	
Surr. Rec.:		92 %			"	"	
BH #2 5' (D902014-08) Soil Sampled: 02/26/09 12:45 Received: 02/27/09 16:00							
Benzene	ND	0.10	mg/kg	20	03/03/09	8021B	
Toluene	0.24	0.10	"	"	"	"	
Ethylbenzene	1.2	0.10	"	"	"	"	
Xylenes (total)	2.5	0.20	"	"	"	"	
Surr. Rec.:		77 %			"	"	

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #2 10' (D902014-09) Soil Sampled: 02/26/09 13:00 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		87 %			"	"	
BH #2 15' (D902014-10) Soil Sampled: 02/26/09 13:45 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		90 %			"	"	
BH #2 20' (D902014-11) Soil Sampled: 02/26/09 13:55 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		94 %			"	"	
BH #3 Surface (D902014-12) Soil Sampled: 02/26/09 14:30 Received: 02/27/09 16:00							
Benzene	ND	0.050	mg/kg	10	03/03/09	8021B	
Toluene	0.090	0.050	"	"	"	"	
Ethylbenzene	0.60	0.050	"	"	"	"	
Xylenes (total)	1.3	0.10	"	"	"	"	
Surr. Rec.:		92 %			"	"	

QC Officer Approval

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #3 5' (D902014-13) Soil Sampled: 02/26/09 14:35 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		98 %			"	"	
BH #3 10' (D902014-14) Soil Sampled: 02/26/09 14:50 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		93 %			"	"	
BH #3 15' (D902014-15) Soil Sampled: 02/26/09 15:00 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		89 %			"	"	


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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 Surface (D902014-01) Soil Sampled: 02/26/09 08:45 Received: 02/27/09 16:00							S-09
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	3600	200	"	"	"	"	
C29 - C35 Range Organics	ND	400	"	"	"	"	
Total Petroleum Hydrocarbons	3880	200	"	"	"	"	
BH #1 5' (D902014-02) Soil Sampled: 02/26/09 09:00 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	80	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	88	10	"	"	"	"	
Surr. Rec.:		99 %			"	"	
BH #1 10' (D902014-03) Soil Sampled: 02/26/09 09:30 Received: 02/27/09 16:00							
Gasoline Range Organics	30	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	190	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	220	10	"	"	"	"	
Surr. Rec.:		91 %			"	"	
BH #1 15' (D902014-04) Soil Sampled: 02/26/09 09:55 Received: 02/27/09 16:00							
Gasoline Range Organics	50	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	340	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	390	10	"	"	"	"	
Surr. Rec.:		98 %			"	"	

QC Officer Approval

Argon Laboratories, Inc.

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Safety & Environmental Solutions, Inc.	Project Number: NAV-09-002	Work Order No.: D902014
703 E. Clinton Ave	Project Name: Navajo Lea Refinery Delineation	
Hobbs, NM 88240	Project Manager: Bob Allen	

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 20' (D902014-05) Soil Sampled: 02/26/09 10:05 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	

BH #1 25' (D902014-06) Soil Sampled: 02/26/09 10:20 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		101 %			"	"	

BH #2 Surface (D902014-07) Soil Sampled: 02/26/09 10:45 Received: 02/27/09 16:00							S-09
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	3000	200	"	"	"	"	
C29 - C35 Range Organics	ND	400	"	"	"	"	
Total Petroleum Hydrocarbons	3190	200	"	"	"	"	

BH #2 5' (D902014-08) Soil Sampled: 02/26/09 12:45 Received: 02/27/09 16:00							
Gasoline Range Organics	30	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	430	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	460	10	"	"	"	"	
Surr. Rec.:		102 %			"	"	

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #2 10 ' (D902014-09) Soil Sampled: 02/26/09 13:00 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	50	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	50	10	"	"	"	"	
Surr. Rec.:	104 %				"	"	
BH #2 15 ' (D902014-10) Soil Sampled: 02/26/09 13:45 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:	105 %				"	"	
BH #2 20 ' (D902014-11) Soil Sampled: 02/26/09 13:55 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:	105 %				"	"	
BH #3 Surface (D902014-12) Soil Sampled: 02/26/09 14:30 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	S-09
Diesel Range Organics	12000	200	"	"	"	"	
C29 - C35 Range Organics	8100	400	"	"	"	"	
Total Petroleum Hydrocarbons	20200	200	"	"	"	"	

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #3 5' (D902014-13) Soil Sampled: 02/26/09 14:35 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	20	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	20	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	
BH #3 10' (D902014-14) Soil Sampled: 02/26/09 14:50 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	
BH #3 15' (D902014-15) Soil Sampled: 02/26/09 15:00 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		99 %			"	"	



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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
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Batch DS00038 - EPA 5030B

Blank (DS00038-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: a,a,a-Trifluorotoluene	0.0410		mg/kg	0.0500		82		
Benzene	ND	0.005	"					
Toluene	ND	0.005	"					
Ethylbenzene	ND	0.005	"					
Xylenes (total)	ND	0.010	"					

LCS (DS00038-BS1)

Prepared & Analyzed: 03/03/09

Benzene	0.047		mg/kg	0.0500		94		
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LCS Dup (DS00038-BSD1)

Prepared & Analyzed: 03/03/09

Benzene	0.050		mg/kg	0.0500		100	6	
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Matrix Spike (DS00038-MS1)


Prepared & Analyzed: 03/03/09

Toluene	0.047		mg/kg	0.0500		94		
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Matrix Spike Dup (DS00038-MSD1)

Prepared & Analyzed: 03/03/09

Toluene	0.046		mg/kg	0.0500		92	2	
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703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
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Batch DS00039 - EPA 3550B

Blank (DS00039-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: <i>p</i> -Terphenyl	0.0970		mg/kg	0.100		97		
Gasoline Range Organics	ND	10	"					
Diesel Range Organics	ND	10	"					
C29 - C35 Range Organics	ND	20	"					
Total Petroleum Hydrocarbons	ND	10	"					

LCS (DS00039-BS1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	234		mg/kg	250		94		
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LCS Dup (DS00039-BSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	228		mg/kg	250		91	3	
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Matrix Spike (DS00039-MS1)


Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	240		mg/kg	250		96		
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Matrix Spike Dup (DS00039-MSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	244		mg/kg	250		98	2	
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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Notes and Definitions

S-09 Surrogate diluted out of range due to sample dilution.
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference



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Argon Laboratories, Inc.

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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 Lea Refining Co.	Contact Darrell Moore
Address 7406 S Main Lovington, NM	Telephone No. 575-746-5281
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 Diesel	Volume of Release 100 bbls	Volume Recovered 80 bbls
Source of Release Bleeder left open	Date and Hour of Occurrence 2/21/09 7:30 am	Date and Hour of Discovery 2/21/09 7:45 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson	
By Whom? Johnny Lackey	Date and Hour 2/21/09 7:50 am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The plant has been in turnaround so it has been down. When starting up the plant, rundown lines were being filled. A bleeder was inadvertently left open and the product was spilled.

Describe Area Affected and Cleanup Action Taken.*

The area affected is 150' long by 30' wide on the west side of the plant southwest of the office building. The product was immediately vacuumed up and contaminated soil was removed and put on plastic. We have scheduled a drilling rig for Thursday to delineate vertical extent of spill.

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 <i>Darrell Moore</i>	OIL CONSERVATION DIVISION	
Printed Name: Darrell Moore	Approved by District Supervisor:	
Title: Environmental Manager for Water and Waste	Approval Date:	Expiration Date:
E-mail Address: Darrell.moore@hollycorp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: February 24, 2009 5281	Phone: 575-746-	

* Attach Additional Sheets If Necessary

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



Environmental Division

04-Jun-09

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

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

Re: NAV-04-009-Lea Refining

Work Order : 0906079

Dear Darrell,

ALS Laboratory Group received 5 samples on 5/2/2009 08:30 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 15.

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

Sincerely,

JayLynn F Thibault

Electronically approved by: Glenda H. Ramos

JayLynn F Thibault
Project Manager



Certificate No: T104704231-08-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: 04-Jun-09

Client: Navajo Refining Company
Project: NAV-04-009-Lea Refining
Work Order: 0906079

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>
0906079-01	BH#5 5'	Soil	0905050-19	4/30/2009 14:00	5/2/2009 08:30	<input type="checkbox"/>
0906079-02	BH#5 10'	Soil	0905050-20	4/30/2009 14:25	5/2/2009 08:30	<input type="checkbox"/>
0906079-03	BH#6 5'	Soil	0905050-21	4/30/2009 15:15	5/2/2009 08:30	<input type="checkbox"/>
0906079-04	BH#6 10'	Soil	0905050-22	4/30/2009 15:25	5/2/2009 08:30	<input type="checkbox"/>
0906079-05	BH#6 15'	Soil	0905050-23	4/30/2009 15:40	5/2/2009 08:30	<input type="checkbox"/>

ALS Laboratory Group

Date: 04-Jun-09

Client: Navajo Refining Company
Project: NAV-04-009-Lea Refining
Sample ID: BH#5 5'
Collection Date: 4/30/2009 02:00 PM

Work Order: 0906079
Lab ID: 0906079-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PH			SW9045B			Analyst: TDW
pH	8.82		0.100	pH Units	1	6/4/2009 03:00 PM

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

ALS Laboratory Group

Date: 04-Jun-09

Client: Navajo Refining Company
Project: NAV-04-009-Lea Refining
Sample ID: BH#5 10'
Collection Date: 4/30/2009 02:25 PM

Work Order: 0906079
Lab ID: 0906079-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PH			SW9045B			Analyst: TDW
pH	8.94		0.100	pH Units	1	6/4/2009 03:00 PM

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

ALS Laboratory Group**Date:** 04-Jun-09

Client: Navajo Refining Company
Project: NAV-04-009-Lea Refining
Sample ID: BH#6 5'
Collection Date: 4/30/2009 03:15 PM

Work Order: 0906079
Lab ID: 0906079-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PH			SW9045B			Analyst: TDW
pH	8.81		0.100	pH Units	1	6/4/2009 03:00 PM

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

ALS Laboratory Group

Date: 04-Jun-09

Client: Navajo Refining Company

Project: NAV-04-009-Lea Refining

Work Order: 0906079

Sample ID: BH#6 10'

Lab ID: 0906079-04

Collection Date: 4/30/2009 03:25 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PH			SW9045B			Analyst: TDW
pH	9.66		0.100	pH Units	1	6/4/2009 03:00 PM.

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

ALS Laboratory Group

Date: 04-Jun-09

Client: Navajo Refining Company

Project: NAV-04-009-Lea Refining

Work Order: 0906079

Sample ID: BH#6 15'

Lab ID: 0906079-05

Collection Date: 4/30/2009 03:40 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PH			SW9045B			Analyst: TDW
pH	9.79		0.100	pH Units	1	6/4/2009 03:00 PM

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

ALS Laboratory Group

Date: 04-Jun-09

Client: Navajo Refining Company

Work Order: 0906079

Project: NAV-04-009-Lea Refining

QC BATCH REPORT

Batch ID: **R77613** Instrument ID **WetChem** Method: **SW9045B**

LCS Sample ID: **WLCSW1-060409-R77613** Units: **pH Units** Analysis Date: **6/4/2009 03:00 PM**

Client ID: Run ID: **WETCHEM_090604A** SeqNo: **1686501** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6	0.10	6	0	100	90-110	0			

DUP Sample ID: **0906079-01adup** Units: **pH Units** Analysis Date: **6/4/2009 03:00 PM**

Client ID: **BH#5 5'** Run ID: **WETCHEM_090604A** SeqNo: **1686515** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.81	0.10	0	0	0	0-0	8.82	0.113	20	

The following samples were analyzed in this batch:

0906079-01A	0906079-02A	0906079-03A
0906079-04A	0906079-05A	

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

ALS Laboratory Group

Date: 04-Jun-09

Client: Navajo Refining Company
Project: NAV-04-009-Lea Refining
WorkOrder: 0906079

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
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

Units Reported Description

pH Units

W.O. # 0905050

0905050-19B

Stored: 10F

SxID: BH#5 5'

Bottle: 1 of 1

Client: NAVAJO REFINING

Collected: 4/30/2009 2:00:00 PM Received: 5/2/2009 8:30:00 AM

300_S, 300_S_PR, 8015M_S, 8015SPR

0905050-20B

Stored: 10F

SxID: BH#5 10'

Bottle: 1 of 1

Client: NAVAJO REFINING

Collected: 4/30/2009 2:25:00 PM Received: 5/2/2009 8:30:00 AM

300_S, 300_S_PR, 8015M_S, 8015SPR

0905050-21B

Stored: 10F

SxID: BH#6 5'

Bottle: 1 of 1

Client: NAVAJO REFINING

Collected: 4/30/2009 3:15:00 PM Received: 5/2/2009 8:30:00 AM

300_S, 300_S_PR, 8015M_S, 8015SPR

0905050-22B

Stored: 10F

SxID: BH#6 10'

Bottle: 1 of 1

Client: NAVAJO REFINING

Collected: 4/30/2009 3:25:00 PM Received: 5/2/2009 8:30:00 AM

300_S, 300_S_PR, 8015M_S, 8015SPR

0905050-23B

Stored: 10F

SxID: BH#6 15'

Bottle: 1 of 1

Client: NAVAJO REFINING

Collected: 4/30/2009 3:40:00 PM Received: 5/2/2009 8:30:00 AM

300_S, 300_S_PR, 8015M_S, 8015SPR

Relog 0905050

PH

3day

Samples 19-23

Jay

[illegible]

Note: 1 - All samples must be made in writing once samples and CQC Form have been submitted to ALS Laboratory Group.

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.

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Holland, MI 49424-9263
Tel: +1 816 399 6070
Fax: +1 616 399 6185

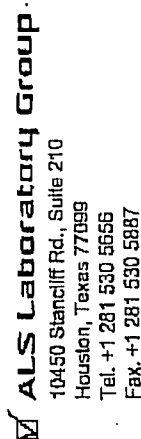
Page 2 of 3

[illegible]

NOTE: 1. Airtightness must be made in writing on samples and COC Form have been submitted to ALS Laboratory Group.

1. Any changes must be made in writing once samples and COC form have been submitted to ALS Laboratory Group. Any changes submitted to ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.

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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 3 of 3

Customer Information				Project Information				ALS Project Manager												ALS Work Order #											
Purchase Order				Project Name				Parameter/Method Request for Analysis				Project Manager				ALS Work Order #															
Lea Refining				Lea Refining				BTEX (8021)				A																			
NAV-04-009				NAV-04-009				GRO (8015M)				B																			
Navajo Refining Company				Navajo Refining Company				DRO (8015M)				C																			
Darrell Moore				Darrell Moore				ORO (8015M)				D																			
P.O. Box 159				P.O. Box 159				Anions (300) Cl				E																			
Artesia, NM 88211				Artesia, NM 88211								F																			
(505) 748-3311				(505) 748-3311								G																			
(505) 748-5421				(505) 748-5421								H																			
dpbayer@SES-NM.com				e-Mail Address								I																			
BH #6 5'				4/30/19 1515				Seil				A				✓															
BH #6 10'				↓ 1525								B				✓															
BH #6 15'				↓ 1540								C				✓															
BH #7 5'				4/5/109 0845								D				✓															
BH #7 10'				5/1/09 0900								E				✓															
BH #7 15'				5/1/09 0925								F				✓															
Temp Blank												G																			
Trip Blank												H																			
												I																			
												J																			
												K																			
												L																			
												M																			
												N																			
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Note:

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ALS Laboratory Group

Sample Receipt Checklist

Client Name: NAVAJO REFINING

Date/Time Received: 02-May-09 08:30

Work Order: 0905060

Received by: RDH

Checklist completed by Raymond M Gamba
Signature

04-May-09
Date

Reviewed by: Jay Lynn F Thibault
Signature

05-May-09
Date

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.4c</u> <u>002</u>		
Cooler(s)/Kiln(s):	<u>2497</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes: Received sample "BH#5.15" not on COC; logged in with analysis.

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:


Comments:

Corrective Action:

W011925050

THIS PORTION CANNOT BE REMOVED FOR RECIPIENT'S RECORD.

to	5/1/09	FedEx Tracking Number	869376483244
Sender's name	SEST	Phone	575 347-0517
Company	SEST		
Address	703 E Clinton		
	Hotbs	State/Zip	TX 78210
Our Internal Billing Reference			

	ALS Laboratory Group	CU
	10450 Stancliff Rd., Suite 210	
	Houston, Texas 77099	
	Tel. +1 281 530 5886 Fax. +1 281 530 5887	
	Date: 5/1/09	
	Name: T. S. G. G.	
	Company: 98	

STUDY SEAL	Seal Broken By:
Time: 1600	KSP
Kindard	
5/1/09	5/1/09

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



Environmental Division

18-May-09

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

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

Re: NAV-09-004-Lea Refining

Work Order : 0905050

Dear Darrell,

ALS Laboratory Group received 28 samples on 5/2/2009 08:30 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 51.

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

Sincerely,

JayLynn F Thibault

Electronically approved by: Glenda H. Ramos

JayLynn F Thibault
Project Manager



Certificate No: T104704231-08-TX

ALS Group USA, Corp.
Part of the **ALS Laboratory Group**
10450 Standcliff 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: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Work Order: 0905050

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>
0905050-01	BH#1 5'	Soil		4/29/2009 09:05	5/2/2009 08:30	<input type="checkbox"/>
0905050-02	BH#1 10'	Soil		4/29/2009 09:25	5/2/2009 08:30	<input type="checkbox"/>
0905050-03	BH#1 15'	Soil		4/29/2009 09:35	5/2/2009 08:30	<input type="checkbox"/>
0905050-04	BH#2 5'	Soil		4/30/2009 08:00	5/2/2009 08:30	<input type="checkbox"/>
0905050-05	BH#2 10'	Soil		4/30/2009 08:10	5/2/2009 08:30	<input type="checkbox"/>
0905050-06	BH#2 15'	Soil		4/30/2009 08:30	5/2/2009 08:30	<input type="checkbox"/>
0905050-07	BH#3 5'	Soil		4/30/2009 09:20	5/2/2009 08:30	<input type="checkbox"/>
0905050-08	BH#3 10'	Soil		4/30/2009 09:35	5/2/2009 08:30	<input type="checkbox"/>
0905050-09	BH#3 15'	Soil		4/30/2009 09:40	5/2/2009 08:30	<input type="checkbox"/>
0905050-10	BH#3 20'	Soil		4/30/2009 09:50	5/2/2009 08:30	<input type="checkbox"/>
0905050-11	BH#3 25'	Soil		4/30/2009 10:05	5/2/2009 08:30	<input type="checkbox"/>
0905050-12	BH#3 30'	Soil		4/30/2009 10:30	5/2/2009 08:30	<input type="checkbox"/>
0905050-13	BH#3 35'	Soil		4/30/2009 10:55	5/2/2009 08:30	<input type="checkbox"/>
0905050-14	BH#3 40'	Soil		4/30/2009 11:15	5/2/2009 08:30	<input type="checkbox"/>
0905050-15	BH#3 45'	Soil		4/30/2009 11:30	5/2/2009 08:30	<input type="checkbox"/>
0905050-16	BH#4 5'	Soil		4/30/2009 12:50	5/2/2009 08:30	<input type="checkbox"/>
0905050-17	BH#4 10'	Soil		4/30/2009 13:10	5/2/2009 08:30	<input type="checkbox"/>
0905050-18	BH#4 15'	Soil		4/30/2009 13:20	5/2/2009 08:30	<input type="checkbox"/>
0905050-19	BH#5 5'	Soil		4/30/2009 14:00	5/2/2009 08:30	<input type="checkbox"/>
0905050-20	BH#5 10'	Soil		4/30/2009 14:25	5/2/2009 08:30	<input type="checkbox"/>
0905050-21	BH#6 5'	Soil		4/30/2009 15:15	5/2/2009 08:30	<input type="checkbox"/>
0905050-22	BH#6 10'	Soil		4/30/2009 15:25	5/2/2009 08:30	<input type="checkbox"/>
0905050-23	BH#6 15'	Soil		4/30/2009 15:40	5/2/2009 08:30	<input type="checkbox"/>
0905050-24	BH#7 5'	Soil		5/1/2009 08:45	5/2/2009 08:30	<input type="checkbox"/>
0905050-25	BH#7 10'	Soil		5/1/2009 09:00	5/2/2009 08:30	<input type="checkbox"/>
0905050-26	BH#7 15'	Soil		5/1/2009 09:25	5/2/2009 08:30	<input type="checkbox"/>
0905050-27	Trip Blank	Water		5/1/2009 09:25	5/2/2009 08:30	<input type="checkbox"/>
0905050-28	BH#5 15'	Soil		4/30/2009 14:27	5/2/2009 08:30	<input type="checkbox"/>

ALS Laboratory Group*Date: 18-May-09*

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Work Order: 0905050

Case Narrative

BTEX (Samples 0905050-08, 09, 10, 11, 12 and 13) recovery out of control limits for surrogates. confirmed by reanalysis.

Gasoline Range Organics (Sample 0905050-08, 09, 10, 11,) recovery out of control limits for surrogates. Confirmed by reanalysis.

Batch R76430 BTEX (sample 0905020-02) MS unrelated sample.

Batch R76752 GRO (sample 0905050-10) MS/MSD recovery out of control limits due to matrix.

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#1 5'
Collection Date: 4/29/2009 09:05 AM

Work Order: 0905050
Lab ID: 0905050-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 04:46 PM
TPH (Motor Oil Range)	ND		97	mg/Kg	1	5/11/2009 04:46 PM
Surr: 2-Fluorobiphenyl	126		70-130	%REC	1	5/11/2009 04:46 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/6/2009 11:07 AM
Surr: 4-Bromofluorobenzene	120		70-130	%REC	1	5/6/2009 11:07 AM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 02:53 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 02:53 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/4/2009 02:53 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/4/2009 02:53 PM
Surr: 4-Bromofluorobenzene	98.8		75-131	%REC	1	5/4/2009 02:53 PM
Surr: Trifluorotoluene	101		73-130	%REC	1	5/4/2009 02:53 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	9.75		4.99	mg/Kg	1	5/7/2009 07:01 PM
Surr: Selenate (surr)	106		85-115	%REC	1	5/7/2009 07:01 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#1 10'
Collection Date: 4/29/2009 09:25 AM

Work Order: 0905050
Lab ID: 0905050-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		50	mg/Kg	1	5/11/2009 06:24 PM
TPH (Motor Oil Range)	ND		100	mg/Kg	1	5/11/2009 06:24 PM
Surr: 2-Fluorobiphenyl	128		70-130	%REC	1	5/11/2009 06:24 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/6/2009 04:29 PM
Surr: 4-Bromofluorobenzene	119		70-130	%REC	1	5/6/2009 04:29 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 03:26 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 03:26 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/4/2009 03:26 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/4/2009 03:26 PM
Surr: 4-Bromofluorobenzene	101		75-131	%REC	1	5/4/2009 03:26 PM
Surr: Trifluorotoluene	101		73-130	%REC	1	5/4/2009 03:26 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	7.63		4.90	mg/Kg	1	5/7/2009 07:24 PM
Surr: Selenate (surr)	105		85-115	%REC	1	5/7/2009 07:24 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company

Project: NAV-09-004-Lea Refining

Sample ID: BH#1 15'

Collection Date: 4/29/2009 09:35 AM

Work Order: 0905050

Lab ID: 0905050-03

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 06:56 PM
TPH (Motor Oil Range)	ND		98	mg/Kg	1	5/11/2009 06:56 PM
Surr: 2-Fluorobiphenyl	98.5		70-130	%REC	1	5/11/2009 06:56 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/6/2009 04:05 PM
Surr: 4-Bromofluorobenzene	121		70-130	%REC	1	5/6/2009 04:05 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 03:59 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 03:59 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/4/2009 03:59 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/4/2009 03:59 PM
Surr: 4-Bromofluorobenzene	101		75-131	%REC	1	5/4/2009 03:59 PM
Surr: Trifluorotoluene	100		73-130	%REC	1	5/4/2009 03:59 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	17.3		4.97	mg/Kg	1	5/7/2009 07:47 PM
Surr: Selenate (surr)	106		85-115	%REC	1	5/7/2009 07:47 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#2 5'
 Collection Date: 4/30/2009 08:00 AM

Work Order: 0905050
 Lab ID: 0905050-04
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 07:29 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/11/2009 07:29 PM
Surr: 2-Fluorobiphenyl	117		70-130	%REC	1	5/11/2009 07:29 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/6/2009 06:08 PM
Surr: 4-Bromofluorobenzene	119		70-130	%REC	1	5/6/2009 06:08 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 04:32 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 04:32 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/4/2009 04:32 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/4/2009 04:32 PM
Surr: 4-Bromofluorobenzene	101		75-131	%REC	1	5/4/2009 04:32 PM
Surr: Trifluorotoluene	101		73-130	%REC	1	5/4/2009 04:32 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.41		4.96	mg/Kg	1	5/7/2009 08:10 PM
Surr: Selenate (surr)	105		85-115	%REC	1	5/7/2009 08:10 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#2 10'
Collection Date: 4/30/2009 08:10 AM

Work Order: 0905050
Lab ID: 0905050-05
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 08:01 PM
TPH (Motor Oil Range)	ND		97	mg/Kg	1	5/11/2009 08:01 PM
Surr: 2-Fluorobiphenyl	130		70-130	%REC	1	5/11/2009 08:01 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/6/2009 06:33 PM
Surr: 4-Bromofluorobenzene	120		70-130	%REC	1	5/6/2009 06:33 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 05:04 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 05:04 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/4/2009 05:04 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/4/2009 05:04 PM
Surr: 4-Bromofluorobenzene	99.5		75-131	%REC	1	5/4/2009 05:04 PM
Surr: Trifluorotoluene	100		73-130	%REC	1	5/4/2009 05:04 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.33		4.99	mg/Kg	1	5/7/2009 08:33 PM
Surr: Selenate (surr)	99.4		85-115	%REC	1	5/7/2009 08:33 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company

Project: NAV-09-004-Lea Refining

Work Order: 0905050

Sample ID: BH#2 15'

Lab ID: 0905050-06

Collection Date: 4/30/2009 08:30 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 08:34 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/11/2009 08:34 PM
Surr: 2-Fluorobiphenyl	127		70-130	%REC	1	5/11/2009 08:34 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/6/2009 06:58 PM
Surr: 4-Bromofluorobenzene	123		70-130	%REC	1	5/6/2009 06:58 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 10:08 AM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 10:08 AM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 10:08 AM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 10:08 AM
Surr: 4-Bromofluorobenzene	97.3		75-131	%REC	1	5/5/2009 10:08 AM
Surr: Trifluorotoluene	100		73-130	%REC	1	5/5/2009 10:08 AM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.31		4.99	mg/Kg	1	5/7/2009 08:56 PM
Surr: Selenate (surr)	106		85-115	%REC	1	5/7/2009 08:56 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#3 5'
 Collection Date: 4/30/2009 09:20 AM

Work Order: 0905050
 Lab ID: 0905050-07
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	370		49	mg/Kg	1	5/11/2009 09:07 PM
TPH (Motor Oil Range)	ND		97	mg/Kg	1	5/11/2009 09:07 PM
Surr: 2-Fluorobiphenyl	128		70-130	%REC	1	5/11/2009 09:07 PM
GASOLINE RANGE ORGANICS			SW8015			Analyst: DKG
Gasoline Range Organics	0.58		0.050	mg/Kg	1	5/6/2009 08:37 PM
Surr: 4-Bromofluorobenzene	124		70-130	%REC	1	5/6/2009 08:37 PM
BTEX			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 11:37 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 11:37 PM
Ethylbenzene	0.055		0.0010	mg/Kg	1	5/4/2009 11:37 PM
Xylenes, Total	0.022		0.0030	mg/Kg	1	5/4/2009 11:37 PM
Surr: 4-Bromofluorobenzene	127		75-131	%REC	1	5/4/2009 11:37 PM
Surr: Trifluorotoluene	96.4		73-130	%REC	1	5/4/2009 11:37 PM
ANIONS			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.26		4.94	mg/Kg	1	5/7/2009 09:18 PM
Surr: Selenate (surr)	107		85-115	%REC	1	5/7/2009 09:18 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#3 10'
 Collection Date: 4/30/2009 09:35 AM

Work Order: 0905050
 Lab ID: 0905050-08
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	2,500		99	mg/Kg	2	5/12/2009 06:39 PM
TPH (Motor Oil Range)	ND		200	mg/Kg	2	5/12/2009 06:39 PM
Surr: 2-Fluorobiphenyl	74.1		70-130	%REC	2	5/12/2009 06:39 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	28		0.050	mg/Kg	1	5/6/2009 07:23 PM
Surr: 4-Bromofluorobenzene	546	S	70-130	%REC	1	5/6/2009 07:23 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	0.0048		0.0010	mg/Kg	1	5/5/2009 12:10 AM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 12:10 AM
Ethylbenzene	3.4		0.12	mg/Kg	125	5/4/2009 03:14 PM
Xylenes, Total	4.1		0.38	mg/Kg	125	5/4/2009 03:14 PM
Surr: 4-Bromofluorobenzene	194	S	75-131	%REC	1	5/5/2009 12:10 AM
Surr: 4-Bromofluorobenzene	122		75-131	%REC	125	5/4/2009 03:14 PM
Surr: Trifluorotoluene	100		73-130	%REC	1	5/5/2009 12:10 AM
Surr: Trifluorotoluene	97.0		73-130	%REC	125	5/4/2009 03:14 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.96		4.96	mg/Kg	1	5/7/2009 09:41 PM
Surr: Selenate (surr)	106		85-115	%REC	1	5/7/2009 09:41 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#3 15'
Collection Date: 4/30/2009 09:40 AM

Work Order: 0905050
Lab ID: 0905050-09
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	2,200		99	mg/Kg	2	5/12/2009 07:12 PM
TPH (Motor Oil Range)	ND		200	mg/Kg	2	5/12/2009 07:12 PM
Surr: 2-Fluorobiphenyl	73.5		70-130	%REC	2	5/12/2009 07:12 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	20		0.050	mg/Kg	1	5/6/2009 07:47 PM
Surr: 4-Bromofluorobenzene	427	S	70-130	%REC	1	5/6/2009 07:47 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	0.0015		0.0010	mg/Kg	1	5/4/2009 06:10 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 06:10 PM
Ethylbenzene	1.1		0.12	mg/Kg	125	5/6/2009 02:56 PM
Xylenes, Total	0.60		0.015	mg/Kg	5	5/5/2009 12:52 PM
Surr: 4-Bromofluorobenzene	112		75-131	%REC	125	5/6/2009 02:56 PM
Surr: 4-Bromofluorobenzene	180	S	75-131	%REC	1	5/4/2009 06:10 PM
Surr: 4-Bromofluorobenzene	128		75-131	%REC	5	5/5/2009 12:52 PM
Surr: Trifluorotoluene	97.4		73-130	%REC	5	5/5/2009 12:52 PM
Surr: Trifluorotoluene	94.5		73-130	%REC	125	5/6/2009 02:56 PM
Surr: Trifluorotoluene	101		73-130	%REC	1	5/4/2009 06:10 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.55		4.90	mg/Kg	1	5/7/2009 11:13 PM
Surr: Selenate (surr)	109		85-115	%REC	1	5/7/2009 11:13 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#3 20'
Collection Date: 4/30/2009 09:50 AM

Work Order: 0905050
Lab ID: 0905050-10
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	4,600		250	mg/Kg	5	5/12/2009 07:44 PM
TPH (Motor Oil Range)	ND		490	mg/Kg	5	5/12/2009 07:44 PM
Surr: 2-Fluorobiphenyl	123		70-130	%REC	5	5/12/2009 07:44 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	26		0.050	mg/Kg	1	5/6/2009 08:12 PM
Surr: 4-Bromofluorobenzene	568	S	70-130	%REC	1	5/6/2009 08:12 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	0.0029		0.0010	mg/Kg	1	5/4/2009 06:43 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 06:43 PM
Ethylbenzene	3.3		0.12	mg/Kg	125	5/6/2009 03:23 PM
Xylenes, Total	0.81		0.015	mg/Kg	5	5/5/2009 01:25 PM
Surr: 4-Bromofluorobenzene	112		75-131	%REC	125	5/6/2009 03:23 PM
Surr: 4-Bromofluorobenzene	75.3		75-131	%REC	1	5/4/2009 06:43 PM
Surr: 4-Bromofluorobenzene	198	S	75-131	%REC	5	5/5/2009 01:25 PM
Surr: Trifluorotoluene	98.5		73-130	%REC	5	5/5/2009 01:25 PM
Surr: Trifluorotoluene	98.5		73-130	%REC	125	5/6/2009 03:23 PM
Surr: Trifluorotoluene	104		73-130	%REC	1	5/4/2009 06:43 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	ND		4.89	mg/Kg	1	5/7/2009 11:36 PM
Surr: Selenate (surr)	107		85-115	%REC	1	5/7/2009 11:36 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#3 25'
Collection Date: 4/30/2009 10:05 AM

Work Order: 0905050
Lab ID: 0905050-11
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	6,100		500	mg/Kg	10	5/14/2009 02:12 PM
TPH (Motor Oil Range)	ND		990	mg/Kg	10	5/14/2009 02:12 PM
Surr: 2-Fluorobiphenyl	89.8		70-130	%REC	10	5/14/2009 02:12 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	19		0.050	mg/Kg	1	5/8/2009 02:52 PM
Surr: 4-Bromofluorobenzene	468	S	70-130	%REC	1	5/8/2009 02:52 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	0.0023		0.0010	mg/Kg	1	5/4/2009 07:16 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 07:16 PM
Ethylbenzene	3.0		0.12	mg/Kg	125	5/6/2009 03:50 PM
Xylenes, Total	0.20		0.0030	mg/Kg	1	5/4/2009 07:16 PM
Surr: 4-Bromofluorobenzene	116		75-131	%REC	1	5/4/2009 07:16 PM
Surr: 4-Bromofluorobenzene	99.4		75-131	%REC	125	5/6/2009 03:50 PM
Surr: Trifluorotoluene	102		73-130	%REC	1	5/4/2009 07:16 PM
Surr: Trifluorotoluene	93.4		73-130	%REC	125	5/6/2009 03:50 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.30		4.88	mg/Kg	1	5/7/2009 11:59 PM
Surr: Selenate (surr)	110		85-115	%REC	1	5/7/2009 11:59 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#3 30'
 Collection Date: 4/30/2009 10:30 AM

Work Order: 0905050
 Lab ID: 0905050-12
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	820		50	mg/Kg	1	5/11/2009 03:40 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/11/2009 03:40 PM
Surr: 2-Fluorobiphenyl	106		70-130	%REC	1	5/11/2009 03:40 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	21		0.050	mg/Kg	1	5/8/2009 04:32 PM
Surr: 4-Bromofluorobenzene	504	S	70-130	%REC	1	5/8/2009 04:32 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	0.0022		0.0010	mg/Kg	1	5/4/2009 07:48 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 07:48 PM
Ethylbenzene	2.0		0.12	mg/Kg	125	5/6/2009 04:17 PM
Xylenes, Total	0.20		0.0030	mg/Kg	1	5/4/2009 07:48 PM
Surr: 4-Bromofluorobenzene	228	S	75-131	%REC	1	5/4/2009 07:48 PM
Surr: 4-Bromofluorobenzene	91.9		75-131	%REC	125	5/6/2009 04:17 PM
Surr: Trifluorotoluene	97.1		73-130	%REC	1	5/4/2009 07:48 PM
Surr: Trifluorotoluene	96.6		73-130	%REC	125	5/6/2009 04:17 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	8.13		4.88	mg/Kg	1	5/8/2009 12:22 AM
Surr: Selenate (surr)	110		85-115	%REC	1	5/8/2009 12:22 AM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#3 35
Collection Date: 4/30/2009 10:55 AM

Work Order: 0905050
Lab ID: 0905050-13
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	1,900		49	mg/Kg	1	5/11/2009 04:46 PM
TPH (Motor Oil Range)	ND		98	mg/Kg	1	5/11/2009 04:46 PM
Surr: 2-Fluorobiphenyl	107		70-130	%REC	1	5/11/2009 04:46 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	20		0.050	mg/Kg	1	5/8/2009 05:46 PM
Surr: 4-Bromofluorobenzene	469	S	70-130	%REC	1	5/8/2009 05:46 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	0.0016		0.0010	mg/Kg	1	5/4/2009 09:26 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 09:26 PM
Ethylbenzene	0.40		0.0050	mg/Kg	5	5/5/2009 11:14 PM
Xylenes, Total	0.12		0.0030	mg/Kg	1	5/4/2009 09:26 PM
Surr: 4-Bromofluorobenzene	126		75-131	%REC	5	5/5/2009 11:14 PM
Surr: 4-Bromofluorobenzene	189	S	75-131	%REC	1	5/4/2009 09:26 PM
Surr: Trifluorotoluene	97.0		73-130	%REC	5	5/5/2009 11:14 PM
Surr: Trifluorotoluene	97.5		73-130	%REC	1	5/4/2009 09:26 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	6.05		4.96	mg/Kg	1	5/8/2009 12:45 AM
Surr: Selenate (surr)	108		85-115	%REC	1	5/8/2009 12:45 AM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#3 40'
Collection Date: 4/30/2009 11:15 AM

Work Order: 0905050
Lab ID: 0905050-14
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		50	mg/Kg	1	5/11/2009 05:18 PM
TPH (Motor Oil Range)	ND		100	mg/Kg	1	5/11/2009 05:18 PM
Surr: 2-Fluorobiphenyl	85.4		70-130	%REC	1	5/11/2009 05:18 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 06:11 PM
Surr: 4-Bromofluorobenzene	59.9	S	70-130	%REC	1	5/8/2009 06:11 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 09:59 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 09:59 PM
Ethylbenzene	0.0015		0.0010	mg/Kg	1	5/4/2009 09:59 PM
Xylenes, Total	0.0042		0.0030	mg/Kg	1	5/4/2009 09:59 PM
Surr: 4-Bromofluorobenzene	108		75-131	%REC	1	5/4/2009 09:59 PM
Surr: Trifluorotoluene	101		73-130	%REC	1	5/4/2009 09:59 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	6.71		4.93	mg/Kg	1	5/8/2009 01:07 AM
Surr: Selenate (surr)	106		85-115	%REC	1	5/8/2009 01:07 AM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#3 45'
Collection Date: 4/30/2009 11:30 AM

Work Order: 0905050
Lab ID: 0905050-15
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 05:51 PM
TPH (Motor Oil Range)	ND		98	mg/Kg	1	5/11/2009 05:51 PM
Surr: 2-Fluorobiphenyl	102		70-130	%REC	1	5/11/2009 05:51 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 06:35 PM
Surr: 4-Bromofluorobenzene	88.1		70-130	%REC	1	5/8/2009 06:35 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/4/2009 10:32 PM
Toluene	ND		0.0010	mg/Kg	1	5/4/2009 10:32 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/4/2009 10:32 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/4/2009 10:32 PM
Surr: 4-Bromofluorobenzene	102		75-131	%REC	1	5/4/2009 10:32 PM
Surr: Trifluorotoluene	99.4		73-130	%REC	1	5/4/2009 10:32 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	8.21		4.96	mg/Kg	1	5/8/2009 01:30 AM
Surr: Selenate (surr)	106		85-115	%REC	1	5/8/2009 01:30 AM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#4 5'
 Collection Date: 4/30/2009 12:50 PM

Work Order: 0905050
 Lab ID: 0905050-16
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 06:24 PM
TPH (Motor Oil Range)	ND		98	mg/Kg	1	5/11/2009 06:24 PM
Surr: 2-Fluorobiphenyl	93.1		70-130	%REC	1	5/11/2009 06:24 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 03:17 PM
Surr: 4-Bromofluorobenzene	84.2		70-130	%REC	1	5/8/2009 03:17 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 03:03 PM
Toluene	0.0011		0.0010	mg/Kg	1	5/5/2009 03:03 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 03:03 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 03:03 PM
Surr: 4-Bromofluorobenzene	101		75-131	%REC	1	5/5/2009 03:03 PM
Surr: Trifluorotoluene	99.8		73-130	%REC	1	5/5/2009 03:03 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	6.18		4.93	mg/Kg	1	5/8/2009 04:16 PM
Surr: Selenate (surr)	105		85-115	%REC	1	5/8/2009 04:16 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#4 10'
 Collection Date: 4/30/2009 01:10 PM

Work Order: 0905050
 Lab ID: 0905050-17
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		50	mg/Kg	1	5/11/2009 06:56 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/11/2009 06:56 PM
Surr: 2-Fluorobiphenyl	100		70-130	%REC	1	5/11/2009 06:56 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 07:00 PM
Surr: 4-Bromofluorobenzene	85.5		70-130	%REC	1	5/8/2009 07:00 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 03:36 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 03:36 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 03:36 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 03:36 PM
Surr: 4-Bromofluorobenzene	98.6		75-131	%REC	1	5/5/2009 03:36 PM
Surr: Trifluorotoluene	99.4		73-130	%REC	1	5/5/2009 03:36 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.01		4.94	mg/Kg	1	5/8/2009 05:24 PM
Surr: Selenate (surr)	103		85-115	%REC	1	5/8/2009 05:24 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#4 15'
Collection Date: 4/30/2009 01:20 PM

Work Order: 0905050
Lab ID: 0905050-18
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 07:29 PM
TPH (Motor Oil Range)	ND		97	mg/Kg	1	5/11/2009 07:29 PM
Surr: 2-Fluorobiphenyl	91.7		70-130	%REC	1	5/11/2009 07:29 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 07:25 PM
Surr: 4-Bromofluorobenzene	90.2		70-130	%REC	1	5/8/2009 07:25 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 04:08 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 04:08 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 04:08 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 04:08 PM
Surr: 4-Bromofluorobenzene	97.7		75-131	%REC	1	5/5/2009 04:08 PM
Surr: Trifluorotoluene	99.2		73-130	%REC	1	5/5/2009 04:08 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.18		4.96	mg/Kg	1	5/8/2009 05:47 PM
Surr: Selenate (surr)	104		85-115	%REC	1	5/8/2009 05:47 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#5 5'
 Collection Date: 4/30/2009 02:00 PM

Work Order: 0905050
 Lab ID: 0905050-19
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 08:01 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/11/2009 08:01 PM
Surr: 2-Fluorobiphenyl	82.7		70-130	%REC	1	5/11/2009 08:01 PM
GASOLINE RANGE ORGANICS			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 07:50 PM
Surr: 4-Bromofluorobenzene	86.3		70-130	%REC	1	5/8/2009 07:50 PM
BTEX			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 04:41 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 04:41 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 04:41 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 04:41 PM
Surr: 4-Bromofluorobenzene	100		75-131	%REC	1	5/5/2009 04:41 PM
Surr: Trifluorotoluene	98.9		73-130	%REC	1	5/5/2009 04:41 PM
ANIONS			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	7.79		4.99	mg/Kg	1	5/8/2009 06:10 PM
Surr: Selenate (surr)	108		65-115	%REC	1	5/8/2009 06:10 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#5 10'
Collection Date: 4/30/2009 02:25 PM

Work Order: 0905050
Lab ID: 0905050-20
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 08:34 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/11/2009 08:34 PM
Surr: 2-Fluorobiphenyl	97.6		70-130	%REC	1	5/11/2009 08:34 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 08:14 PM
Surr: 4-Bromofluorobenzene	86.7		70-130	%REC	1	5/8/2009 08:14 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 05:14 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 05:14 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 05:14 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 05:14 PM
Surr: 4-Bromofluorobenzene	99.2		75-131	%REC	1	5/5/2009 05:14 PM
Surr: Trifluorotoluene	99.9		73-130	%REC	1	5/5/2009 05:14 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	11.6		4.98	mg/Kg	1	5/8/2009 06:33 PM
Surr: Selenate (surr)	108		85-115	%REC	1	5/8/2009 06:33 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#6 5'
 Collection Date: 4/30/2009 03:15 PM

Work Order: 0905050
 Lab ID: 0905050-21
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/7/2009 02:33 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/7/2009 02:33 PM
Surr: 2-Fluorobiphenyl	88.4		70-130	%REC	1	5/7/2009 02:33 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 08:39 PM
Surr: 4-Bromofluorobenzene	87.0		70-130	%REC	1	5/8/2009 08:39 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 05:47 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 05:47 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 05:47 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 05:47 PM
Surr: 4-Bromofluorobenzene	97.1		75-131	%REC	1	5/5/2009 05:47 PM
Surr: Trifluorotoluene	97.8		73-130	%REC	1	5/5/2009 05:47 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	12.3		4.90	mg/Kg	1	5/8/2009 06:56 PM
Surr: Selenate (surr)	105		85-115	%REC	1	5/8/2009 06:56 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#6 10'
Collection Date: 4/30/2009 03:25 PM

Work Order: 0905050
Lab ID: 0905050-22
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		50	mg/Kg	1	5/11/2009 09:40 PM
TPH (Motor Oil Range)	ND		100	mg/Kg	1	5/11/2009 09:40 PM
Surr: 2-Fluorobiphenyl	99.0		70-130	%REC	1	5/11/2009 09:40 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 09:04 PM
Surr: 4-Bromofluorobenzene	87.3		70-130	%REC	1	5/8/2009 09:04 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 06:20 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 06:20 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 06:20 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	5/5/2009 06:20 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 06:20 PM
Surr: 4-Bromofluorobenzene	99.8		75-131	%REC	1	5/5/2009 06:20 PM
Surr: Trifluorotoluene	99.8		73-130	%REC	1	5/5/2009 06:20 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	12.1		4.97	mg/Kg	1	5/8/2009 08:27 PM
Surr: Selenate (surr)	107		85-115	%REC	1	5/8/2009 08:27 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#6 15'
Collection Date: 4/30/2009 03:40 PM

Work Order: 0905050
Lab ID: 0905050-23
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 09:07 PM
TPH (Motor Oil Range)	ND		97	mg/Kg	1	5/11/2009 09:07 PM
Surr: 2-Fluorobiphenyl	70.5		70-130	%REC	1	5/11/2009 09:07 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 10:18 PM
Surr: 4-Bromofluorobenzene	85.0		70-130	%REC	1	5/8/2009 10:18 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 06:53 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 06:53 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 06:53 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	5/5/2009 06:53 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 06:53 PM
Surr: 4-Bromofluorobenzene	97.3		75-131	%REC	1	5/5/2009 06:53 PM
Surr: Trifluorotoluene	98.5		73-130	%REC	1	5/5/2009 06:53 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	6.80		4.92	mg/Kg	1	5/8/2009 08:50 PM
Surr: Selenate (surr)	106		85-115	%REC	1	5/8/2009 08:50 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#7 5'
 Collection Date: 5/1/2009 08:45 AM

Work Order: 0905050
 Lab ID: 0905050-24
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/14/2009 01:40 PM
TPH (Motor Oil Range)	ND		98	mg/Kg	1	5/14/2009 01:40 PM
Surr: 2-Fluorobiphenyl	73.0		70-130	%REC	1	5/14/2009 01:40 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 10:43 PM
Surr: 4-Bromofluorobenzene	83.9		70-130	%REC	1	5/8/2009 10:43 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 07:25 PM
Toluene	0.0015		0.0010	mg/Kg	1	5/5/2009 07:25 PM
Ethylbenzene	0.0021		0.0010	mg/Kg	1	5/5/2009 07:25 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	5/5/2009 07:25 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 07:25 PM
Surr: 4-Bromofluorobenzene	92.4		75-131	%REC	1	5/5/2009 07:25 PM
Surr: Trifluorotoluene	97.8		73-130	%REC	1	5/5/2009 07:25 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	5.76		4.90	mg/Kg	1	5/8/2009 09:13 PM
Surr: Selenate (surr)	106		85-115	%REC	1	5/8/2009 09:13 PM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
 Project: NAV-09-004-Lea Refining
 Sample ID: BH#7 10'
 Collection Date: 5/1/2009 09:00 AM

Work Order: 0905050
 Lab ID: 0905050-25
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		50	mg/Kg	1	5/11/2009 11:18 PM
TPH (Motor Oil Range)	ND		100	mg/Kg	1	5/11/2009 11:18 PM
Surr: 2-Fluorobiphenyl	80.4		70-130	%REC	1	5/11/2009 11:18 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/14/2009 11:42 AM
Surr: 4-Bromofluorobenzene	89.7		70-130	%REC	1	5/14/2009 11:42 AM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 07:58 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 07:58 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 07:58 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	5/5/2009 07:58 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 07:58 PM
Surr: 4-Bromofluorobenzene	99.0		75-131	%REC	1	5/5/2009 07:58 PM
Surr: Trifluorotoluene	99.0		73-130	%REC	1	5/5/2009 07:58 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	21.7		4.89	mg/Kg	1	5/12/2009 02:39 AM
Surr: Selenate (surr)	97.9		85-115	%REC	1	5/12/2009 02:39 AM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#7 15'
Collection Date: 5/1/2009 09:25 AM

Work Order: 0905050
Lab ID: 0905050-26
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		49	mg/Kg	1	5/11/2009 10:45 PM
TPH (Motor Oil Range)	ND		98	mg/Kg	1	5/11/2009 10:45 PM
Surr: 2-Fluorobiphenyl	70.6		70-130	%REC	1	5/11/2009 10:45 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/8/2009 11:32 PM
Surr: 4-Bromofluorobenzene	86.6		70-130	%REC	1	5/8/2009 11:32 PM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 09:36 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 09:36 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 09:36 PM
Methyl tert-butyl ether	ND		0.0050	mg/Kg	1	5/5/2009 09:36 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 09:36 PM
Surr: 4-Bromofluorobenzene	96.8		75-131	%REC	1	5/5/2009 09:36 PM
Surr: Trifluorotoluene	98.7		73-130	%REC	1	5/5/2009 09:36 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	15.3		4.97	mg/Kg	1	5/12/2009 03:02 AM
Surr: Selenate (surr)	98.4		85-115	%REC	1	5/12/2009 03:02 AM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
Sample ID: BH#5 15
Collection Date: 4/30/2009 02:27 PM

Work Order: 0905050
Lab ID: 0905050-28
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TPH AND MISCELLANEOUS GCFID						
			SW8015M		Prep Date: 5/5/2009	Analyst: KMB
TPH (Diesel Range)	ND		50	mg/Kg	1	5/11/2009 10:12 PM
TPH (Motor Oil Range)	ND		99	mg/Kg	1	5/11/2009 10:12 PM
Surr: 2-Fluorobiphenyl	79.6		70-130	%REC	1	5/11/2009 10:12 PM
GASOLINE RANGE ORGANICS						
			SW8015			Analyst: DKG
Gasoline Range Organics	ND		0.050	mg/Kg	1	5/14/2009 11:17 AM
Surr: 4-Bromofluorobenzene	89.9		70-130	%REC	1	5/14/2009 11:17 AM
BTEX						
			SW8021B			Analyst: WLR
Benzene	ND		0.0010	mg/Kg	1	5/5/2009 10:09 PM
Toluene	ND		0.0010	mg/Kg	1	5/5/2009 10:09 PM
Ethylbenzene	ND		0.0010	mg/Kg	1	5/5/2009 10:09 PM
Xylenes, Total	ND		0.0030	mg/Kg	1	5/5/2009 10:09 PM
Surr: 4-Bromofluorobenzene	98.3		75-131	%REC	1	5/5/2009 10:09 PM
Surr: Trifluorotoluene	99.3		73-130	%REC	1	5/5/2009 10:09 PM
ANIONS						
			E300		Prep Date: 5/6/2009	Analyst: IGF
Chloride	6.51		4.92	mg/Kg	1	5/12/2009 03:25 AM
Surr: Selenate (surr)	99.2		85-115	%REC	1	5/12/2009 03:25 AM

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

ALS Laboratory Group

Date: 18-May-09

Client: Navajo Refining Company

Work Order: 0905050

Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: 35866 Instrument ID FID-8 Method: SW8015M

MBLK Sample ID: FBLKS1-090505-35866 Units: mg/Kg Analysis Date: 5/11/2009 03:07 PM

Client ID: Run ID: FID-8_090505A SeqNo: 1669789 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	ND	50								
TPH (Motor Oil Range)	ND	50								
Surr: 2-Fluorobiphenyl	29.94	0	25	0	120	70-130	0			

LCS Sample ID: FLCSS1-090505-35866 Units: mg/Kg Analysis Date: 5/11/2009 03:40 PM

Client ID: Run ID: FID-8_090505A SeqNo: 1669790 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	310	50	250	0	124	70-130	0			
TPH (Motor Oil Range)	191.6	50	250	0	76.6	70-130	0			
Surr: 2-Fluorobiphenyl	30.59	0	25	0	122	70-130	0			

LCSD Sample ID: FLCSDS1-090505-35866 Units: mg/Kg Analysis Date: 5/11/2009 04:13 PM

Client ID: Run ID: FID-8_090505A SeqNo: 1669791 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	287.8	50	250	0	115	70-130	310	7.42	30	
TPH (Motor Oil Range)	200.2	50	250	0	80.1	70-130	191.6	4.4	30	
Surr: 2-Fluorobiphenyl	31.87	0	25	0	127	70-130	30.59	4.12	30	

MS Sample ID: 0905050-01BMS Units: mg/Kg Analysis Date: 5/11/2009 05:18 PM

Client ID: BH#1 5' Run ID: FID-8_090505A SeqNo: 1669793 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	292.5	49	242.7	1.038	120	70-130	0			
TPH (Motor Oil Range)	246.5	49	242.7	0	102	70-130	0			
Surr: 2-Fluorobiphenyl	31.48	0	24.27	0	130	70-130	0			

MSD Sample ID: 0905050-01BMSD Units: mg/Kg Analysis Date: 5/11/2009 05:51 PM

Client ID: BH#1 5' Run ID: FID-8_090505A SeqNo: 1669794 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	293	49	243.7	1.038	120	70-130	292.5	0.167	30	
TPH (Motor Oil Range)	254.3	49	243.7	0	104	70-130	246.5	3.12	30	
Surr: 2-Fluorobiphenyl	31.48	0	24.37	0	129	70-130	31.48	0.00509	30	

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

Client: Navajo Refining Company
Work Order: 0905050
Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: **35866** Instrument ID **FID-8** Method: **SW8015M**

The following samples were analyzed in this batch:

0905050-01B	0905050-02B	0905050-03B
0905050-04B	0905050-05B	0905050-06B
0905050-07B	0905050-08B	0905050-09B
0905050-10B	0905050-11B	0905050-12B
0905050-13B	0905050-14B	0905050-15B
0905050-16B	0905050-17B	0905050-18B
0905050-19B	0905050-20B	

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: 35867 Instrument ID FID-7 Method: SW8015M

MBLK Sample ID: FBLKS2-090505-35867 Units: mg/Kg Analysis Date: 5/7/2009 11:15 AM

Client ID: Run ID: FID-7_090505A SeqNo: 1664705 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	ND	50								
TPH (Motor Oil Range)	ND	50								
Surr: 2-Fluorobiphenyl	28.12	0	25	0	112	70-130	0			

LCS Sample ID: FLCSS2-090505-35867 Units: mg/Kg Analysis Date: 5/7/2009 01:27 PM

Client ID: Run ID: FID-7_090505A SeqNo: 1664944 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	237.5	50	250	0	95	70-130	0			
TPH (Motor Oil Range)	304.9	50	250	0	122	70-130	0			
Surr: 2-Fluorobiphenyl	28.33	0	25	0	113	70-130	0			

LCSD Sample ID: FLCSDS2-090505-35867 Units: mg/Kg Analysis Date: 5/7/2009 01:59 PM

Client ID: Run ID: FID-7_090505A SeqNo: 1664945 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	230	50	250	0	92	70-130	237.5	3.21	30	
TPH (Motor Oil Range)	298.7	50	250	0	119	70-130	304.9	2.05	30	
Surr: 2-Fluorobiphenyl	29.44	0	25	0	118	70-130	28.33	3.86	30	

MS Sample ID: 0905050-21BMS Units: mg/Kg Analysis Date: 5/7/2009 03:05 PM

Client ID: BH#6 5' Run ID: FID-7_090505A SeqNo: 1664949 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	200.8	49	246.1	0.05187	81.6	70-130	0			
TPH (Motor Oil Range)	284	49	246.1	1.956	115	70-130	0			
Surr: 2-Fluorobiphenyl	19.49	0	24.61	0	79.2	70-130	0			

MSD Sample ID: 0905050-21BMSD Units: mg/Kg Analysis Date: 5/7/2009 03:38 PM

Client ID: BH#6 5' Run ID: FID-7_090505A SeqNo: 1664951 Prep Date: 5/5/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	206.9	49	246.3	0.05187	84	70-130	200.8	3.03	30	
TPH (Motor Oil Range)	266.5	49	246.3	1.956	107	70-130	284	6.35	30	
Surr: 2-Fluorobiphenyl	25.1	0	24.63	0	102	70-130	19.49	25.2	30	

The following samples were analyzed in this batch:

0905050-21B	0905050-22B	0905050-23B
0905050-24B	0905050-25B	0905050-26B
0905050-28B		

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: R76430 Instrument ID BTEX3 Method: SW8021B

MBLK Sample ID: BBLKS1-050409-R76430 Units: µg/Kg Analysis Date: 5/4/2009 10:17 AM

Client ID: Run ID: BTEX3_090504A SeqNo: 1661826 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	30.37	1.0	30	0	101	75-131	0			
Surr: Trifluorotoluene	30.78	1.0	30	0	103	73-130	0			

LCS Sample ID: BLCSS1-050409-R76430 Units: µg/Kg Analysis Date: 5/4/2009 09:12 AM

Client ID: Run ID: BTEX3_090504A SeqNo: 1661825 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.84	1.0	20	0	109	74-129	0			
Toluene	20.96	1.0	20	0	105	75-128	0			
Ethylbenzene	20.62	1.0	20	0	103	73-127	0			
Xylenes, Total	62.57	3.0	60	0	104	74-127	0			
Surr: 4-Bromofluorobenzene	32.88	1.0	30	0	110	75-131	0			
Surr: Trifluorotoluene	31.56	1.0	30	0	105	73-130	0			

MS Sample ID: 0905020-02AMS Units: µg/Kg Analysis Date: 5/4/2009 01:48 PM

Client ID: Run ID: BTEX3_090504A SeqNo: 1661832 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	15.61	1.0	20	0	78.1	74-129	0			
Toluene	14.94	1.0	20	0	74.7	75-128	0			S
Ethylbenzene	15.03	1.0	20	0.9792	70.2	73-127	0			S
Xylenes, Total	44.66	3.0	60	3.175	69.1	74-127	0			S
Surr: 4-Bromofluorobenzene	27.45	1.0	30	0	91.5	75-131	0			
Surr: Trifluorotoluene	27.62	1.0	30	0	92.1	73-130	0			

MSD Sample ID: 0905020-02AMSD Units: µg/Kg Analysis Date: 5/4/2009 12:43 PM

Client ID: Run ID: BTEX3_090504A SeqNo: 1661830 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.41	1.0	20	0	92.1	74-129	15.61	16.5	30	
Toluene	17.59	1.0	20	0	88	75-128	14.94	16.3	30	
Ethylbenzene	17.82	1.0	20	0.9792	84.2	73-127	15.03	17	30	
Xylenes, Total	52.89	3.0	60	3.175	82.9	74-127	44.66	16.9	30	
Surr: 4-Bromofluorobenzene	28.2	1.0	30	0	94	75-131	27.45	2.73	30	
Surr: Trifluorotoluene	28.87	1.0	30	0	96.2	73-130	27.62	4.42	30	

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

Client: Navajo Refining Company
Work Order: 0905050
Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: **R76430** Instrument ID **BTEX3** Method: **SW8021B**

The following samples were analyzed in this batch:

0905050-01A	0905050-02A	0905050-03A
0905050-04A	0905050-05A	0905050-07A
0905050-08A	0905050-09A	0905050-10A
0905050-11A	0905050-12A	0905050-13A
0905050-14A	0905050-15A	

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: **R76451** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **MEOHW1-050409-R76451** Units: **µg/L** Analysis Date: **5/4/2009 08:20 AM**

Client ID: Run ID: **BTEX1_090504A** SeqNo: **1662154** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	30.65	1.0	30	0	102	77-129	0			
Surr: Trifluorotoluene	32.33	1.0	30	0	108	75-130	0			

MBLK Sample ID: **BBLKW1-050409-R76451** Units: **µg/L** Analysis Date: **5/4/2009 08:50 AM**

Client ID: Run ID: **BTEX1_090504A** SeqNo: **1662155** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
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	32.65	1.0	30	0	109	75-130	0			

LCS Sample ID: **BLCSW1-050409-R76451** Units: **µg/L** Analysis Date: **5/4/2009 07:53 AM**

Client ID: Run ID: **BTEX1_090504A** SeqNo: **1662153** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	17.8	1.0	20	0	89	76-125	0			
Xylenes, Total	51.58	3.0	60	0	86	79-124	0			
Surr: 4-Bromofluorobenzene	29.62	1.0	30	0	98.7	77-129	0			
Surr: Trifluorotoluene	32.41	1.0	30	0	108	75-130	0			

MS Sample ID: **0904680-07AMS** Units: **µg/L** Analysis Date: **5/4/2009 10:10 AM**

Client ID: Run ID: **BTEX1_090504A** SeqNo: **1662158** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	20.44	1.0	20	0	102	76-125	0			
Xylenes, Total	60.08	3.0	60	0	100	79-124	0			
Surr: 4-Bromofluorobenzene	29.57	1.0	30	0	98.6	77-129	0			
Surr: Trifluorotoluene	33.66	1.0	30	0	112	75-130	0			

MSD Sample ID: **0904680-07AMSD** Units: **µg/L** Analysis Date: **5/4/2009 10:37 AM**

Client ID: Run ID: **BTEX1_090504A** SeqNo: **1662159** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	20.33	1.0	20	0	102	76-125	20.44	0.562	20	
Xylenes, Total	58.84	3.0	60	0	98.1	79-124	60.08	2.09	20	
Surr: 4-Bromofluorobenzene	30	1.0	30	0	100	77-129	29.57	1.46	20	
Surr: Trifluorotoluene	32.52	1.0	30	0	108	75-130	33.66	3.44	20	

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

Client: Navajo Refining Company
Work Order: 0905050
Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: **R76451** Instrument ID **BTEX1** Method: **SW8021B**

The following samples were analyzed in this batch:

0905050-08A

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: **R76502** Instrument ID **BTEX3** Method: **SW8021B**

MELK Sample ID: **BBLKS1-050509-R76502** Units: **µg/Kg** Analysis Date: **5/5/2009 09:35 AM**

Client ID: Run ID: **BTEX3_090505A** SeqNo: **1663129** 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								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	29.06	1.0	30	0	96.9	75-131	0			
Surr: Trifluorotoluene	29.97	1.0	30	0	99.9	73-130	0			

LCS Sample ID: **BLCSS1-050509-R76502** Units: **µg/Kg** Analysis Date: **5/5/2009 08:30 AM**

Client ID: Run ID: **BTEX3_090505A** SeqNo: **1663128** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.68	1.0	20	0	108	74-129	0			
Toluene	20.64	1.0	20	0	103	75-128	0			
Ethylbenzene	20.48	1.0	20	0	102	73-127	0			
Methyl tert-butyl ether	109	5.0	100	0	109	73-128	0			
Xylenes, Total	61.67	3.0	60	0	103	74-127	0			
Surr: 4-Bromofluorobenzene	30.25	1.0	30	0	101	75-131	0			
Surr: Trifluorotoluene	30.28	1.0	30	0	101	73-130	0			

MS Sample ID: **0905050-06AMS** Units: **µg/Kg** Analysis Date: **5/5/2009 10:41 AM**

Client ID: **BH#2 15'** Run ID: **BTEX3_090505A** SeqNo: **1663131** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.64	1.0	20	0	103	74-129	0			
Toluene	19.71	1.0	20	0	98.5	75-128	0			
Ethylbenzene	19.55	1.0	20	0	97.8	73-127	0			
Methyl tert-butyl ether	104.4	5.0	100	0	104	73-128	0			
Xylenes, Total	58.75	3.0	60	0	97.9	74-127	0			
Surr: 4-Bromofluorobenzene	30.06	1.0	30	0	100	75-131	0			
Surr: Trifluorotoluene	29.43	1.0	30	0	98.1	73-130	0			

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: R76502 Instrument ID BTEX3 Method: SW8021B

MSD Sample ID: 0905050-06AMSD Units: µg/Kg Analysis Date: 5/5/2009 11:13 AM

Client ID: BH#2 15' Run ID: BTEX3_090505A SeqNo: 1663132 Prep Date: DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.74	1.0	20	0	109	74-129	20.64	5.21	30	
Toluene	20.76	1.0	20	0	104	75-128	19.71	5.22	30	
Ethylbenzene	20.52	1.0	20	0	103	73-127	19.55	4.84	30	
Methyl tert-butyl ether	108.8	5.0	100	0	109	73-128	104.4	4.13	30	
Xylenes, Total	61.58	3.0	60	0	103	74-127	58.75	4.71	30	
Surr: 4-Bromofluorobenzene	29.18	1.0	30	0	97.3	75-131	30.06	2.97	30	
Surr: Trifluorotoluene	29.8	1.0	30	0	99.3	73-130	29.43	1.25	30	

The following samples were analyzed in this batch:

0905050-06A	0905050-09A	0905050-10A
0905050-13A	0905050-16A	0905050-17A
0905050-18A	0905050-19A	0905050-20A
0905050-21A	0905050-22A	0905050-23A
0905050-24A	0905050-25A	0905050-26A
0905050-28A		

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: **R76536** Instrument ID **FID-9** Method: **SW8015**

MBLK Sample ID: **GBLKS-050609-R76536** Units: **mg/Kg** Analysis Date: **5/6/2009 10:43 AM**

Client ID: Run ID: **FID-9_090506A** SeqNo: **1664578** 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	0.1154	0.0050	0.1	0	115	70-130	0			

LCS Sample ID: **GLCSS-050609-R76536** Units: **mg/Kg** Analysis Date: **5/6/2009 09:53 AM**

Client ID: Run ID: **FID-9_090506A** SeqNo: **1664577** 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	1.079	0.050	1	0	108	70-130	0			
Surr: 4-Bromofluorobenzene	0.1224	0.0050	0.1	0	122	70-130	0			

MS Sample ID: **0905050-01AMS** Units: **mg/Kg** Analysis Date: **5/6/2009 11:57 AM**

Client ID: **BH#1 5'** Run ID: **FID-9_090506A** SeqNo: **1664581** 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	0.7992	0.050	1	0	79.9	70-130	0			
Surr: 4-Bromofluorobenzene	0.1205	0.0050	0.1	0	120	70-130	0			

MSD Sample ID: **0905050-01AMSD** Units: **mg/Kg** Analysis Date: **5/6/2009 12:22 PM**

Client ID: **BH#1 5'** Run ID: **FID-9_090506A** SeqNo: **1664582** 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	0.8703	0.050	1	0	87	70-130	0.7992	8.51	30	
Surr: 4-Bromofluorobenzene	0.1199	0.0050	0.1	0	120	70-130	0.1205	0.523	30	

The following samples were analyzed in this batch:

0905050-01A	0905050-02A	0905050-03A
0905050-04A	0905050-05A	0905050-06A
0905050-07A	0905050-08A	0905050-09A
0905050-10A		

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: **R76563** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **MEOHW1-050609-R76563** Units: **µg/L** Analysis Date: **5/6/2009 08:14 AM**

Client ID: Run ID: **BTEX1_090506A** SeqNo: **1664189** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	28.84	1.0	30	0	96.1	77-129	0			
Surr: Trifluorotoluene	32.01	1.0	30	0	107	75-130	0			

MBLK Sample ID: **BBLKW1-050609-R76563** Units: **µg/L** Analysis Date: **5/6/2009 08:41 AM**

Client ID: Run ID: **BTEX1_090506A** SeqNo: **1664190** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	29.28	1.0	30	0	97.6	77-129	0			
Surr: Trifluorotoluene	32.63	1.0	30	0	109	75-130	0			

LCS Sample ID: **BLC5W1-050609-R76563** Units: **µg/L** Analysis Date: **5/6/2009 07:47 AM**

Client ID: Run ID: **BTEX1_090506A** SeqNo: **1664188** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	19.86	1.0	20	0	99.3	76-125	0			
Surr: 4-Bromofluorobenzene	30.47	1.0	30	0	102	77-129	0			
Surr: Trifluorotoluene	32.89	1.0	30	0	110	75-130	0			

MS Sample ID: **0905081-02AMS** Units: **µg/L** Analysis Date: **5/6/2009 09:34 AM**

Client ID: Run ID: **BTEX1_090506A** SeqNo: **1664192** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	19.56	1.0	20	0	97.8	76-125	0			
Surr: 4-Bromofluorobenzene	29.4	1.0	30	0	98	77-129	0			
Surr: Trifluorotoluene	32.84	1.0	30	0	109	75-130	0			

MSD Sample ID: **0905081-02AMSD** Units: **µg/L** Analysis Date: **5/6/2009 10:01 AM**

Client ID: Run ID: **BTEX1_090506A** SeqNo: **1664193** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethylbenzene	20.04	1.0	20	0	100	76-125	19.56	2.44	20	
Surr: 4-Bromofluorobenzene	30.26	1.0	30	0	101	77-129	29.4	2.87	20	
Surr: Trifluorotoluene	32.96	1.0	30	0	110	75-130	32.84	0.363	20	

The following samples were analyzed in this batch:

0905050-09A	0905050-10A	0905050-11A
0905050-12A		

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: R76752 Instrument ID FID-9 Method: SW8015

MBLK Sample ID: GBLKS-050809-R76752 Units: mg/Kg Analysis Date: 5/8/2009 02:28 PM

Client ID: Run ID: FID-9_090508A SeqNo: 1668463 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	0.08274	0.0050	0.1	0	82.7	70-130	0			

LCS Sample ID: GLCSS-050809-R76752 Units: mg/Kg Analysis Date: 5/8/2009 01:38 PM

Client ID: Run ID: FID-9_090508A SeqNo: 1668462 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	1.236	0.050	1	0	124	70-130	0			
Surr: 4-Bromofluorobenzene	0.08742	0.0050	0.1	0	87.4	70-130	0			

LCSD Sample ID: GLCSD-050809-R76752 Units: mg/Kg Analysis Date: 5/8/2009 05:21 PM

Client ID: Run ID: FID-9_090508A SeqNo: 1668524 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	1.194	0.050	1	0	119	70-130	1.236	3.48	30	
Surr: 4-Bromofluorobenzene	0.08727	0.0050	0.1	0	87.3	70-130	0.08742	0.165	30	

MS Sample ID: 0905050-16AMS Units: mg/Kg Analysis Date: 5/8/2009 03:42 PM

Client ID: BH#4 5' Run ID: FID-9_090508A SeqNo: 1668466 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	0.7333	0.050	1	0.039	69.4	70-130	0			S
Surr: 4-Bromofluorobenzene	0.0888	0.0050	0.1	0	88.8	70-130	0			

MSD Sample ID: 0905050-16AMSD Units: mg/Kg Analysis Date: 5/8/2009 04:07 PM

Client ID: BH#4 5' Run ID: FID-9_090508A SeqNo: 1668467 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	0.6029	0.050	1	0.039	56.4	70-130	0.7333	19.5	30	S
Surr: 4-Bromofluorobenzene	0.08721	0.0050	0.1	0	87.2	70-130	0.0888	1.8	30	

The following samples were analyzed in this batch:

0905050-11A	0905050-12A	0905050-13A
0905050-14A	0905050-15A	0905050-16A
0905050-17A	0905050-18A	0905050-19A
0905050-20A	0905050-21A	0905050-22A
0905050-23A	0905050-24A	0905050-26A

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: R76861 Instrument ID FID-9 Method: SW8015

MBLK Sample ID: GBLKS-051409-R76861 Units: mg/Kg Analysis Date: 5/14/2009 10:28 AM

Client ID: Run ID: FID-9_090514A SeqNo: 1670496 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	0.08848	0.0050	0.1	0	88.5	70-130	0			

LCS Sample ID: GLCSS-051409-R76861 Units: mg/Kg Analysis Date: 5/14/2009 09:38 AM

Client ID: Run ID: FID-9_090514A SeqNo: 1670495 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	1.238	0.050	1	0	124	70-130	0			
Surr: 4-Bromofluorobenzene	0.09367	0.0050	0.1	0	93.7	70-130	0			

LCSD Sample ID: GLCSD-051409-R76861 Units: mg/Kg Analysis Date: 5/14/2009 02:44 PM

Client ID: Run ID: FID-9_090514A SeqNo: 1670502 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	1.247	0.050	1	0	125	70-130	1.238	0.739	30	
Surr: 4-Bromofluorobenzene	0.09014	0.0050	0.1	0	90.1	70-130	0.09367	3.84	30	

MS Sample ID: 0905156-05AMS Units: mg/Kg Analysis Date: 5/14/2009 12:07 PM

Client ID: Run ID: FID-9_090514A SeqNo: 1670500 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	0.6581	0.050	1	0	65.8	70-130	0			S
Surr: 4-Bromofluorobenzene	0.08626	0.0050	0.1	0	86.3	70-130	0			

MSD Sample ID: 0905156-05AMSD Units: mg/Kg Analysis Date: 5/14/2009 01:55 PM

Client ID: Run ID: FID-9_090514A SeqNo: 1670501 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	0.3537	0.050	1	0	35.4	70-130	0.6581	60.2	30	SR
Surr: 4-Bromofluorobenzene	0.08684	0.0050	0.1	0	86.8	70-130	0.08626	0.669	30	

The following samples were analyzed in this batch:

0905050-25A 0905050-28A

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: 35912 Instrument ID ICS3000 Method: E300

MBLK Sample ID: WBLKS1-050609-35912 Units: mg/Kg Analysis Date: 5/7/2009 06:15 PM

Client ID: Run ID: ICS3000_090507C SeqNo: 1666046 Prep Date: 5/6/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	2.82	5.0								J
Surr: Selenate (surr)	52.46	1.0	50	0	105	85-115	0			

LCS Sample ID: WLCSS1-050609-35912 Units: mg/Kg Analysis Date: 5/7/2009 06:38 PM

Client ID: Run ID: ICS3000_090507C SeqNo: 1666048 Prep Date: 5/6/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	202.9	5.0	200	0	101	90-110	0			
Surr: Selenate (surr)	51.72	1.0	50	0	103	85-115	0			

MS Sample ID: 0905050-15BMS Units: mg/Kg Analysis Date: 5/8/2009 02:16 AM

Client ID: BH#3 45' Run ID: ICS3000_090507C SeqNo: 1666068 Prep Date: 5/6/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	113.6	5.0	99.11	8.206	106	75-125	0			
Surr: Selenate (surr)	55.16	0.99	49.55	0	111	80-120	0			

DUP Sample ID: 0905050-15BDUP Units: mg/Kg Analysis Date: 5/8/2009 01:53 AM

Client ID: BH#3 45' Run ID: ICS3000_090507C SeqNo: 1666067 Prep Date: 5/6/2009 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	8.186	5.0	0	0	0	0-0	8.206	0.242	20	
Surr: Selenate (surr)	53.68	0.99	49.55	0	108	85-115	52.76	1.73	20	

The following samples were analyzed in this batch:

0905050-01B	0905050-02B	0905050-03B
0905050-04B	0905050-05B	0905050-06B
0905050-07B	0905050-08B	0905050-09B
0905050-10B	0905050-11B	0905050-12B
0905050-13B	0905050-14B	0905050-15B

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

Client: Navajo Refining Company
 Work Order: 0905050
 Project: NAV-09-004-Lea Refining

QC BATCH REPORT

Batch ID: 35926 Instrument ID ICS3000 Method: E300

MBLK	Sample ID: WBLKS2-050609-35926				Units: mg/Kg		Analysis Date: 5/8/2009 03:30 PM			
Client ID:	Run ID: ICS3000_090508A				SeqNo: 1666381		Prep Date: 5/6/2009		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	5.0								
Surr: Selenate (surr)	50.75	1.0	50	0	102	85-115	0			

LCS	Sample ID: WLCSS2-050609-35926				Units: mg/Kg		Analysis Date: 5/8/2009 03:53 PM			
Client ID:	Run ID: ICS3000_090508A				SeqNo: 1666384		Prep Date: 5/6/2009		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	198.1	5.0	200	0	99.1	90-110	0			
Surr: Selenate (surr)	49.25	1.0	50	0	98.5	85-115	0			

MS	Sample ID: 0905050-16BMS				Units: mg/Kg		Analysis Date: 5/8/2009 05:01 PM			
Client ID: BH#4 5'		Run ID: ICS3000_090508A			SeqNo: 1666390		Prep Date: 5/6/2009		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	103.2	4.9	98.52	6.177	98.4	75-125	0			
Surr: Selenate (surr)	51.32	0.98	49.26	0	104	80-120	0			

DUP	Sample ID: 0905050-16BDUP				Units: mg/Kg		Analysis Date: 5/8/2009 04:38 PM			
Client ID: BH#4 5'			Run ID: ICS3000_090508A		SeqNo: 1666389		Prep Date: 5/6/2009		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	6.177	4.9	0	0	0	0-0	6.177	0	20	
Surr: Selenate (surr)	51.52	0.98	49.26	0	105	85-115	51.8	0.553	20	

The following samples were analyzed in this batch:

0905050-16B	0905050-17B	0905050-18B
0905050-19B	0905050-20B	0905050-21B
0905050-22B	0905050-23B	0905050-24B
0905050-25B	0905050-26B	0905050-28B

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

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Date: 18-May-09

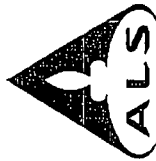
Client: Navajo Refining Company
Project: NAV-09-004-Lea Refining
WorkOrder: 0905050

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

Chain of Custody Form

Page 1 of 3

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

Customer Information				Project Information				ALS Project Manager: <u>ALS Work Order # 000000</u>																			
Purchase Order:				Project Name:				Lea Refining				A BTEX (8021)				Parameter/Method Request for Analysis											
Work Order:				Project Number:				NAV-04-009				B GRO (8015M)															
Company Name:				Bill To Company:				Navajo Refining Company				C DRO (8015M)															
Send Report To:				Invoice Attn:				Darrell Moore				D ORO (8015M)															
Address:				P.O. Box 159				P.O. Box 159				E Artons (300) Cl															
City/State/Zip:				Artesia, NM 88211				Artesia, NM 88211				G															
Phone:				(505) 748-3311				(505) 748-3311				H															
Fax:				(505) 746-5421				(505) 746-5421				I															
E-Mail Address:				dgboyer@SESI-NM.com				J				J															
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold										
1	BH #1 5'	4/29/09	0905	Soil		2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓										
2	BH #1 10'	↓	0925																								
3	BH #1 15'	↓	0935																								
4	BH #2 5'	4/30/09	0830																								
5	BH #2 10'	↓	0810																								
6	BH #2 15'	↓	0830																								
7	BH #3 5'	↓	0920																								
8	BH #3 10'	↓	0935																								
9	BH #3 15'	↓	0940																								
10	BH #3 20'	↓	0950																								
Sampler(s) Please Print & Sign: <u>Swiss Knecht</u> Shipment Method: <u>FedEx</u>																											
Relinquished by: <u>Swiss Knecht</u> Date: <u>5/1/09</u> Time: <u>1600</u> Received by: <u>DS</u>																											
Relinquished by: <u>Swiss Knecht</u> Date: <u>5/1/09</u> Time: <u>0830</u> Received by: <u>DS</u>																											
Logged by (Laboratory): <u>Swiss Knecht</u> Date: <u>5/1/09</u> Time: <u>0830</u> Received by (Laboratory): <u>DS</u>																											
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: <u>8-C</u> ; 9-5035																											

QC Package: (Check One Box Below)

☒ Level I Std QC ☐ TRRP Check List

☐ Level III Std QC/Raw Data ☐ TRRP Level IV

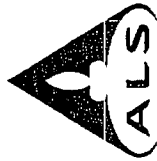
☐ Level IV SW846/CLP ☐ Other: _____

Notes: 10 Work Days TAT.

Required Turnaround Time: (Check Box) ☒ 5 Wk Days ☐ 10 Wk Days ☐ 2 Wk Days ☐ 24 Hour

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.

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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 2 of 3

Customer Information

Purchase Order	Project Name
Work Order	Project Number
Company Name	Bill to Company
Send Report To	Invoice Attn
Address	P.O. Box 159
City/State/Zip	Artesia, NM 88211
Phone	(505) 748-3311
Fax	(505) 746-5421
E-Mail Address	dgboyer@SESI-NM.com

Project Information

Project Name	Lea Refining
Project Number	NAV-04-008
Bill to Company	Navajo Refining Company
Invoice Attn	Darrell Moore
P.O. Box 159	
City/State/Zip	Artesia, NM 88211
Phone	(505) 748-3311
Fax	(505) 746-5421
E-Mail Address	

Parameter/Method Request for Analysis

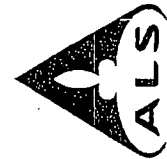
A	BTEX (8021)
B	GRO (8015M)
C	DRO (8015M)
D	ORO (8015M)
E	Anions (300) Cl
F	
G	
H	
I	
J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	BH#3 25'	4/30/09	1005	Soil		2	✓	✓	✓	✓	✓						
2	BH#3 30'		1030														
3	BH#3 35'		1055														
4	BH#3 40'		1115														
5	BH#3 45'		1130														
6	BH#4 5'		1250														
7	BH#4 10'		1310														
8	BH#4 15'		1320														
9	BH#5 5'		1400														
10	BH#5 10'		1425														

Shipment Method		Required Turnaround Time: (Check Box)		Cooler Temp		QC Packaged (Check One Box Below)	
Fed Ex		☑ Sid 10 Wk Days		☑ 5 Wk Days		☑ Level II Sid QC	
Relinquished by: Isaac Kneid		Date: 5/1/09		Time: 1600		☑ Level III Sid QC/Rnw Data	
Received by: [Signature]		Date: 5/1/09		Time: 0830		☑ Level IV SW846/CLP	
Checked by (Laboratory): [Signature]		Date: 5/1/09		Time: 0830		☑ Other	
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: 9-5035		Notes: 10 Work Days TAT.		Results Due Date:		TRRP Checklist	
						☑ TRRP Level IV	

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.

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☒ **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

Page 3 of 3

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

Customer Information				Project Information				ALS Project Manager: <u>ALS Work Order # 005050</u>											
Purchase Order				Lea Refining				Parameter/Method Request for Analysis											
Work Order				NAV-04-009				BTEX (8021)											
Company Name				Navajo Refining Company				GRO (8015M)											
Send Report To				Darrell Moore				DRO (8015M)											
Address				P.O. Box 159				ORO (8015M)											
City/State/Zip				Artesia, NM 88211				Anions (300) Cl											
Phone				(505) 748-3311															
Fax				(505) 748-5421															
e-Mail Address				dgboyer@SES1-NM.com															
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	Al	B	C	D	E	F	G	H	I	J	Hold		
1	BH#6 5'	4/30/19	1515	Soil		2													
2	BH#6 10'		1525																
3	BH#6 15'		1540																
4	BH#7 5'	5/1/19	0845																
5	BH#7 10'	5/1/19	0900																
6	BH#7 15'	5/1/19	0925																
7	Temp Blank																		
8	Trip Blank																		
9																			
10																			
Samples(s) Please Print & Sign				Shipment Method				Required Turnaround Time: (Check Box)										Results Due Date:	
Isaac Sincere				Fed Ex				<input checked="" type="checkbox"/> Sid 10 WK Days <input type="checkbox"/> Sid 2 WK Days <input type="checkbox"/> Other										<input type="checkbox"/> 24 Hour	
Relinquished by:				Received by:				Notes: 10 Work Days TAT.											
Date: 5/1/19				Time: 1600				QC Packages: (Check One Box Below)											
Relinquished by:				Received by: [Signature]				<input checked="" type="checkbox"/> Level II Sid QC <input type="checkbox"/> TRRP Check List											
Logged by (Laboratory):				Checked by (Laboratory):				<input type="checkbox"/> Level III Sid QC Raw Data <input type="checkbox"/> TRRP Level IV											
Date: 5/1/19				Time: 08:30				<input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other											
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-2°C 9-5035																			

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.

ALS Laboratory Group

Sample Receipt Checklist

Client Name: **NAVAJO REFINING**

Date/Time Received: **02-May-09 08:30**

Work Order: **0905050**

Received by: **RDH**

Checklist completed by Raymond N Gamba
eSignature

04-May-09
Date

Reviewed by: Jay Lynn F Thibault
eSignature

05-May-09
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	3.4c 002		
Cooler(s)/Kit(s):	2497		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes: Received sample "BH#5 15" not on COC; logged in with analysis.

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:


Comments:

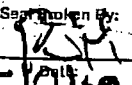
Corrective Action:

W.O.# 0905050

THIS PORTION CAN BE REMOVED FOR RECIPIENT'S RECORDS.

to	5/1/09	FedEx Tracking Number	869376483244
Sender's name	SEST	Phone	575 397-0510
Company	SEST		
Address	703 E Clinton	Dept./Floor/Suite/Room	
City	Hobbs	State	NM
		ZIP	88240
Our Internal Billing Reference			

	ALS Laboratory Group	CL
	10450 Standliff Rd., Suite 210	
	Houston, Texas 77099	
	Tel. +1 281 530 5658	
	Fax. +1 281 530 5887	
	Date:	5/1/09
	Name:	DSAGE
	Company:	SEST

STUDY SEAL	Seal Broken By:
Time: 1600	
Kindred	
5/2/09	

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, October 09, 2009 9:26 AM
To: 'Moore, Darrell'; 'mleighton@lovington-nm.org'; 'hsncpbm@leaco.net'
Cc: Lackey, Johnny; VonGonten, Glenn, EMNRD
Subject: RE: Lea Refinery Historic Delineation Report/Work Plan (GW-14) General Correspondence

Darrell:

Received. After the meeting I recalled the C-141 submittal and it was scanned into our C-141 thumbnail, but the Environmental Status Presentation and Report was to have addressed the attached C-141 issues and should have been included in the report that was passed out at the meeting for our consideration of addressing potential point sources at the facility.

The agencies would appreciate it in the future if you could package items together and reference the discharge permit so we may keep our records complete. The agencies will strive to identify extraneous submittals submitted under the discharge permit and will strive to include them in our review of the Section 21(A) Environmental Status Report and presentation from our meeting yesterday.

Thank you.

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/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [<mailto:Darrell.Moore@hollycorp.com>]
Sent: Friday, October 09, 2009 8:26 AM
To: Chavez, Carl J, EMNRD; 'mleighton@lovington-nm.org'; 'hsncpbm@leaco.net'
Cc: Lackey, Johnny
Subject: FW: Lea Refinery Historic Delineation Report/Work Plan

To all:

The e mail below with attachments was sent to all concerned on July 20, 2009. This is the delineation report of historical spills at the Lovington facility.

From: Moore, Darrell
Sent: Monday, July 20, 2009 1:33 PM
To: 'Chavez, Carl J, EMNRD'; 'hsncpbm@leaco.net'; 'mleighton@lovington-nm.org'
Subject: FW: Lea Refinery Historic Delineation Report/Work Plan

Carl,

Attached is the delineation report for the historical spills referenced in GW-014 for our facility at Lovington. Also attached are all analysis' from samples that were caught and a site map. None of the spills impacted groundwater. Further, also as part of GW-014, we have installed numerous new monitor wells, in some instances directly down dip from historical spills, and these monitor wells have shown no impact to groundwater. We will be forwarding those results along with a site map showing monitor wells locations and analysis in the very near future.

Please note...I have sent this email the the City of Lovington and to Patrick McMahon with Heidel, Samberson, Newell, Cox and McMahon.

If there are any questions from anyone about this submission, please call me at 575-746-5281 or on my cell at 575-703-5058.

From: Susana Rodriguez [mailto:office2@sesi-nm.com]
Sent: Friday, June 12, 2009 4:44 PM
To: Moore, Darrell
Subject: Lea Refinery Historic Delineation Report/Work Plan

Mr. Moore

I have attached the Lea Refinery Historic Delineation/Work Plan for your review. If you have any questions regarding this report please let us know.

Thank you,

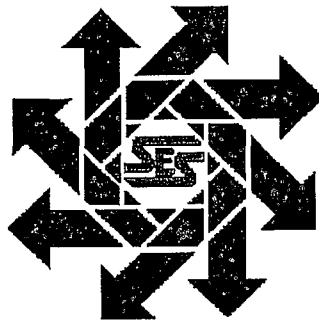
Susana Rodriguez
Administrative Assistant
Safety & Environmental Solutions, Inc.
office: 575.397.0510
fax: 575.393.4388
office2@sesi-nm.com

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This inbound email has been scanned for malicious software and transmitted safely to you using Webroot Email Security.

**Navajo Refining Company
Lea Refinery (Historic)
Delineation Report/Work Plan
Section 36, Township 16S, Range 36E
Lea County, New Mexico**

May 29, 2009



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

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 closest groundwater of record listed with the New Mexico office of the state engineer is located in the same section, range and township. The depth of water in this well was 95 ft.

IV. Soils

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

V. Work Performed

During the period April 29-May 1, 2009, seven boreholes were drilled at four locations where spills or leaks of refinery related fluids were released. The boreholes were advanced to a minimum depth of 15 feet with the deepest borehole drilled to 45 feet. Samples were collected at each location for TPH, BTEX and chloride analysis. At the location having a spent caustic release soil pH was also measured.

The locations of the boreholes are shown on the report aerial photo. Borehole logs are included in the report and reference the appropriate NMOCD C-141 spill report form. With the exception of one borehole (discussed below), all TPH and BTEX analyses showed non-detectable constituents. All soil chloride and pH results were non-elevated and were typical for uncontaminated area soils.

Borehole BH-3 was drilled inside the tank berm near Tank 103B and showed detectable TPH and BTEX. A diesel fuel release occurred the morning of December 7, 2003 and reported to NMOCD later that day. The cause of the release was a relief valve left open which discharged fluid when an associated pump was turned on. An estimated 70 barrels of fuel was released and 30 barrels was recovered. Approximately 100 cubic yards of contaminated soil was removed and shipped to Controlled Recovery Inc., a state permitted disposal facility.

On April 30, 2009 a borehole was drilled inside the tank berm near the lowest point of diesel fuel accumulation. The boring was drilled to a depth of 45 feet with samples collected every 5 feet. The highest diesel range TPH was 6,100 mg/Kg at a depth of 25 feet. The base of the contamination was 35 feet. No TPH contamination was detected at 40 or 45 feet. BTEX was detected to a depth of 40 feet. Maximum benzene was 0.0048 mg/Kg at 10 feet, well below the soil screening reference levels of 10.3 mg/kg and 25.8 mg/Kg for residential and industrial soil, respectively. Groundwater at the location is at a depth of approximately 95 feet and a monitor well was completed downgradient of the location following the release. That monitor well was sampled following installation but

did not show contamination. It has been scheduled for re-sampling together with the new replacement wells recently installed at the refinery.

Samples were retrieved in 5' intervals from all boreholes. All samples were properly preserved and transported under Chain of Custody to ALS Laboratory Group of Houston Texas for analysis. The samples were analyzed for Chlorides (EPA Method 300), Total Petroleum Hydrocarbons (EPA Method 8015) and BTEX (EPA Method SW-846-8260).

The results of the analysis are as follows:

Date	ID	Cl ⁻ (mg/Kg)	TPH (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	pH pH units
4/30/09	BH#1 5'	9.75	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#1 10'	7.63	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#1 15'	17.3	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#2 5'	5.41	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#2 10'	5.33	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#2 15'	5.31	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#3 5'	5.26	-	370	0.58	ND	ND	0.055	0.022	-
4/30/09	BH#3 10'	5.96	-	2500	28	0.0048	ND	3.4	4.1	-
4/30/09	BH#3 15'	5.55	-	2200	20	0.0015	ND	1.1	0.60	-
4/30/09	BH#3 20'	ND	-	4600	26	0.0029	ND	3.3	0.81	-
4/30/09	BH#3 25'	5.30	-	6100	19	0.0023	ND	3.0	0.20	-
4/30/09	BH#3 30'	8.13	-	820	21	0.0022	ND	2.0	0.20	-
4/30/09	BH#3 35'	6.05	-	1900	20	0.0016	ND	0.40	0.12	-
4/30/09	BH#3 40'	6.71	-	ND	ND	ND	ND	0.0015	0.0042	-
4/30/09	BH#3 45'	8.21	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#4 5'	6.18	ND	ND	ND	ND	0.0011	ND	ND	-
4/30/09	BH#4 10'	5.01	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#4 15'	5.18	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#5 5'	7.79	ND	ND	ND	ND	ND	ND	ND	8.82
4/30/09	BH#5 10'	11.6	ND	ND	ND	ND	ND	ND	ND	8.94
4/30/09	BH#5 15'	6.51	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#6 5'	12.3	ND	ND	ND	ND	ND	ND	ND	8.81
4/30/09	BH#6 10'	12.1	ND	ND	ND	ND	ND	ND	ND	9.66
4/30/09	BH#6 15'	6.8	ND	ND	ND	ND	ND	ND	ND	9.79
4/30/09	BH#7 5'	5.76	ND	ND	ND	ND	0.0015	0.0021	ND	-
4/30/09	BH#7 10'	21.7	ND	ND	ND	ND	ND	ND	ND	-
4/30/09	BH#7 15'	15.3	ND	ND	ND	ND	ND	ND	ND	-

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

VI. Action Plan

Given that the spill occurred 5½ years ago and has not advanced past 35 feet, it is unlikely to move further vertically. No further soil investigation or excavation is recommended. Unless the results of the upcoming sampling of the nearby monitor well show differently, only routine groundwater sampling on the same schedule as other refinery wells should be performed.

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

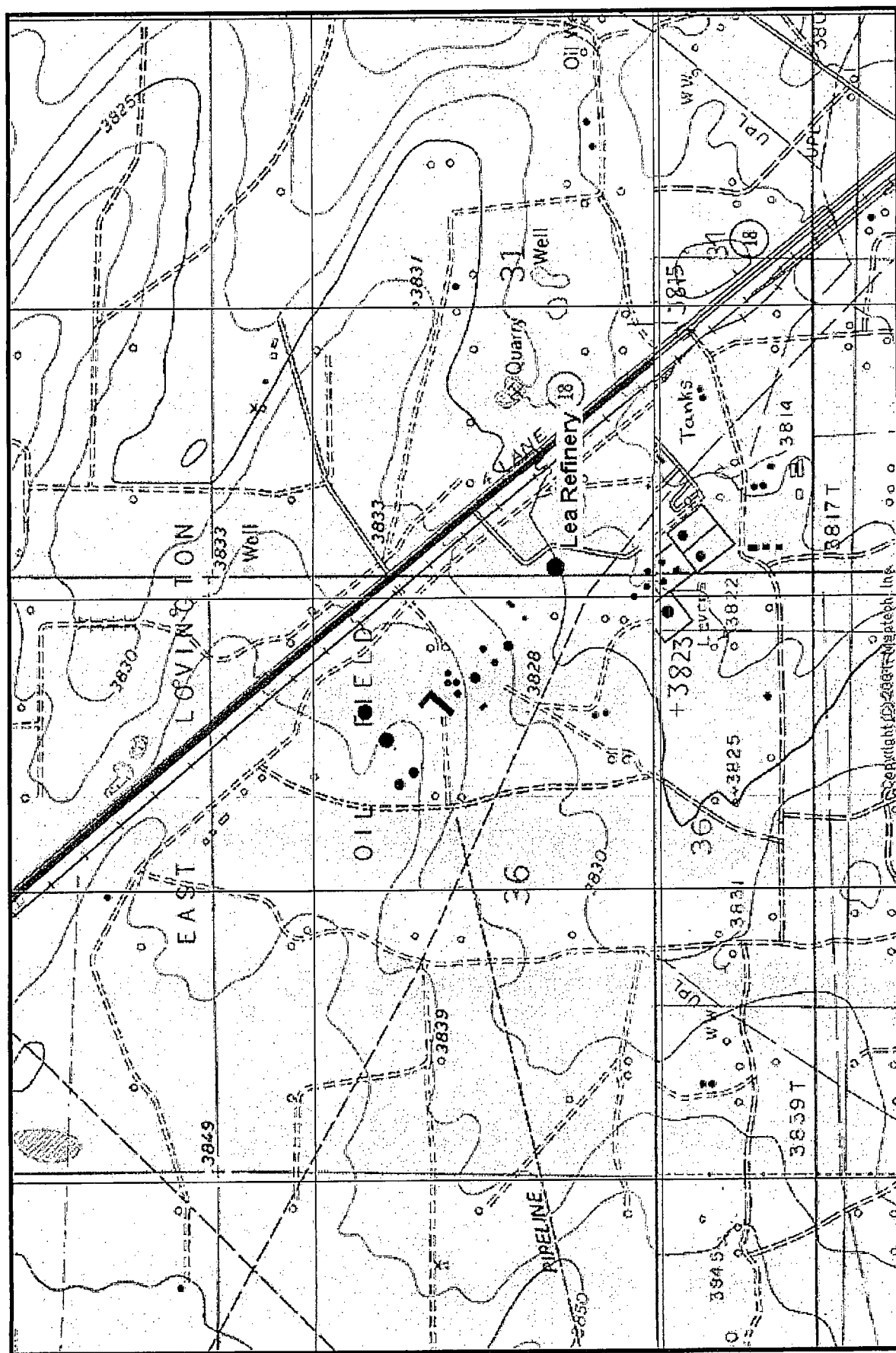


Figure 2
Site Plan



Figure 3

Logs of Boring



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-1

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
C-141, 10/10/07
N32° 52' 49.00", W103° 18' 15.20"

Date, Time Started : 04/29/09, 0845
Date, Time Complete : 04/29/09, 0945
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	GRO-TPH (mg/Kg)	DRO-TPH (mg/Kg)	MOR-TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
					DESCRIPTION								
0				AR	0-0.25 ft. Fill material, brown sand and rock.								
1													
2	CB	0											
3					0.25-5 ft. CALICHE, light tan-brown, coarse with rock fragments, no H/C staining or odor								
4				CA		0905050-01	<0.050	<49	<97	<0.0010	<0.0010	<0.0010	<0.0030
5													
6													
7					5-8.5 ft. CALICHE, light tan-brown, caliche coarse with rock fragments								
8	CB	8											
9													
10					8.5-10 ft. CALICHE and SAND, tan-brown, with rock fragments, no H/C staining or odor	0905050-02	<0.050	<50	<100	<0.0010	<0.0010	<0.0010	<0.0030
11				CA/SP									
12					10-13.5 ft. CALICHE and SAND, tan-brown, with rock fragments, no H/C staining or odor								
13	CB	13.5											
14				SP									
15					13.5-15 ft. SAND, light tan-brown, fine grained, with rock fragments, no H/C staining or odor	0905050-03	<0.050	<50	<100	<0.0010	<0.0010	<0.0010	<0.0030

Notes: Boring backfilled with 6 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-2

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
C-141, 10/10/07
N32° 52' 48.40", W103° 18' 15.30"

Date, Time Started : 04/29/09, 0950
Date, Time Complete : 04/30/09, 0845
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	GRO-TPH (mg/Kg)	DRO-TPH (mg/Kg)	MOR-TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
					DESCRIPTION								
0				AR	0-0.25 ft. Fill material, brown sand and rock, no H/C staining or odor								
1													
2													
3	CB	0		CA	0.25-5 ft. CALICHE, light tan-brown, hard coarse with rock fragments, no H/C staining or odor								
4													
5					5-6 ft. CALICHE, light tan-brown	0905050-04	<0.050	<49	<99	<0.0010	<0.0010	<0.0010	<0.0030
6													
7													
8	CB	20		CA/SP	6-10 ft. CALICHE and SAND, tan-brown, fine grained, with rock fragments, no H/C staining or odor								
9													
10					10-11 ft. Sandy CALICHE, tan-brown, fine grained, no H/C staining or odor	0905050-05	<0.050	<49	<99	<0.0010	<0.0010	<0.0010	<0.0030
11													
12													
13	CB	12		SP	11-15 ft. SAND, light tan-brown, fine grained, with rock fragments, no H/C staining or odor								
14													
15						0905050-06	<0.050	<49	<99	<0.0010	<0.0010	<0.0010	<0.0030

Notes: Hydraulic line broke @0950 4/29; resumed drilling at 0750 4/30.
Boring backfilled with 7 bags bentonite, hydrated.
Maximum chloride concentration, all samples 5.4 mg/kg, 5 ft.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-3

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
C-141, 12/07/03
N32° 52' 30.84", W103° 17' 57.82"

Date, Time Started : 04/30/09, 0905
Date, Time Complete : 04/30/09, 1210
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	GRO-TPH (mg/Kg)	DRO-TPH (mg/Kg)	MOR-TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
0						0-0.25 ft. Fill material, brown sand and caliche								
	CB	0		AR		0.25-5 ft. CALICHE, hard, light gray staining, H/C odor								
5				CA		5-7 ft. CALICHE, brown, coarse, H/C odor	0905050-07	0.58	370	<97	<0.0010	<0.0010	0.055	0.022
	CB	18				7-10 ft. CALICHE and SAND, tan-brown, no H/C staining, minimal odor								
10				CA/SP		10-11 ft. CALICHE SAND, light tan-brown, H/C odor	0905050-08	28	2,500	<200	0.0048	<0.0010	3.4	4.1
	CB	12				11-15 ft. Sandy CALICHE, tan-brown, with H/C odor								
15						15-20 ft. SAND, fine grained, with rock fragments	0905050-09	20	2,200	<200	0.0015	<0.0010	1.1	0.60
	CB	22		SP		20-25 ft. SAND, light tan-brown, fine grained, SANDSTONE layers, H/C odor, no H/C staining	0905050-10	26	4,600	<490	0.0029	<0.0010	3.3	0.81
20						25-30 ft. SAND with SANDSTONE layers, fine grained, no staining, H/C odor								
	CB	26				30-35 ft. SAND with SANDSTONE layers, light tan-brown, fine grained, no staining, H/C odor	0905050-11	19	6,100	<990	0.0023	<0.0010	3.0	0.20
25				SP/SS		35-40 ft. SAND, light tan-brown, fine grained, no H/C staining	0905050-12	21	820	<99	0.0022	<0.0010	2.0	0.20
	CB	21				40-45 ft. SAND, light tan-brown, fine grained, no H/C staining or odor.	0905050-13	20	1,900	<98	0.0016	<0.0010	0.40	0.12
30														
	CB	26					0905050-14	<0.050	<50	<100	<0.0010	<0.0010	0.0015	0.0042
35														
	CB	22		SP			0905050-15	<0.050	<49	<88	<0.0010	<0.0010	<0.0010	<0.0030
40														
	CB	23												
45														

Notes: Boring backfilled with 20 bags bentonite, hydrated.
Maximum chloride concentration, all samples 8.21 mg/kg, 45 ft.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-4

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
C-141, 12/07/03
N32° 52' 29.99", W103° 17' 57.07"

Date, Time Started : 04/30/09, 1230
Date, Time Complete : 04/30/09, 1335
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	GRO-TPH (mg/Kg)	DRO-TPH (mg/Kg)	MOR-TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
					DESCRIPTION								
0				AR	0-0.25 ft. Fill material, dark sand and rock								
1													
2													
3	CB	0		CA	0.25-5 ft. CALICHE, tan-brown, hard, coarse no H/C staining, minimal H/C odor 2-3 ft.								
4													
5						0905050-16	<0.050	<49	<98	<0.0010	0.0011	<0.0010	<0.0030
6					5-7 ft. CALICHE, light tan-brown, no H/C staining or odor								
7													
8	CB	20			7-10 ft. CALICHE and SAND, light tan-brown, no H/C staining or odor								
9													
10						0905050-17	<0.050	<50	<99	<0.0010	<0.0010	<0.0010	<0.0030
11				CA/SP									
12													
13	CB	13			10-15 ft. Sandy CALICHE, tan-brown, rock fragments, fine grained								
14													
15						0905050-18	<0.050	<49	<97	<0.0010	<0.0010	<0.0010	<0.0030

Notes: Boring backfilled with 7 bags bentonite, hydrated.
Maximum chloride concentration, all samples 6.18 mg/kg, 5 ft.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-5

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
C-141, 07/10/08
N32° 52' 47.30", W103° 18' 2.09"

Date, Time Started : 04/30/09, 1345
Date, Time Complete : 04/30/09, 1440
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	GRO-TPH (mg/Kg)	DRO-TPH (mg/Kg)	MOR-TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
					DESCRIPTION								
0			AR		0-0.25 ft. Fill material, dark brown sand with rock								
1													
2	CB	0			0.25-5 ft. CALICHE, light tan-brown, hard, no H/C staining or odor								
3			CA										
4													
5						0905050-19	<0.050	<49	<99	<0.0010	<0.0010	<0.0010	<0.0030
6					5-8.5 ft. CALICHE, light tan-brown								
7													
8	CB	14.5											
9													
10			SP/CA		8.5-10 ft. CALICHE SAND, light tan-brown, medium to coarse grained, with rock fragments, no H/C staining or odor	0905050-20	<0.050	<49	<99	<0.0010	<0.0010	<0.0010	<0.0030
11													
12					10-12 ft. CALICHE SAND, light tan-brown, fine grained, no H/C staining or odor								
13	CB	21											
14			CA/SP		12-15 ft. SANDY CALICHE, light tan-brown, sand fine grained, with rock fragments, no H/C staining or odor								
15						0905050-28	<0.050	<50	<99	<0.0010	<0.0010	<0.0010	<0.0030

Notes: Boring backfilled with 6 bags bentonite, hydrated.
Maximum chloride concentration, all samples 11.6 mg/kg, 10 ft.
Maximum pH concentration, all samples 8.94, 10 ft.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-6

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
C-141, 07/10/08
N32° 52' 48.31", W103° 18' 0.22"

Date, Time Started : 04/30/09, 1450
Date, Time Complete : 04/30/09, 1600
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	GRO-TPH (mg/kg)	DRO-TPH (mg/kg)	MOR-TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Total Xylenes (mg/kg)
					DESCRIPTION								
0			AR	X	0-0.25 ft. Fill material, dark brown sand								
1													
2	CB	0	CA		0.25-5 ft. CALICHE, brown to light tan, hard, coarse, no H/C staining or odor								
3													
4						0905050-21	<0.050	<49	<99	<0.0010	<0.0010	<0.0010	<0.0030
5													
6			SP/CA		5-7 ft. CALICHE SAND, light tan-brown, medium grained, no H/C staining or odor								
7													
8	CB	48	CA/SP		7-10 ft. SANDY CALICHE, light tan-brown, medium grained, no H/C staining or odor								
9						0905050-22	<0.050	<50	<100	<0.0010	<0.0010	<0.0010	<0.0030
10													
11													
12	CB	27	SP		10-15 ft. SAND, tan-brown, fine grained, no H/C staining or odor								
13													
14													
15						0905050-23	<0.050	<49	<97	<0.0010	<0.0010	<0.0010	<0.0030

Notes: Boring backfilled with 8 bags bentonite, hydrated.

Maximum chloride concentration, all samples 12.3 mg/kg, 5 ft.

Maximum pH concentration, all samples 9.79, 15 ft.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-7

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
C-141, 10/13/05
N32° 52' 47.40", W103° 18' 10.60"

Date, Time Started : 05/01/09, 0820
Date, Time Complete : 05/01/09, 1000
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 : Isaac Kincald
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	GRO-TPH (mg/Kg)	DRO-TPH (mg/Kg)	MOR-TPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
					DESCRIPTION								
0	CB	8	CA		0-0.25 ft. Fill material, CALICHE, GRAVEL, H/C staining and odor	0905050-21	<0.050	<49	<98	<0.0010	0.0015	0.0021	<0.0030
1					0.25-2 ft. CALICHE, black, staining and heavy H/C odor								
2													
3					2-5 ft. CALICHE, light tan-brown, coarse, no staining, slight H/C odor								
4													
5	CB	16	SP/CA		5-5.5 ft. CALICHE, light tan, slight H/C odor	0905050-22	<0.050	<50	<100	<0.0010	<0.0010	<0.0010	<0.0030
6					5.5-7 ft. CALICHE, light tan-brown, coarse, no H/C staining or odor								
7													
8					7-10 ft. CALICHE SAND, light tan-brown, fine grained, no H/C staining or odor								
9													
10	CB	15	SP			0905050-23	<0.050	<49	<98	<0.0010	<0.0010	<0.0010	<0.0030
11													
12													
13					10-15 ft. SAND, tan-brown, fine grained, no H/C staining or odor								
14													
15													

Notes: Boring backfilled with 6 bags bentonite, hydrated.
Maximum chloride concentration, all samples 21.7 mg/kg, 10 ft.

Appendix A

Analytical Results

Appendix B

C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate
District Office in accordance
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side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Navajo Lea Refining Co. LLC	Contact Darrell Moore	
Address 7406 S. 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
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 20 bbls	Volume Recovered 5 bbls
Source of Release Sump at pipeline	Date and Hour of Occurrence 10/10/07 8:00am	Date and Hour of Discovery 10/10/07 8:00am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Hobbs OCD voicemail-on call phone	
By Whom? Doug Price	Date and Hour 10/10/07 9:05am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.

Describe Cause of Problem and Remedial Action Taken.* During switching from one crude tank to the other, relief valve released filling up sump and overrunning. Vacuum was used to suck up free oil.

Describe Area Affected and Cleanup Action Taken.* Area affected is in two areas of about 10' wide by 100' long each. Contaminated soil has been picked up and bottom hole TPH samples taken. Waiting on results

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 Waste & Water	Conditions of Approval	Attached <input type="checkbox"/>
Date: 10/18/07 Phone: 575-748-3311		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report

☐ Final Report

Name of Company Navajo Refining - Lea	Contact Darrell Moore
Address P.O. Drawer 159 Artesia, NM	Telephone No. 505-748-3311
Facility Name	Facility Type

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
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

NATURE OF RELEASE

Type of Release Diesel	Volume of Release 70 bbls.	Volume Recovered 30 bbls.
Source of Release Relief valve	Date and Hour of Occurrence 12/7/03 4:00 am	Date and Hour of Discovery 12/7/03 4:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? E.L. Gonzalez	
By Whom? Darrell Moore	Date and Hour 12/7/03 1:00 pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		

Describe Cause of Problem and Remedial Action Taken.* Relief valve was left open. When pump was kicked on, the release occurred.		
Describe Area Affected and Cleanup Action Taken.* Area is near TK103B. Vacuum truck picked up 30bbls. Liquid. 100yds. of contaminated soil was removed and shipped to CRI. Bottom hole samples have been collected. Awaiting results.		

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: <i>Darrell Moore</i>		OIL CONSERVATION DIVISION	
Printed Name: Darrell Moore		Approved by: District Supervisor:	
Title: Env. Mgr. for Water & Waste	Approval Date:	Expiration Date:	
Date: 12/17/03 Phone: 505-748-3311	Conditions of Approval:	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Navajo Refining Co. LLC	Contact Darrell Moore	
Address 7406 SI Main Lovington, NM 88260	Telephone No. 505-703-5058	
Facility Name	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
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

NATURE OF RELEASE

Type of Release Caustic	Volume of Release 150 Bbls	Volume Recovered 120 Bbls
Source of Release Caustic Scrubber	Date and Hour of Occurrence 7/10/08 5:30 am	Date and Hour of Discovery 7/10/08 6:00 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Relief valve hung in the open position and filled sump.. Which then over-flowed. Valve is being replaced.

Describe Area Affected and Cleanup Action Taken.* Area affected is to the east and south of caustic scrubber. Happened during a rain event, so most of material was floating on water. Vacuum truck sucked up spill material. Contaminated soil will be removed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCDD 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 NMOCDD 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, NMOCDD 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 <i>Darrell Moore</i>	OIL CONSERVATION DIVISION	
Printed Name: Darrell Moore	Approved by District Supervisor:	
Title: Env. Mgr. for Water & Waste	Approval Date:	Expiration Date:
Date: 7/10/08 Phone: 575-703-5058	Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Gmnd. 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

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Release Notification and Corrective Action

Name of Company <u>Lea Refining Co.</u>		Contact <u>Darrell Moore</u>
Address		Telephone No. <u>505-746-5281</u>
Facility Name		Facility Type <u>Refinery</u>
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 32°52'38"N Longitude 103°18'00"W

NATURE OF RELEASE

Type of Release <u>Naptha-Kerosene</u>	Volume of Release <u>Unknown</u>	Volume Recovered <u>30bbbls</u>
Source of Release <u>Run Down Line</u>	Date and Hour of <u>Discovery</u>	Date and Hour of Discovery <u>10/12/05</u>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <u>Larry Johnson OCD</u>	
By Whom? <u>Darrell Moore</u>	Date and Hour <u>10/13/05 8:30am</u>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse:	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken * Line developed leak. Leak was clamped off and free standing product was vacuumed up. Line is being inspected for potential replacement.

Describe Area Affected and Cleanup Action Taken.* Affected area is near the R0 Unit and under pipe rack. Crew will remove contaminated dirt which will be profiled for disposal. Bottom samples will be analyzed.

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>Darrell Moore</u>	OIL CONSERVATION DIVISION	
Printed Name: <u>Darrell Moore</u>	Approved by District Supervisor.	
Title <u>Env. Mgr. for Water & Waste</u>	Approval Date:	Expiration Date:
E-mail Address <u>darrell.moore@navajo-refining.com</u>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <u>10/14/05</u>	Phone: <u>505-746-5281</u>	

* Attach Additional Sheets If Necessary

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District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

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Release Notification and Corrective Action**OPERATOR**☒ Initial Report☐ Final Report

Name of Company Navajo Refining Co. LLC	Contact Darrell Moore	
Address 7406 S. Main Lovington, NM	Telephone No. 575-746-5281	
Facility Name Lovington 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
-------------	---------	----------	-------	---------------	------------------	---------------	----------------	--------

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release Unknown	Volume Recovered 2 bbls
Source of Release hole in pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/25/07 10:00am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson, Hobbs OCD, Wayne Price Santa Fe, OCD	
By Whom? Darrell Moore	Date and Hour 3:30 pm 10/25/07	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* A pool of oil was noticed along a pipe run. Upon investigation, a hole was discovered in a pipe. The pipe was excavated and clamped.		
Describe Area Affected and Cleanup Action Taken.* 20 yds of contaminated soil has been removed to uncover the pipe. The vertical limit has not been reached and the location within the pipe run makes it difficult to clean under it.		
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: <i>Darrell Moore</i>	OIL CONSERVATION DIVISION	
Printed Name: Darrell Moore	Approved by District Supervisor.	
Title: Env. Mgr for Water & Waste	Approval Date:	Expiration Date:
Date: 10/25/07 Phone: 575-746-5281	Conditions of Approval:	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Thursday, August 06, 2009 9:48 AM
To: Chavez, Carl J, EMNRD
Subject: Fire at Lovington
Attachments: Fire at Lovington.pdf

At about 3:45 pm yesterday (August 5, 2009) we had a small fire at our Lovington facility. While working on a heat exchanger, crude oil dripped down onto a pump and ignited. Fire extinguishers were used to immediately put out the fire.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised October 10, 2003

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Navajo Lea Refining	Contact	Darrell Moore
Address	7406 S Main Lovington, NM	Telephone No.	575-703-5058
Facility Name	Navajo Refining Co - Lea 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	Fire	Volume of Release	NA	Volume Recovered	NA
Source of Release	Crude oil hitting pump	Date and Hour of Occurrence	3:45 pm 8/5/09	Date and Hour of Discovery	3:45 pm 8/5/09
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

While working on a heat exchanger, crude oil dripped down onto a pump. This ignited the crude oil and a small fire started. Fire extinguishers were used to put out the fire.

Describe Area Affected and Cleanup Action Taken.*

Area affected was the area around Heat Exchanger E-101A

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: *Darrell Moore*

Printed Name: Darrell Moore

Approved by District Supervisor:

Title: Env. Mgr

Approval Date:

Expiration Date:

E-mail Address: Darrell.moore@hollycorp.com

Conditions of Approval:

Attached ☐

Date: 8/6/09

Phone: 575-748-3311

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Monday, July 27, 2009 2:15 PM
To: 'Moore, Darrell'
Cc: Lackey, Johnny; 'Patrick B. McMahon'
Subject: 2/21/2009 100 bbl. Release of Diesel Initial Report Delineation Report/Work Plan

Darrell:

I am in receipt of your July 20, 2009 e-mail w/ attached C-141 Initial Report for the subject release. For cleanup criteria, I am referring to Page 7 of the OCD "Guidelines for Remediation of Leaks, Spills and Releases" at http://www.emnrd.state.nm.us/ocd/documents/7C_spill1.pdf, I use the most stringent criteria for Benzene (10 ppm), BTEX (50 ppm) and TPH (100 ppm). The OCD recommends that Naphthalene and Trimethyl Benzene Isomers be analyzed for in addition to the standard constituents, since these parameters are common to diesel fuel releases. Based on the review of the areas where borings were emplaced, I notice what appears to be over 1500 ft. of separation between the point source of the release and down gradient sampling (Areas 1 and 3).

In the delineation report prepared by Safety & Environmental Solutions, Inc. and the 3 areas with 6 borings total within the 3 areas within the release, I have the following comments and/or recommendations:

- 1) The release was most significant in Areas 1 and 2 in the upper 10 feet.
- 2) Based on the footages between the above areas, it appears that controls for run-on and run-off in storm water areas of the refinery are lacking. Are there storm water areas in between the areas that were also impacted, since the release appears to have been uncontrolled and flowed in a preferential path across storm water areas of the facility between areas 1 through 3?
- 3) At least 10 feet of excavation (to be confirmed with field monitoring equipment during excavation) should also be performed in Areas 1 and 2, in addition to Area 3 as contamination was worse concentration wise in the upper 10 feet, and with time, the excavation may be deeper. The excavation shall be investigated following the corrective action requirement in the permit and cleanup criteria shall be as specified in the opening paragraph of this e-mail message.
- 4) NRC informed the OCD during the most recent facility meetings that the ground at the facility consisted of a desert gravel, which was difficult to penetrate; consequently, NRC was reluctant to perform excavations at the facility. However, upon inspection of the six boring logs, While there appears to be as much as 1 foot of surficial fill material (sand, clay, rock), there is at least 8 feet of caliche near ground surface followed by sand. Caliche is know what highly fractured characteristics and the inability to retard the downward migration of contamination or protect ground water. Caliche poses no obstacle to excavation from standard heavy equipment; therefore, NRC shall excavate contaminated sediments, fill, etc. where contamination impacts non-native soils, sediments, etc.

While the OCD appreciates NRC's new protocol for investigating and undertaking corrective action(s) for releases at the facility, the OCD is concerned that NRC is not fully complying with the OCD discharge permit. I think we need discuss what appears to be a lack of control when releases occur, process area controls, etc. that allow the release to move over vast storm water areas within the facility. The refinery may want to consider cementing the process areas and providing process area drainage with containment to reroute spills back to the treatment system to be in compliance with Section 18 of the permit.

Please contact me to discuss. I have copied the City of Lovington on this review in the event it has further comments. Thank you.

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/index.htm>
(Pollution Prevention Guidance is under "Publications")

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Monday, July 20, 2009 1:45 PM
To: Chavez, Carl J, EMNRD; 'hsncpbm@leaco.net'; 'mleighton@lovington-nm.org'
Subject: FW: Navajo Lea Refinery Delineation Report
Attachments: Lea Refinery Delineation Report and Work Plan.pdf

Carl,

Please find attached the delineation report for a spill at our Lovington facility that was reported to OCD on February 21, 2009. The C-141 is attached.

From: Susana Rodriguez [mailto:office2@sesi-nm.com]
Sent: Friday, June 12, 2009 2:06 PM
To: Moore, Darrell
Subject: Navajo Lea Refinery Delineation Report

Mr. Moore:

Attached please find the delineation report/work plan for the Lea Refinery. This is the first spill in which three separate areas were affected. If you have any comments or concerns please let me know.

Thank you,

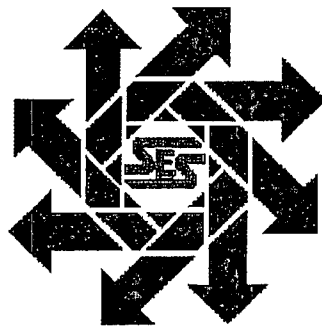
Susana Rodriguez
Administrative Assistant
Safety & Environmental Solutions, Inc.
office: 575.397.0510
fax: 575.393.4388
office2@sesi-nm.com

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This inbound email has been scanned by the MessageLabs Email Security System.

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

May 29, 2009



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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BH#1 15'	390	50	340	ND	0.43	6.8	9.7
BH#1 20'	ND	ND	ND	ND	ND	ND	ND
BH#1 25'	ND	ND	ND	ND	ND	ND	ND
BH#2 Surface	3190	ND	3000	ND	2.4	10	17
BH#2 5'	460	30	430	ND	0.24	1.2	2.5
BH#2 10'	50	ND	50	ND	ND	ND	ND
BH#2 15'	ND	ND	ND	ND	ND	ND	ND
BH#2 20'	ND	ND	ND	ND	ND	ND	ND
AREA 2							
BH#3 Surface	20200	ND	12000	ND	0.090	0.60	1.3
BH#3 5'	20	ND	20	ND	ND	ND	ND
BH#3 10'	ND	ND	ND	ND	ND	ND	ND
BH#3 15'	ND	ND	ND	ND	ND	ND	ND
BH#4 Surface	41600	480	34000	ND	4.6	16	26
BH#4 5'	450	ND	360	ND	ND	0.12	2.8
BH#4 10'	ND	ND	ND	ND	ND	ND	ND
BH#4 15'	ND	ND	ND	ND	ND	ND	ND
BH#5 Surface	24800	ND	20000	ND	ND	2.0	5.7
BH#5 5'	14	ND	14	ND	ND	ND	ND
BH#5 10'	ND	ND	ND	ND	ND	ND	ND
AREA 3 - North							
BH#6 Surface	2110	350	1300	1.8	30	31	42
BH#6 5'	440	50	390	ND	ND	ND	1.4
BH#6 10'	24	ND	24	ND	ND	ND	ND
BH#6 15'	ND	ND	ND	ND	ND	ND	ND

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

The results for all areas indicate there was minimal vertical migration and BTEX readings are below regulatory limits.

VI. Action Plan

It is recommended for both Area 1 and Area 2 to be excavated 6-10" below ground surface for the removal of the most highly contaminated and/or saturated material. For Area 3 the top 4' to 5' of contaminated soil be removed by excavation. The excavated soils will be transported to an NMOCD approved facility for disposal. The excavations will then be backfilled with clean soils.

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

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

Safety and Environmental Solutions, Inc. (SESI) was engaged by Lea Refining Company to perform delineation services at the Lea Refinery. There were three (3) separate areas located inside of the refinery boundary that were affected and all were near operating facilities.

III. Surface and Ground Water

The closest groundwater of record listed with the New Mexico office of the state engineer is located in the same section, range and township. The depth of water in this well was 55'.

IV. Soils

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

V. Work Performed

On February 26-27, 2009 SESI installed a total of six (6) soil borings inside the spill areas (three separate areas) to determine the vertical extent of contamination.

AREA 1

Borehole #1 was drilled to a depth of 25', Borehole #2 was drilled to a depth of 20'.

AREA 2

Boreholes #3 and Borehole #4 were drilled to a depth of 15' and Borehole #5 was drilled to a depth of 10'.

AREA 3

Borehole #6 was drilled to a depth of 15'.

Samples were retrieved in 5' intervals from all boreholes. All samples were properly preserved and transported under Chain of Custody to Argon Laboratories of Hobbs, New Mexico for analysis. The samples were analyzed for Total Petroleum Hydrocarbons (EPA Method 8015) and BTEX (EPA Method SW-846-8260).

The results of the analysis are as follows:

Sample ID	TPH (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)
AREA 1 - South							
BH#1 Surface	3880	ND	3600	ND	0.32	2.6	5.1
BH#1 5'	88	ND	80	ND	0.24	1.5	2.4
BH#1 10'	220	30	190	ND	0.054	1.7	2.2

000

Wellhead Protection Area

<1000 feet from a water source, or;
<200 feet from private domestic water source

Yes	20
No	0

Distance To Surface Water Body

<200 horizontal feet	20
200 - 1000 horizontal feet	10
>1000 horizontal feet	0

b. Recommended Remediation Action Level

The total ranking score determines the degree of remediation that may be required at any given site. The total ranking score is the sum of all four individual ranking criteria listed in Section IV.A.2.a. The table below lists the remediation action level that may be required for the appropriate total ranking score.

(NOTE: The OCD retains the right to require remediation to more stringent levels than those proposed below if warranted by site specific conditions (ie. native soil type, location relative to population centers and future use of the site or other appropriate site specific conditions.)

	<u>Total Ranking Score</u>		
	<u>>19</u>	<u>10 - 19</u>	<u>0 - 9</u>
<u>Benzene (ppm) *</u>	10	10	10
<u>BTEX (ppm) *</u>	50	50	50
<u>TPH (ppm) **</u>	100	1000	5000

* A field soil vapor headspace measurement (Section V.B.1) of 100 ppm may be substituted for a laboratory analysis of the Benzene and BTEX concentration limits.

** The contaminant concentration for TPH is the concentration above background levels.

B. GROUND WATER

Contaminated ground water is defined as ground water of a present or foreseeable beneficial use which contains free phase products, dissolved phase volatile organic constituents or other dissolved constituents in excess of the natural background water quality. Ground water contaminated in excess of the WQCC ground water standards or natural background water quality will require remediation.

V. SOIL AND WATER SAMPLING PROCEDURES

Below are the sampling procedures for soil and ground water contaminant investigations of leaks, spills or releases of RCRA Subtitle C exempt oil field petroleum hydrocarbon wastes. Leaks, spills or releases of non-exempt RCRA wastes must be tested to demonstrate that the wastes are not characteristically hazardous according to RCRA regulations. Sampling for additional constituents may be required based upon the nature of the contaminant which was leaked, spilled or released.

A. HIGHLY CONTAMINATED OR SATURATED SOILS

The following method is used to determine if soils are highly contaminated or saturated:

1. Physical Observations

Study a representative sample of the soil for observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase. A soil exhibiting any of these characteristics is considered highly contaminated or saturated.

B. UNSATURATED CONTAMINATED SOILS

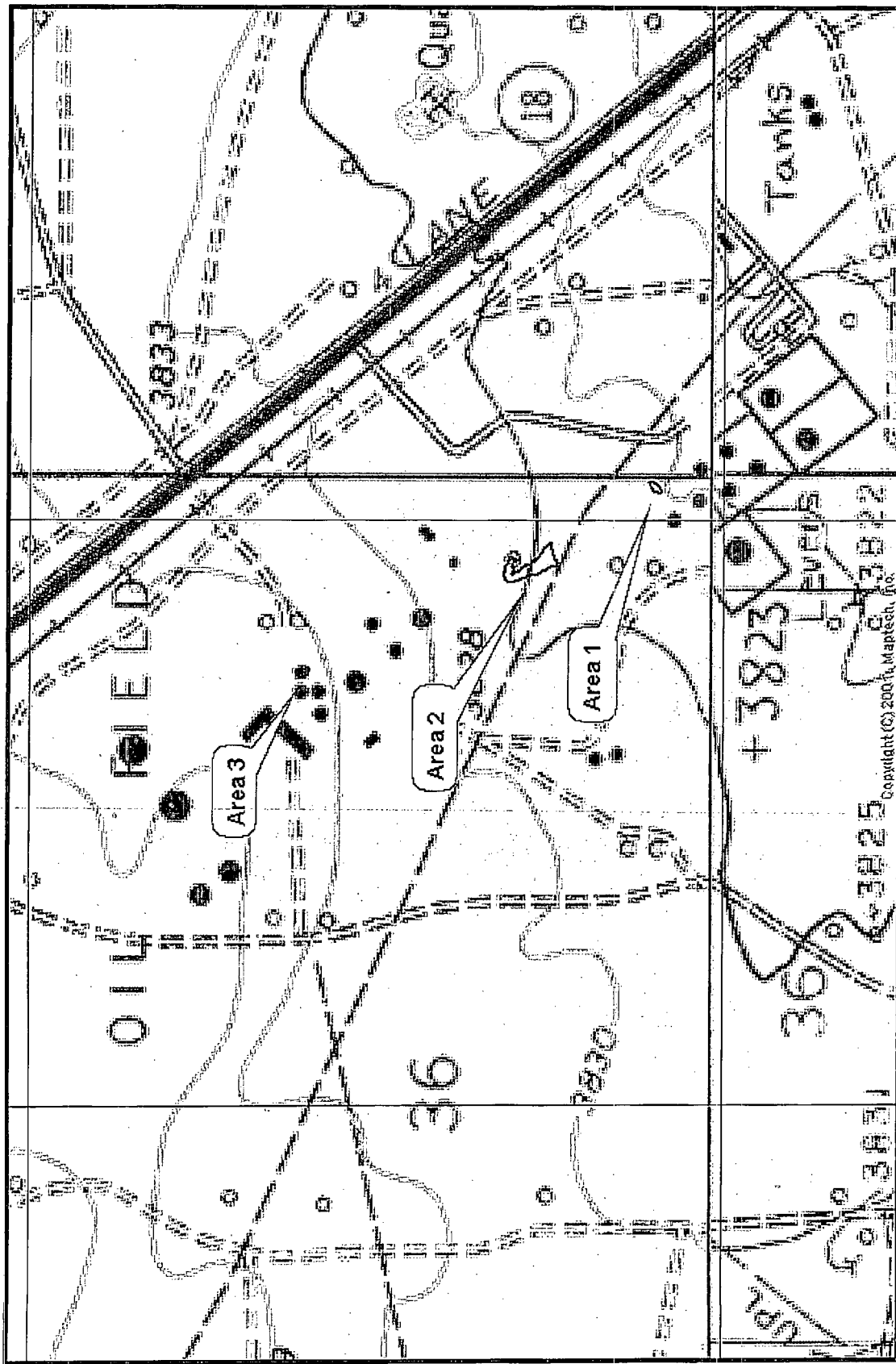
The following methods may be used for determining the magnitude of contamination in unsaturated soils:

1. Soil Sampling Procedures for Headspace Analysis

A headspace analysis may be used to determine the total volatile organic vapor concentrations in soils (ie. in lieu of a laboratory analysis for benzene and BTEX but not in lieu of a TPH analysis). Headspace analysis procedures should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD procedures are as follows:

- a) Fill a 0.5 liter or larger jar half full of sample and seal the top tightly with aluminum foil or fill

Figure 1
Vicinity Map



Copyright (C) 2004 Maptech, Inc.

Figure 2
Site Plan

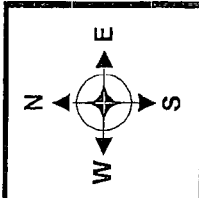


Figure 3

Logs of Boring



Safety & Environmental
Solutions, Inc.

LOG OF BORING BH-1

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
South Location
N32° 52' 33.08", W103° 17' 58.11"

Date, Time Started : 02/26/09, 0845
Date, Time Complete : 02/26/09, 1030
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 ft. Surface sample taken. Dark rock (caliche), staining with H/C odor	D902014-01	3,880	<0.20	0.32	2.6	2.6
1											
2											
3	CB	0			0.5-5 ft. CALICHE, white, hard, coarse H/C odor						
4											
5			CA			D902014-02	88	<0.10	0.24	1.5	1.5
6											
7					5-8 ft. CALICHE, H/C odor, no staining						
8	CB	14									
9											
10					8-10 ft. CALICHE, sandy, white, sand fine grained, with cobbles, no staining, H/C odor	D902014-03	220	<0.10	0.054	1.7	1.7
11											
12	CB	14			10-15 ft. SAND, tan-brown, fine grained, with minimal rock fragments, H/C odor, no staining						
13											
14											
15			SP			D902014-04	390	<0.10	0.43	6.8	6.8
16											
17	CB	13			15-20 ft. SAND, tan-brown, fine grained, no H/C staining or odor						
18											
19											
20						D902014-05	<10	<0.005	<0.005	<0.005	<0.005
21											
22	CB	42	SP/SS		20-25 ft. SAND, tan-brown, fine grained, with sandstone layers, no H/C staining or odor						
23											
24											
25						D902014-05	<10	<0.005	<0.005	<0.005	<0.005

Notes: Boring backfilled with 9 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-2

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
South Location
N32° 52' 32.88", W103° 17' 58.32"

Date, Time Started : 02/26/09, 1230
Date, Time Complete : 02/26/09, 1400
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-67

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth In Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0			AR		0-0.5 ft. Surface sample taken; fill material, sand, clay, rock, dark staining with odor.	D902014-07	3,190	<0.50	2.4	10	10
1											
2	CB	0	CA/SP		0.5-5 ft. CALICHE and SAND, tan- light brown, coarse, heavy H/C odor, no staining						
3											
4											
5						D902014-08	460	<0.10	0.24	1.2	1.2
6											
7	CB	8	CA		5-8 ft. CALICHE, hard rock, light brown (whitish)						
8											
9											
10					8-10 ft. SAND, tan-light brown, coarse grained, with rock fragments.	D902014-09	50	<0.005	<0.005	<0.005	<0.005
11											
12	CB	12	SP/CA		10-15 ft. SAND, tan-light brown with rock fragments, no H/C staining or odor.						
13											
14											
15						D902014-10	<10	<0.005	<0.005	<0.005	<0.005
16											
17	CB	15	SP		15-20 ft. SAND, tan-light brown, no H/C staining or odor.						
18											
19											
20						D902014-11	<10	<0.005	<0.005	<0.005	<0.005

Notes: Boring backfilled with 9 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-3

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
Middle Location
N32° 52' 37.54", W103° 18' 1.51"

Date, Time Started : 02/26/09, 1425
Date, Time Complete : 02/26/09, 1515
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 : Isaac Kincaid
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D802014-12	20,200	<0.050	0.090	0.60	0.60
1											
2	CB	0			0.5-5 ft. Top soil (silt) dark black with staining and heavy H/C odor						
3											
4											
5				ML		D802014-13	20	<0.005	<0.005	<0.005	<0.005
6											
7	CB	16			5-9 ft. Top soil (silt) dark black, staining with minimal odor						
8											
9					9-10 ft. CLAY, red	D802014-14	<10	<0.005	<0.005	<0.005	<0.005
10											
11											
12	CB	60		CL	10-14.5 ft. CLAY, red, no H/C staining or odor						
13											
14											
15				CL	14.5-15 ft. SANDY CLAY, tan-light brown, no H/C staining or odor	D902014-15	<10	<0.005	<0.005	<0.005	<0.005
16											
17											
18											
19											
20											

Notes: Boring backfilled with 6 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-4

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
Middle Location
N32° 52' 38.06", W103° 18' 2.30"

Date, Time Started : 02/27/09, 0811
Date, Time Complete : 02/27/09, 0930
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 : Brian Cuellar
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D902015-01	41,800	<0.50	4.8	16	16
1			ML		0-2 ft. Sandy loam, light brown, heavy H/C staining and odor.						
2	CB	12									
3			CA/C		2-5 ft. CALICHE with SANDY CLAY, limey white with light staining and moderate odor						
4											
5						D902015-02	450	<0.050	<0.050	0.12	0.12
6	CB	9.5									
7											
8					5-10 ft. CALICHE, limey white, very light staining and very light odor						
9											
10			CA			D902015-03	<10	<0.005	<0.005	<0.005	<0.005
11	CB	--									
12											
13					10-15 ft. CALICHE, limey white, sub angular, no H/C staining or odor						
14											
15						D902015-04	<10	<0.005	<0.005	<0.005	<0.005
16											
17											
18											
19											
20											

Notes: Boring backfilled with 5 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-5

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Lea Refinery
Lovington, New Mexico
Middle Location
N32° 52' 39.22", W103° 18' 2.93"

Date, Time Started : 02/27/09, 0940
Date, Time Complete : 02/27/09, 1055
Hole Diameter : 8 1/4 in.
Drilling Method : Hollow Stem Auger
Drilling Equipment : Foremost-Mobile B-67

Drilled By : Eco/Enviro Drilling
Sampling Method : 5 ft. core barrel
Logged By : Brian Cuellar
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	USCS	GRAPHIC	Sample Type SS Split Spoon (16" or 24") CB Core Barrel (2.5' or 5') CT Auger Cuttings NR No recovery	Lab No.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D902015-05	24,800	<0.40	<0.40	2.0	2.0
1			ML/CA		0-2 ft. Sandy loam and rock, light brown with heavy H/C staining and odor						
2											
3	CB	--			2-5 ft. CALICHE, limey white, sub-angular, no visible staining and moderate odor. Rock bit utilized to drill through hard surface, sample from cuttings.						
4											
5						D902015-06	14	<0.005	<0.005	<0.005	<0.005
6			CA								
7											
8	CB	16			5-10 ft. CALICHE, limey white, sub-angular, no odor or staining.						
9											
10						D902015-07	<10	<0.005	<0.005	<0.005	<0.005
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Notes: Boring backfilled with 5 bags bentonite, hydrated.



**Safety & Environmental
Solutions, Inc.**

LOG OF BORING BH-6

(Page 1 of 1)

Hydrocarbon Release Investigation
Navajo Les Refinery
Lovington, New Mexico
North Location
N32° 52' 48.09", W103° 18' 7.76"

Date, Time Started : 02/27/09, 1300
Date, Time Complete : 02/27/09, 1420
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 : Brian Cuellar
Company Rep. : Steve Terry, Navajo

Depth in Feet	Sample Type	Recovery (in.)	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.	TPH 8015 (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Ethyl Benzene (mg/Kg)
					DESCRIPTION						
0					0-0.5 Surface sample.	D902015-08	2,110	1.8	30	31	31
1					0-2 ft. Sandy loam and rock, heavy staining with historic staining, heavy odor 0-3 ft.						
2											
3	CB	--		ML/CA							
4					3-5 ft. CALICHE, limy white, sub-angular, no staining and light odor. Rock bit utilized to break through rock layer.	D902015-09	440	<0.10	<0.10	<0.10	<0.10
5											
6											
7											
8	CB	--		CA	5-10 ft. CALICHE, limy white, sub-angular, no staining or apparent odor. Rock bit utilized.						
9											
10						D902015-10	24	<0.005	<0.005	<0.005	<0.005
11											
12											
13	CB	9			10-14 ft. CALICHE, limy white, sub-angular, no staining or odor.						
14											
15			SC		14-15 ft. CLAYEY SAND, reddish-brown, no H/C staining or odor	D902015-11	<10	<0.005	<0.005	<0.005	<0.005
16											
17											
18											
19											
20											

Notes: Boring backfilled with bentonite, hydrated.

Appendix A

Analytical Results

argon laboratories

06 March 2009

Bob Allen
Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

RE: Navajo Lea Refinery Delineation Project Data

Enclosed are the results for sample(s) received on 02/27/09 16:00 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,





Hiram Cueto
Lab Manager

Argon Labs

2126 W. Marland Ave Hobbs, NM 88240
(505)397-0295 (505)397-0296 info@argonlabs.com

CHAIN OF CUSTODY

1227
0000D902015

Project No: NAN-09-002		Client: SESI	
Project Title: Location:		Address: 703 E. Clinton	
Sampler's Name: Brian Cuellar		Contact: Hobbs, NM 88240	
(print)		Phone:	
Sampler's Signature: 		Fax:	
Bill To: SAME		Client: Address:	
TURN AROUND TIME		ANALYSIS	
RUSH	24 Hour	48 Hour	other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard (5 days)	<input type="checkbox"/>		
Sample ID.	Date	Time	# Containers
BH#4. Surface	2/27/09	0811	1
BH#4. 5'		0830	
BH#4. 10'		0845	
BH#4. 15'		0910	
BH#5. Surface		0950	
BH#5. 5'		1005	
BH#5. 10'		1030	
BH#6. Surface		1310	
BH#6. 5'		1332	
BH#6. 10'		1345	
BH#6. 15'		1410	
Matrix	Soil		
TPH 8015	X		
BTEX	X		
COMMENTS			
Relinquished By: 	Date: 2/27/09	Time:	
Relinquished By:	Date:	Time:	
Relinquished By:	Date:	Time:	
Received By: Matthew Franco	Date: 2-27-09	Time: 4pm	
Received By:	Date:	Time:	
Received By:	Date:	Time:	
SPECIAL INSTRUCTIONS:			

Argon Laboratories Sample Receipt Checklist

Client Name: SESI Date & Time Received: 02/27/09 16:00

Project Name: Navajo Lea Refinery Client Project Number: NAV-09-002

Received By: NF Matrix: Water ☐ Soil ☒

Sample Carrier: Client ☐ Laboratory ☒ Fed Ex ☐ UPS ☐ Other ☐

Argon Labs Project Number: D902015

Shipper Container in good condition? Yes ☒ No ☐

N/A ☐ Yes ☒ No ☐ Samples received in proper containers? Yes ☒ No ☐

Samples received under refrigeration? Yes ☒ No ☐ Samples received intact? Yes ☒ No ☐

Chain of custody present? Yes ☒ No ☐ Sufficient sample volume for requested tests? Yes ☒ No ☐

Chain of Custody signed by all parties? Yes ☒ No ☐ Samples received within holding time? Yes ☒ No ☐

Do samples contain proper preservative?
N/A ☒ Yes ☐ No ☐

Chain of Custody matches all sample labels? Yes ☒ No ☐ Do VOA vials contain zero headspace?
(None submitted ☒) Yes ☐ No ☐

ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW

Date Client Contacted: _____ Person Contacted: _____

Contacted By: _____ Subject: _____

Comments: _____

Action Taken: _____

ADDITIONAL TEST(S) REQUEST / OTHER

Contacted By: _____ Date: _____ Time: _____

Call Received By: _____

Comments: _____

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH #4 Surface	D902015-01	Soil	02/27/09 08:11	02/27/09 16:00
BH #4 5'	D902015-02	Soil	02/27/09 08:30	02/27/09 16:00
BH #4 10'	D902015-03	Soil	02/27/09 08:45	02/27/09 16:00
BH #4 15'	D902015-04	Soil	02/27/09 09:10	02/27/09 16:00
BH #5 Surface	D902015-05	Soil	02/27/09 09:50	02/27/09 16:00
BH #5 5'	D902015-06	Soil	02/27/09 10:05	02/27/09 16:00
BH #5 10'	D902015-07	Soil	02/27/09 10:30	02/27/09 16:00
BH #6 Surface	D902015-08	Soil	02/27/09 13:10	02/27/09 16:00
BH #6 5'	D902015-09	Soil	02/27/09 13:32	02/27/09 16:00
BH #6 10'	D902015-10	Soil	02/27/09 13:45	02/27/09 16:00
BH #6 15'	D902015-11	Soil	02/27/09 14:10	02/27/09 16:00

QC Officer Approval

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #4 Surface (D902015-01) Soil Sampled: 02/27/09 08:11 Received: 02/27/09 16:00							
Benzene	ND	0.50	mg/kg	100	03/03/09	8021B	
Toluene	4.6	0.50	"	"	"	"	
Ethylbenzene	16	0.50	"	"	"	"	
Xylenes (total)	26	1.0	"	"	"	"	
Surr. Rec.:		103 %			"	"	
BH #4 5' (D902015-02) Soil Sampled: 02/27/09 08:30 Received: 02/27/09 16:00							
Benzene	ND	0.050	mg/kg	10	03/03/09	8021B	
Toluene	ND	0.050	"	"	"	"	
Ethylbenzene	0.12	0.050	"	"	"	"	
Xylenes (total)	2.8	0.10	"	"	"	"	
Surr. Rec.:		104 %			"	"	
BH #4 10' (D902015-03) Soil Sampled: 02/27/09 08:45 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		86 %			"	"	
BH #4 15' (D902015-04) Soil Sampled: 02/27/09 09:10 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		88 %			"	"	

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #5 Surface (D902015-05) Soil Sampled: 02/27/09 09:50 Received: 02/27/09 16:00							
Benzene	ND	0.40	mg/kg	80	03/03/09	8021B	
Toluene	ND	0.40	"	"	"	"	
Ethylbenzene	2.0	0.40	"	"	"	"	
Xylenes (total)	5.7	0.80	"	"	"	"	
Surr. Rec.:		84 %			"	"	
BH #5 5' (D902015-06) Soil Sampled: 02/27/09 10:05 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		106 %			"	"	
BH #5 10' (D902015-07) Soil Sampled: 02/27/09 10:30 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		86 %			"	"	
BH #6 Surface (D902015-08) Soil Sampled: 02/27/09 13:10 Received: 02/27/09 16:00							
Benzene	1.8	0.50	mg/kg	100	03/03/09	8021B	
Toluene	30	0.50	"	"	"	"	
Ethylbenzene	31	0.50	"	"	"	"	
Xylenes (total)	42	1.0	"	"	"	"	
Surr. Rec.:		112 %			"	"	

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
Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #6 5' (D902015-09) Soil Sampled: 02/27/09 13:32 Received: 02/27/09 16:00							
Benzene	ND	0.10	mg/kg	20	03/03/09	8021B	
Toluene	ND	0.10	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	
Xylenes (total)	1.4	0.20	"	"	"	"	
Surr. Rec.:		96 %			"	"	
BH #6 10' (D902015-10) Soil Sampled: 02/27/09 13:45 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		100 %			"	"	
BH #6 15' (D902015-11) Soil Sampled: 02/27/09 14:10 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		85 %			"	"	


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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #4 Surface (D902015-01) Soil Sampled: 02/27/09 08:11 Received: 02/27/09 16:00							S-09
Gasoline Range Organics	480	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	34000	200	"	"	"	"	
C29 - C35 Range Organics	7100	400	"	"	"	"	
Total Petroleum Hydrocarbons	41600	200	"	"	"	"	
BH #4 5' (D902015-02) Soil Sampled: 02/27/09 08:30 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	360	10	"	"	"	"	
C29 - C35 Range Organics	90	20	"	"	"	"	
Total Petroleum Hydrocarbons	450	10	"	"	"	"	
Surr. Rec.:		106 %			"	"	
BH #4 10' (D902015-03) Soil Sampled: 02/27/09 08:45 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		111 %			"	"	
BH #4 15' (D902015-04) Soil Sampled: 02/27/09 09:10 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	

QC Officer Approval

Argon Laboratories, Inc.

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #5 Surface (D902015-05) Soil Sampled: 02/27/09 09:50 Received: 02/27/09 16:00							S-09
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	20000	200	"	"	"	"	
C29 - C35 Range Organics	4700	400	"	"	"	"	
Total Petroleum Hydrocarbons	24800	200	"	"	"	"	
BH #5 5' (D902015-06) Soil Sampled: 02/27/09 10:05 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	14	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	14	10	"	"	"	"	
Surr. Rec.:		94 %			"	"	
BH #5 10' (D902015-07) Soil Sampled: 02/27/09 10:30 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		99 %			"	"	
BH #6 Surface (D902015-08) Soil Sampled: 02/27/09 13:10 Received: 02/27/09 16:00							
Gasoline Range Organics	350	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	1300	10	"	"	"	"	
C29 - C35 Range Organics	460	20	"	"	"	"	
Total Petroleum Hydrocarbons	2110	10	"	"	"	"	
Surr. Rec.:		106 %			"	"	

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2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296

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argon laboratories


Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #6 5' (D902015-09) Soil Sampled: 02/27/09 13:32 Received: 02/27/09 16:00							
Gasoline Range Organics	50	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	390	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	440	10	"	"	"	"	
Surr. Rec.:		93 %			"	"	
BH #6 10' (D902015-10) Soil Sampled: 02/27/09 13:45 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	24	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	24	10	"	"	"	"	
Surr. Rec.:		97 %			"	"	
BH #6 15' (D902015-11) Soil Sampled: 02/27/09 14:10 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		98 %			"	"	


QC Officer Approval

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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

BTEX EPA Method 8021B - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-----	-------

Batch DS00038 - EPA 5030B

Blank (DS00038-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: <i>a,a,a</i> -Trifluorotoluene	0.0410		mg/kg	0.0500		82		
Benzene	ND	0.005	"					
Toluene	ND	0.005	"					
Ethylbenzene	ND	0.005	"					
Xylenes (total)	ND	0.010	"					

LCS (DS00038-BS1)

Prepared & Analyzed: 03/03/09

Benzene	0.047		mg/kg	0.0500		94		
---------	-------	--	-------	--------	--	----	--	--

LCS Dup (DS00038-BSD1)

Prepared & Analyzed: 03/03/09

Benzene	0.050		mg/kg	0.0500		100	6	
---------	-------	--	-------	--------	--	-----	---	--

Matrix Spike (DS00038-MS1)


Prepared & Analyzed: 03/03/09

Toluene	0.047		mg/kg	0.0500		94		
---------	-------	--	-------	--------	--	----	--	--

Matrix Spike Dup (DS00038-MSD1)

Prepared & Analyzed: 03/03/09

Toluene	0.046		mg/kg	0.0500		92	2	
---------	-------	--	-------	--------	--	----	---	--


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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Total Petroleum Hydrocarbons EPA Method 8015M - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-----	-------

Batch DS00039 - EPA 3550B

Blank (DS00039-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: <i>p</i> -Terphenyl	0.0970		mg/kg	0.100		97		
Gasoline Range Organics	ND	10	"					
Diesel Range Organics	ND	10	"					
C29 - C35 Range Organics	ND	20	"					
Total Petroleum Hydrocarbons	ND	10	"					

LCS (DS00039-BS1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	234		mg/kg	250		94		
------------------------------	-----	--	-------	-----	--	----	--	--

LCS Dup (DS00039-BSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	228		mg/kg	250		91	3	
------------------------------	-----	--	-------	-----	--	----	---	--

Matrix Spike (DS00039-MS1)

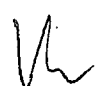
Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	240		mg/kg	250		96		
------------------------------	-----	--	-------	-----	--	----	--	--

Matrix Spike Dup (DS00039-MSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	244		mg/kg	250		98	2	
------------------------------	-----	--	-------	-----	--	----	---	--


QC Officer Approval

Argon Laboratories, Inc.

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296

email: info@argonlabs.com

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argon laboratories


Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902015

Notes and Definitions

S-09 Surrogate diluted out of range due to sample dilution.
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference



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06 March 2009

Bob Allen
Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

RE: Navajo Lea Refinery Delineation Project Data

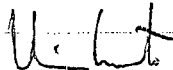
Enclosed are the results for sample(s) received on 02/27/09 16:00 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,





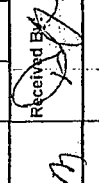
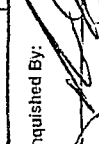
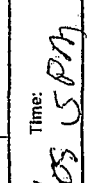


Hiram Cueto
Lab Manager

2126 W. Marland Ave Hobbs, NM 88240
(505)397-0295 (505)397-0296 info@argo

CHAIN OF CUSTODY











1226

Project No: Navajo-002		Client: SEF	
Project Title: Navajo Lea Refinery Remediation		Address: 703 E Clinton	
Location: Lea Co, NM		Contact: 40665, nm 88240	
Sampler's Name: Isaac Kinard		Phone: 505-397-0500	
(print)		Fax:	
Sampler's Signature: 		Client: Sam Q	
TURN AROUND TIME		BILL TO:	
RUSH	24 Hour	48 Hour	other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard (5 days)	<input type="checkbox"/>		
Sample ID	Date	Time	# Containers
BH #1 Subcore 21269	0845	0900	1
BH #1 5'	0930	0955	1
BH #1 10'	1000	1020	1
BH #1 15'	1030	1045	1
BH #1 20'	1055	1100	1
BH #1 25'	1115	1130	1
BH #2 Subcore	1145	1200	1
BH #2 5'	1215	1230	1
BH #2 10'	1245	1300	1
BH #2 15'	1315	1330	1
BH #2 20'	1345	1355	1
ANALYSIS			
COMMENTS			
SPECIAL INSTRUCTIONS:			
Relinquished By: 	Date: 7/26/09	Time: 5pm	Received By: 
Relinquished By: 	Date: 7/27/09	Time:	Received By: 
Relinquished By: 	Date:	Time:	Received By: 

(505)397-0295 (505)397-0296 info@argonlabs.com

1225

2902014

Project No: NAV-02-005 Project Title: Navajo Lea Refinery Relocation Location: Lea Co, NM		Client: SEF Address: 703 E Clinton Contact: Hobbs, NM 88240 Phone: (575) 397-0570 Fax:		Bill To: Client: Same Address:		SPECIAL INSTRUCTIONS:
Sampler's Name: Isaac Kincaid (print)		Client: Same Address:		Relinquished By:  Date: 2/26/07 Time: 5 PM		
Sampler's Signature: 		Relinquished By:  Date: 2/27/07 Time:		Relinquished By:  Date: 2-29-07 Time: 4 PM		
Relinquished By:  Date: 2/27/07 Time:		Relinquished By:  Date: 2-29-07 Time: 4 PM		Relinquished By:  Date: 2-29-07 Time: 4 PM		
Relinquished By:  Date: 2-29-07 Time: 4 PM		Relinquished By:  Date: 2-29-07 Time: 4 PM		Relinquished By:  Date: 2-29-07 Time: 4 PM		

Argon Laboratories Sample Receipt Checklist

Client Name: SESI Date & Time Received: 02/27/09 16:00

Project Name: Navajo Lea Refinery Client Project Number: NAV-09-002

Received By: NF Matrix: Water ☐ Soil ☒

Sample Carrier: Client ☐ Laboratory ☒ Fed Ex ☐ UPS ☐ Other ☐

Argon Labs Project Number: D902014

Shipper Container in good condition? Yes ☒ No ☐

N/A ☐ Yes ☒ No ☐ Samples received in proper containers? Yes ☒ No ☐

Samples received under refrigeration? Yes ☒ No ☐ Samples received intact? Yes ☒ No ☐

Chain of custody present? Yes ☒ No ☐ Sufficient sample volume for requested tests? Yes ☒ No ☐

Chain of Custody signed by all parties? Yes ☒ No ☐ Samples received within holding time? Yes ☒ No ☐

Do samples contain proper preservative?
N/A ☒ Yes ☐ No ☐

Chain of Custody matches all sample labels? Yes ☒ No ☐ Do VOA vials contain zero headspace?
(None submitted ☒) Yes ☐ No ☐

ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW

Date Client Contacted: _____ Person Contacted: _____

Contacted By: _____ Subject: _____

Comments: _____

Action Taken: _____

ADDITIONAL TEST(S) REQUEST / OTHER

Contacted By: _____ Date: _____ Time: _____

Call Received By: _____

Comments: _____

argon laboratories


Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH #1 Surface	D902014-01	Soil	02/26/09 08:45	02/27/09 16:00
BH #1 5'	D902014-02	Soil	02/26/09 09:00	02/27/09 16:00
BH #1 10'	D902014-03	Soil	02/26/09 09:30	02/27/09 16:00
BH #1 15'	D902014-04	Soil	02/26/09 09:55	02/27/09 16:00
BH #1 20'	D902014-05	Soil	02/26/09 10:05	02/27/09 16:00
BH #1 25'	D902014-06	Soil	02/26/09 10:20	02/27/09 16:00
BH #2 Surface	D902014-07	Soil	02/26/09 10:45	02/27/09 16:00
BH #2 5'	D902014-08	Soil	02/26/09 12:45	02/27/09 16:00
BH #2 10'	D902014-09	Soil	02/26/09 13:00	02/27/09 16:00
BH #2 15'	D902014-10	Soil	02/26/09 13:45	02/27/09 16:00
BH #2 20'	D902014-11	Soil	02/26/09 13:55	02/27/09 16:00
BH #3 Surface	D902014-12	Soil	02/26/09 14:30	02/27/09 16:00
BH #3 5'	D902014-13	Soil	02/26/09 14:35	02/27/09 16:00
BH #3 10'	D902014-14	Soil	02/26/09 14:50	02/27/09 16:00
BH #3 15'	D902014-15	Soil	02/26/09 15:00	02/27/09 16:00



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Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 Surface (D902014-01) Soil Sampled: 02/26/09 08:45 Received: 02/27/09 16:00							
Benzene	ND	0.20	mg/kg	40	03/03/09	8021B	
Toluene	0.32	0.20	"	"	"	"	
Ethylbenzene	2.6	0.20	"	"	"	"	
Xylenes (total)	5.1	0.40	"	"	"	"	
Surr. Rec.:		96 %			"	"	
BH #1 5' (D902014-02) Soil Sampled: 02/26/09 09:00 Received: 02/27/09 16:00							
Benzene	ND	0.10	mg/kg	20	03/03/09	8021B	
Toluene	0.24	0.10	"	"	"	"	
Ethylbenzene	1.5	0.10	"	"	"	"	
Xylenes (total)	2.4	0.20	"	"	"	"	
Surr. Rec.:		94 %			"	"	
BH #1 10' (D902014-03) Soil Sampled: 02/26/09 09:30 Received: 02/27/09 16:00							
Benzene	ND	0.025	mg/kg	5	03/03/09	8021B	
Toluene	0.054	0.025	"	"	"	"	
Ethylbenzene	1.7	0.025	"	"	"	"	
Xylenes (total)	2.2	0.050	"	"	"	"	
Surr. Rec.:		89 %			"	"	
BH #1 15' (D902014-04) Soil Sampled: 02/26/09 09:55 Received: 02/27/09 16:00							
Benzene	ND	0.20	mg/kg	40	03/03/09	8021B	
Toluene	0.43	0.20	"	"	"	"	
Ethylbenzene	6.8	0.20	"	"	"	"	
Xylenes (total)	9.7	0.40	"	"	"	"	
Surr. Rec.:		81 %			"	"	

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Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 20' (D902014-05) Soil Sampled: 02/26/09 10:05 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		88 %			"	"	
BH #1 25' (D902014-06) Soil Sampled: 02/26/09 10:20 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		88 %			"	"	
BH #2 Surface (D902014-07) Soil Sampled: 02/26/09 10:45 Received: 02/27/09 16:00							
Benzene	ND	0.50	mg/kg	100	03/03/09	8021B	
Toluene	2.4	0.50	"	"	"	"	
Ethylbenzene	10	0.50	"	"	"	"	
Xylenes (total)	17	1.0	"	"	"	"	
Surr. Rec.:		92 %			"	"	
BH #2 5' (D902014-08) Soil Sampled: 02/26/09 12:45 Received: 02/27/09 16:00							
Benzene	ND	0.10	mg/kg	20	03/03/09	8021B	
Toluene	0.24	0.10	"	"	"	"	
Ethylbenzene	1.2	0.10	"	"	"	"	
Xylenes (total)	2.5	0.20	"	"	"	"	
Surr. Rec.:		77 %			"	"	

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Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #2 10' (D902014-09) Soil Sampled: 02/26/09 13:00 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		87 %			"	"	
BH #2 15' (D902014-10) Soil Sampled: 02/26/09 13:45 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		90 %			"	"	
BH #2 20' (D902014-11) Soil Sampled: 02/26/09 13:55 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		94 %			"	"	
BH #3 Surface (D902014-12) Soil Sampled: 02/26/09 14:30 Received: 02/27/09 16:00							
Benzene	ND	0.050	mg/kg	10	03/03/09	8021B	
Toluene	0.090	0.050	"	"	"	"	
Ethylbenzene	0.60	0.050	"	"	"	"	
Xylenes (total)	1.3	0.10	"	"	"	"	
Surr. Rec.:		92 %			"	"	

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Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #3 5' (D902014-13) Soil Sampled: 02/26/09 14:35 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		98 %			"	"	
BH #3 10' (D902014-14) Soil Sampled: 02/26/09 14:50 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		93 %			"	"	
BH #3 15' (D902014-15) Soil Sampled: 02/26/09 15:00 Received: 02/27/09 16:00							
Benzene	ND	0.005	mg/kg	1	03/03/09	8021B	
Toluene	ND	0.005	"	"	"	"	
Ethylbenzene	ND	0.005	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	
Surr. Rec.:		89 %			"	"	


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Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 Surface (D902014-01) Soil Sampled: 02/26/09 08:45 Received: 02/27/09 16:00							S-09
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	3600	200	"	"	"	"	
C29 - C35 Range Organics	ND	400	"	"	"	"	
Total Petroleum Hydrocarbons	3880	200	"	"	"	"	
BH #1 5' (D902014-02) Soil Sampled: 02/26/09 09:00 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	80	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	88	10	"	"	"	"	
Surr. Rec.:		99 %			"	"	
BH #1 10' (D902014-03) Soil Sampled: 02/26/09 09:30 Received: 02/27/09 16:00							
Gasoline Range Organics	30	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	190	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	220	10	"	"	"	"	
Surr. Rec.:		91 %			"	"	
BH #1 15' (D902014-04) Soil Sampled: 02/26/09 09:55 Received: 02/27/09 16:00							
Gasoline Range Organics	50	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	340	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	390	10	"	"	"	"	
Surr. Rec.:		98 %			"	"	

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Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #1 20 ' (D902014-05) Soil Sampled: 02/26/09 10:05 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:	104 %				"	"	
BH #1 25 ' (D902014-06) Soil Sampled: 02/26/09 10:20 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:	101 %				"	"	
BH #2 Surface (D902014-07) Soil Sampled: 02/26/09 10:45 Received: 02/27/09 16:00							
S-09							
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	3000	200	"	"	"	"	
C29 - C35 Range Organics	ND	400	"	"	"	"	
Total Petroleum Hydrocarbons	3190	200	"	"	"	"	
BH #2 5 ' (D902014-08) Soil Sampled: 02/26/09 12:45 Received: 02/27/09 16:00							
Gasoline Range Organics	30	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	430	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	460	10	"	"	"	"	
Surr. Rec.:	102 %				"	"	

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D902014

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #2 10' (D902014-09) Soil Sampled: 02/26/09 13:00 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	50	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	50	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	
BH #2 15' (D902014-10) Soil Sampled: 02/26/09 13:45 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		105 %			"	"	
BH #2 20' (D902014-11) Soil Sampled: 02/26/09 13:55 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		105 %			"	"	
BH #3 Surface (D902014-12) Soil Sampled: 02/26/09 14:30 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	200	mg/kg	20	03/03/09	EPA 8015M	
Diesel Range Organics	12000	200	"	"	"	"	
C29 - C35 Range Organics	8100	400	"	"	"	"	
Total Petroleum Hydrocarbons	20200	200	"	"	"	"	

S-09

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Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
BH #3 5' (D902014-13) Soil Sampled: 02/26/09 14:35 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	20	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	20	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	
BH #3 10' (D902014-14) Soil Sampled: 02/26/09 14:50 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		104 %			"	"	
BH #3 15' (D902014-15) Soil Sampled: 02/26/09 15:00 Received: 02/27/09 16:00							
Gasoline Range Organics	ND	10	mg/kg	1	03/03/09	EPA 8015M	
Diesel Range Organics	ND	10	"	"	"	"	
C29 - C35 Range Organics	ND	20	"	"	"	"	
Total Petroleum Hydrocarbons	ND	10	"	"	"	"	
Surr. Rec.:		99 %			"	"	

QC Officer Approval

Argon Laboratories, Inc.

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email: info@argonlabs.com

Page 9 of 12

argon laboratories

Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

BTEX EPA Method 8021B - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-----	-------

Batch DS00038 - EPA 5030B

Blank (DS00038-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: <i>a,a,a-Trifluorotoluene</i>	0.0410		mg/kg	0.0500		82		
Benzene	ND	0.005	"					
Toluene	ND	0.005	"					
Ethylbenzene	ND	0.005	"					
Xylenes (total)	ND	0.010	"					

LCS (DS00038-BS1)

Prepared & Analyzed: 03/03/09

Benzene	0.047		mg/kg	0.0500		94		
---------	-------	--	-------	--------	--	----	--	--

LCS Dup (DS00038-BSD1)

Prepared & Analyzed: 03/03/09

Benzene	0.050		mg/kg	0.0500		100	6	
---------	-------	--	-------	--------	--	-----	---	--

Matrix Spike (DS00038-MS1)


Prepared & Analyzed: 03/03/09

Toluene	0.047		mg/kg	0.0500		94		
---------	-------	--	-------	--------	--	----	--	--

Matrix Spike Dup (DS00038-MSD1)

Prepared & Analyzed: 03/03/09

Toluene	0.046		mg/kg	0.0500		92	2	
---------	-------	--	-------	--------	--	----	---	--


QC Officer Approval

Argon Laboratories, Inc.

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email: info@argonlabs.com

argon laboratories

Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Total Petroleum Hydrocarbons EPA Method 8015M - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	RPD	Notes
---------	--------	--------------------	-------	----------------	------------------	------	-----	-------

Batch DS00039 - EPA 3550B

Blank (DS00039-BLK1)

Prepared & Analyzed: 03/03/09

Surrogate: p-Terphenyl	0.0970		mg/kg	0.100		97		
Gasoline Range Organics	ND	10	"					
Diesel Range Organics	ND	10	"					
C29 - C35 Range Organics	ND	20	"					
Total Petroleum Hydrocarbons	ND	10	"					

LCS (DS00039-BS1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	234		mg/kg	250		94		
------------------------------	-----	--	-------	-----	--	----	--	--

LCS Dup (DS00039-BSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	228		mg/kg	250		91	3	
------------------------------	-----	--	-------	-----	--	----	---	--

Matrix Spike (DS00039-MS1)


Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	240		mg/kg	250		96		
------------------------------	-----	--	-------	-----	--	----	--	--

Matrix Spike Dup (DS00039-MSD1)

Prepared & Analyzed: 03/03/09

Total Petroleum Hydrocarbons	244		mg/kg	250		98	2	
------------------------------	-----	--	-------	-----	--	----	---	--


QC Officer Approval

Argon Laboratories, Inc.

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argon laboratories

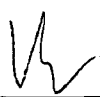
Safety & Environmental Solutions, Inc.
703 E. Clinton Ave
Hobbs, NM 88240

Project Number: NAV-09-002
Project Name: Navajo Lea Refinery Delineation
Project Manager: Bob Allen

Work Order No.:
D902014

Notes and Definitions

S-09 Surrogate diluted out of range due to sample dilution.
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference



QC Officer Approval

Argon Laboratories, Inc.

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email: info@argonlabs.com Page 12 of 12

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 Lea Refining Co.	Contact	Darrell Moore
Address	7406 S Main Lovington, NM	Telephone No.	575-746-5281
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	Diesel	Volume of Release	100 bbls	Volume Recovered	80 bbls
Source of Release	Bleeder left open	Date and Hour of Occurrence	2/21/09 7:30 am	Date and Hour of Discovery	2/21/09 7:45 am
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Larry Johnson		
By Whom?	Johnny Lackey	Date and Hour	2/21/09 7:50 am		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The plant has been in turnaround so it has been down. When starting up the plant, rundown lines were being filled. A bleeder was inadvertently left open and the product was spilled.

Describe Area Affected and Cleanup Action Taken.*

The area affected is 150' long by 30' wide on the west side of the plant southwest of the office building. The product was immediately vacuumed up and contaminated soil was removed and put on plastic. We have scheduled a drilling rig for Thursday to delineate vertical extent of spill.

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: Environmental Manager for Water and Waste	Approval Date:	Expiration Date:	
E-mail Address: Darrell.moore@hollycorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: February 24, 2009	Phone: 575-746-5281		

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Monday, July 27, 2009 9:22 AM
To: Chavez, Carl J, EMNRD; 'hsncpbm@leaco.net'; 'mleighton@lovington-nm.org'
Cc: Strange, Aaron; Lackey, Johnny
Subject: Spill at Lovington

Carl,

On July 26, 2009 at about 2 pm, Tank 1214 at our Lovington facility was overrun and spilled 25 bbls of Gas Oil. We mobilized clean up crews and have picked up about 100 yds of contaminated soil. We have contacted Safety and Environmental Solutions to do a delineation study including drilling borings and sampling. A C-141 will be sent to you shortly.

Please note that the City of Lovington and Patrick McMahon have been copied on this notification.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

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Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Tuesday, June 02, 2009 1:10 PM
To: Chavez, Carl J, EMNRD
Cc: Lackey, Johnny
Subject: RE: Discharge Permit GW-014 Annual Report Dated April 15, 2009
Attachments: Lovington Caustic Spill Final.pdf

Carl

We have no photos of this spill or any manifests that definitively show this waste. I've attached the bottom hole sample we took. This spill occurred during a heavy rain fall event and the material was floating on the water and was sucked up by vacuum truck and put back in the refinery wastewater system. The attached analysis shows some hits of metals but these are total metals not TCLP. They would be well below TCLP haz levels if a TCLP was run. Safety and Environmental Solutions has done some borings in the area to delineate the spill. As you know, with the rock in this area almost at the surface, it is difficult to dig. Once that sampling and report are finished, we will forward that to you. That should happen by the end of June, 2009. With the adoption of the new discharge permit, we are now taking photos and tracking manifests and bottom hole samples on ALL spills.

As for the sumps we want to close. These sumps would NOT help drainage and/or containment. These sumps are NOT connected to the sewer system. They are simply 2'x2'x2' concrete boxes. For instance, one was put in by our predecessor in the early 80's to collect condensate from an air conditioner. That air conditioner is no longer even there. Why you would want to collect condensate anyway is beyond me its just fesh water! Plus we will have to test them per our Discharge Permit. We dont use them so we want to close them.

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Wednesday, May 13, 2009 2:21 PM
To: Moore, Darrell
Cc: Lackey, Johnny
Subject: Discharge Permit GW-014 Annual Report Dated April 15, 2009

Darrell:

I am currently reviewing Navajo Refining Company's Annual Report for the above subject facility. I have a request and/or question provided below.

- 1) Please provide me with the final C-141 for the July 10, 2008 release with manifests for disposal of contaminated soils; soil remediation samples results at the bottom of the excavation; and photos documenting corrective action.
- 2) Why does the refinery want to get rid of working sumps that will help with drainage and/or containment from releases? There are minimum requirements in the discharge permit for testing lines, etc. Can you tell me what you pressured up to once you filled the sump lines, etc. to see if there was any leakage?

Thanks.

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/index.htm>

(Pollution Prevention Guidance is under "Publications")

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This inbound email has been scanned by the MessageLabs Email Security System.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Monday, July 27, 2009 12:03 PM
To: 'Moore, Darrell'
Cc: Lackey, Johnny; 'Patrick B. McMahon'
Subject: (GW-014) Sumps Western Refining Southwest's message below, clarification of storm water, process areas and releases occurring at the refinery

Darrell:

Section 18 of your permits is provided below.

18. Storm Water: The owner/operator shall implement and maintain run-on and run-off plans and controls. The owner/operator shall separate or isolate chemical contact from non-contact storm water drainage areas at the plant. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any non-contact storm water run-off drainage area. The owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to mitigate and remediate any discharge.

I understand that Navajo Refining Company (NRC) has emplaced a dike around the facility to prevent drainage off-property. I believe NRC views this as its storm water control. However, I think it is important to point out that any rain drop or precipitation that falls outside of the process areas (bermed units or controls where chemicals may be released and prevented from migrating into storm water areas) at the refinery and within the bermed areas is considered storm water drainage by the OCD and EPA.

Within process areas of your refinery, these sumps may serve as controls for the purpose of preventing spills from overtopping the berms or as a collection point for spills in process areas that provides some means of containment? If you remove sumps in process areas, aren't you removing controls? Is NRC planning to install process drains to route spills to the treatment system at the facility? I understand that the sumps are closed sumps, not connected to sewer or the treatment system; however, the permit and above referenced section above requires that you maintain run-on and run-off plans and controls. In addition, you are required to separate or isolate chemical contact from non-contact storm water drainage areas at the plant.

The OCD views any sumps within process areas of the refinery to be controls for releases, and removing them may constitute a violation to your permit. Further, if you lack liners or containment within your process areas then you have no controls whatsoever for spills within process or bermed areas. An additional concern based on the concept of storm water discussed above, the OCD is noticing that several of your spills are migrating several hundred feet into your storm water areas and across your facility. I think NRC is having problems keeping process and non-process area drainage separated? Does NRC need to replace those sumps in the process areas with process drains to its treatment system so chemicals aren't overflowing into non-process or storm drainage areas of the facility? The permit may require that containment be emplaced where several spills begin running off onto storm water areas of your facility, bone yard, etc. I'm concerned that NRC is in violation of Section 18 of the discharge permit.

Please contact me to discuss and communicate about your run-on and run-off controls and the sump drains that appear to be located in process and non-process areas across the facility. I am reviewing the C-141 release reports from the facility and this issue is becoming of more concern. Thank you.

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/index.htm>
(Pollution Prevention Guidance is under "Publications")

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Sent: Tuesday, June 02, 2009 1:10 PM
To: Chavez, Carl J, EMNRD
Cc: Lackey, Johnny
Subject: RE: Discharge Permit GW-014 Annual Report Dated April 15, 2009

Carl

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ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



Environmental Division

31-Jul-08

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

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

Re: Lovington Caustic Spill

Work Order : 0807553

Dear Darrell,

ALS Laboratory Group received 3 samples on 7/24/2008 09:10 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 14.

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

Sincerely,

Electronically approved by: Glenda H. Ramos

Jeffrey L Croston
Project Manager



Certificate No: T104704231-08-TX

ALS Group USA, Corp.

Part of the **ALS Laboratory Group**

10450 Stancil 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: 31-Jul-08

Client: Navajo Refining Company
Project: Lovington Caustic Spill
Work Order: 0807553

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>
0807553-01	Caustic Spill (East)	Solid		7/23/2008 09:00	7/24/2008 09:10	<input type="checkbox"/>
0807553-02	Caustic Spill (South)	Solid		7/23/2008 09:00	7/24/2008 09:10	<input type="checkbox"/>

ALS Laboratory Group*Date: 31-Jul-08*

Client: Navajo Refining Company
Project: Lovington Caustic Spill
Work Order: 0807553

Case Narrative

Batch 31018 Metals MS/MSD was an unrelated sample.

ALS Laboratory Group

Date: 31-Jul-08

Client: Navajo Refining Company

Project: Lovington Caustic Spill

Sample ID: Caustic Spill (East)

Collection Date: 7/23/2008 09:00 AM

Work Order: 0807553

Lab ID: 0807553-01

Matrix: SOLID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TEXAS TPH						
			TX1005		Prep Date: 7/25/2008	Analyst: KMB
nC6 to nC12	ND		50	mg/Kg	1	7/26/2008 08:56 PM
>nC12 to nC28	ND		50	mg/Kg	1	7/26/2008 08:56 PM
>nC28 to nC35	ND		50	mg/Kg	1	7/26/2008 08:56 PM
Total Petroleum Hydrocarbon	ND		50	mg/Kg	1	7/26/2008 08:56 PM
Surr: 2-Fluorobiphenyl	80.1		70-130	%REC	1	7/26/2008 08:56 PM
Surr: Trifluoromethyl benzene	94.0		70-130	%REC	1	7/26/2008 08:56 PM
MERCURY, TOTAL - SW7471B						
			SW7471A		Prep Date: 7/30/2008	Analyst: JCJ
Mercury	0.0229		0.0129	mg/Kg	1	7/30/2008 02:30 PM
ICP METALS - SW6020A						
			SW6020		Prep Date: 7/25/2008	Analyst: IGF
Arsenic	3.80		0.450	mg/Kg	1	7/26/2008 01:40 AM
Barium	118		0.450	mg/Kg	1	7/26/2008 01:40 AM
Cadmium	ND		0.450	mg/Kg	1	7/26/2008 01:40 AM
Chromium	15.0		0.450	mg/Kg	1	7/26/2008 01:40 AM
Lead	14.0		0.450	mg/Kg	1	7/26/2008 01:40 AM
Selenium	ND		0.450	mg/Kg	1	7/26/2008 01:40 AM
Silver	ND		0.450	mg/Kg	1	7/26/2008 01:40 AM
PH IN SOLID						
			SW9045B			Analyst: MAM
pH	9.22		0.100	pH Units	1	7/28/2008 06:00 PM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
a - Not accredited

S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time
n - Not offered for accreditation

ALS Laboratory Group

Date: 31-Jul-08

Client: Navajo Refining Company

Project: Lovington Caustic Spill

Sample ID: Caustic Spill (South)

Collection Date: 7/23/2008 09:00 AM

Work Order: 0807553

Lab ID: 0807553-02

Matrix: SOLID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TEXAS TPH			TX1005		Prep Date: 7/25/2008	Analyst: KMB
nC6 to nC12	ND		49	mg/Kg	1	7/26/2008 09:47 PM
>nC12 to nC28	210		49	mg/Kg	1	7/26/2008 09:47 PM
>nC28 to nC35	310		49	mg/Kg	1	7/26/2008 09:47 PM
Total Petroleum Hydrocarbon	520		49	mg/Kg	1	7/26/2008 09:47 PM
Surr: 2-Fluorobiphenyl	83.4		70-130	%REC	1	7/26/2008 09:47 PM
Surr: Trifluoromethyl benzene	101		70-130	%REC	1	7/26/2008 09:47 PM
MERCURY, TOTAL - SW7471B			SW7471A		Prep Date: 7/30/2008	Analyst: JCJ
Mercury	ND		0.0132	mg/Kg	1	7/30/2008 02:13 PM
ICP METALS - SW6020A			SW6020		Prep Date: 7/25/2008	Analyst: IGF
Arsenic	11.4		0.472	mg/Kg	1	7/26/2008 01:46 AM
Barium	209		4.72	mg/Kg	10	7/28/2008 05:55 PM
Cadmium	ND		0.472	mg/Kg	1	7/26/2008 01:46 AM
Chromium	6.62		0.472	mg/Kg	1	7/26/2008 01:46 AM
Lead	11.1		0.472	mg/Kg	1	7/26/2008 01:46 AM
Selenium	ND		0.472	mg/Kg	1	7/26/2008 01:46 AM
Silver	ND		0.472	mg/Kg	1	7/26/2008 01:46 AM
PH IN SOLID			SW9045B			Analyst: MAM
pH	8.61		0.100	pH Units	1	7/28/2008 06:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level
 a - Not accredited

S - Spike Recovery outside accepted recovery limits
 P - Dual Column results percent difference > 40%
 E - Value above quantitation range
 H - Analyzed outside of Hold Time
 n - Not offered for accreditation

ALS Laboratory Group

Client: Navajo Refining Company
Work Order: 0807553
Project: Lovington Caustic Spill

Date: 31-Jul-08

QC BATCH REPORT

Batch ID: **31012** Instrument ID **FID-8** Method: **TX1005**

MBLK Sample ID: **FBLKS1-080725-31012** Units: **mg/Kg** Analysis Date: **7/26/2008 09:55 AM**

Client ID: Run ID: **FID-8_080725B** SeqNo: **1451927** Prep Date: **7/25/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	ND	50								
>nC12 to nC28	ND	50								
>nC28 to nC35	ND	50								
Total Petroleum Hydrocarbon	ND	50								
Surr: 2-Fluorobiphenyl	36.88	0	50	0	73.8	70-130	0			
Surr: Trifluoromethyl benzene	43.95	0	50	0	87.9	70-130	0			

LCS Sample ID: **FLCSS1-080725-31012** Units: **mg/Kg** Analysis Date: **7/26/2008 10:45 AM**

Client ID: Run ID: **FID-8_080725B** SeqNo: **1451928** Prep Date: **7/25/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	256.7	50	250	0	103	75-125	0			
>nC12 to nC28	239.4	50	250	0	95.8	75-125	0			
Surr: 2-Fluorobiphenyl	39.85	0	50	0	79.7	70-130	0			
Surr: Trifluoromethyl benzene	49.44	0	50	0	98.9	70-130	0			

LCSD Sample ID: **FLCSDS1-080725-31012** Units: **mg/Kg** Analysis Date: **7/26/2008 11:36 AM**

Client ID: Run ID: **FID-8_080725B** SeqNo: **1451929** Prep Date: **7/25/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	261.5	50	250	0	105	75-125	256.7	1.87	20	
>nC12 to nC28	246.2	50	250	0	98.5	75-125	239.4	2.79	20	
Surr: 2-Fluorobiphenyl	43.47	0	50	0	86.9	70-130	39.85	8.69	20	
Surr: Trifluoromethyl benzene	51.62	0	50	0	103	70-130	49.44	4.33	20	

MS Sample ID: **0807558-01BMS** Units: **mg/Kg** Analysis Date: **7/26/2008 01:17 PM**

Client ID: Run ID: **FID-8_080725B** SeqNo: **1451931** Prep Date: **7/25/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	234.6	50	248.8	0	94.3	75-125	0			
>nC12 to nC28	216.3	50	248.8	0	87	75-125	0			
Surr: 2-Fluorobiphenyl	37.23	0	49.75	0	74.8	70-130	0			
Surr: Trifluoromethyl benzene	51.88	0	49.75	0	104	70-130	0			

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

Client: Navajo Refining Company
Work Order: 0807553
Project: Lovington Caustic Spill

QC BATCH REPORT

Batch ID: 31012 Instrument ID FID-8 Method: TX1005

MSD Sample ID: 0807558-01BM SD Units: mg/Kg Analysis Date: 7/26/2008 02:08 PM

Client ID: Run ID: FID-8_080725B SeqNo: 1451932 Prep Date: 7/25/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	241	50	248.3	0	97.1	75-125	234.6	2.72	20	
>nC12 to nC28	219	50	248.3	0	88.2	75-125	216.3	1.23	20	
Surr: 2-Fluorobiphenyl	38.2	0	49.65	0	76.9	70-130	37.23	2.58	20	
Surr: Trifluoromethyl benzene	52.61	0	49.65	0	106	70-130	51.88	1.4	20	

The following samples were analyzed in this batch:

0807553-01A 0807553-02A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

Client: Navajo Refining Company
 Work Order: 0807553
 Project: Lovington Caustic Spill

QC BATCH REPORT

Batch ID: 31018 Instrument ID ICPMS02 Method: SW6020

MBLK Sample ID: MBLKS1-072508-31018 Units: mg/Kg Analysis Date: 7/25/2008 04:33 PM

Client ID: Run ID: ICPMS02_080725A SeqNo: 1451037 Prep Date: 7/25/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.50								
Barium	0.0867	0.50								J
Cadmium	ND	0.50								
Chromium	ND	0.50								
Lead	ND	0.50								
Selenium	ND	0.50								
Silver	ND	0.50								

LCS Sample ID: MLCSS1-072508-31018 Units: mg/Kg Analysis Date: 7/25/2008 04:39 PM

Client ID: Run ID: ICPMS02_080725A SeqNo: 1451038 Prep Date: 7/25/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.563	0.50	10	0	95.6	80-120	0			
Barium	9.257	0.50	10	0	92.6	80-120	0			
Cadmium	9.456	0.50	10	0	94.6	80-120	0			
Chromium	9.068	0.50	10	0	90.7	80-120	0			
Lead	9.27	0.50	10	0	92.7	80-120	0			
Selenium	9.341	0.50	10	0	93.4	80-120	0			
Silver	9.458	0.50	10	0	94.6	80-120	0			

MS Sample ID: 0807558-03CMS Units: mg/Kg Analysis Date: 7/25/2008 09:49 PM

Client ID: Run ID: ICP7500_080725A SeqNo: 1451777 Prep Date: 7/25/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	16.62	0.47	9.346	5.669	117	75-125	0			
Barium	588.5	0.47	9.346	615	-284	75-125	0			SEO
Cadmium	8.772	0.47	9.346	0.756	85.8	75-125	0			
Chromium	26.3	0.47	9.346	16	110	75-125	0			
Lead	129.3	0.47	9.346	117.6	126	75-125	0			SO
Selenium	8.118	0.47	9.346	0.2737	83.9	75-125	0			
Silver	7.618	0.47	9.346	0.02025	81.3	75-125	0			

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

Client: Navajo Refining Company
 Work Order: 0807553
 Project: Lovington Caustic Spill

QC BATCH REPORT

Batch ID: 31018 Instrument ID ICPMS02 Method: SW6020

MSD Sample ID: 0807558-03CMSD Units: mg/Kg Analysis Date: 7/25/2008 09:55 PM

Client ID: Run ID: ICP7500_080725A SeqNo: 1451779 Prep Date: 7/25/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.69	0.47	9.346	5.669	85.8	75-125	16.62	19.3	25	
Barium	610	0.47	9.346	615	-54	75-125	588.5	3.59	25	SEO
Cadmium	8.605	0.47	9.346	0.756	84	75-125	8.772	1.93	25	
Chromium	24.09	0.47	9.346	16	86.6	75-125	26.3	8.75	25	
Lead	124.4	0.47	9.346	117.6	73	75-125	129.3	3.9	25	SO
Selenium	7.915	0.47	9.346	0.2737	81.8	75-125	8.118	2.53	25	
Silver	7.377	0.47	9.346	0.02025	78.7	75-125	7.618	3.22	25	

DUP Sample ID: 0807558-03CDJP Units: mg/Kg Analysis Date: 7/25/2008 09:43 PM

Client ID: Run ID: ICP7500_080725A SeqNo: 1451776 Prep Date: 7/25/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.72	0.47	0	0	0	0-0	5.669	0.886	25	
Cadmium	0.9132	0.47	0	0	0	0-0	0.756	18.8	25	
Chromium	17.57	0.47	0	0	0	0-0	16	9.35	25	
Lead	115.4	0.47	0	0	0	0-0	117.6	1.85	25	
Selenium	0.1936	0.47	0	0	0	0-0	0.2737	0	25	J
Silver	0.02681	0.47	0	0	0	0-0	0.02025	0	25	J

DUP Sample ID: 0807558-03CDUP Units: mg/Kg Analysis Date: 7/28/2008 04:43 PM

Client ID: Run ID: ICPMS02_080728A SeqNo: 1452764 Prep Date: 7/25/2008 DF: 50

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	496.7	23	0	0	0	0-0	513.6	3.33	25	

The following samples were analyzed in this batch:

0807553-01A 0807553-02A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

Client: Navajo Refining Company
 Work Order: 0807553
 Project: Lovington Caustic Spill

QC BATCH REPORT

Batch ID: 31077 Instrument ID Mercury Method: SW7471A

MBLK Sample ID: GBLKS1-073008-31077 Units: µg/Kg Analysis Date: 7/30/2008 02:04 PM

Client ID: Run ID: MERCURY_080730A SeqNo: 1455020 Prep Date: 7/30/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	13								

LCS Sample ID: GLCSS1-073008-31077 Units: µg/Kg Analysis Date: 7/30/2008 02:06 PM

Client ID: Run ID: MERCURY_080730A SeqNo: 1455021 Prep Date: 7/30/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	355.3	13	333.3	0	107	85-115	0			

LCSD Sample ID: GLCSDS1-073008-31077 Units: µg/Kg Analysis Date: 7/30/2008 02:08 PM

Client ID: Run ID: MERCURY_080730A SeqNo: 1455022 Prep Date: 7/30/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	355.3	13	333.3	0	107	85-115	355.3	0	20	

MS Sample ID: 0807553-02AMS Units: µg/Kg Analysis Date: 7/30/2008 02:19 PM

Client ID: Caustic Spill (South) Run ID: MERCURY_080730A SeqNo: 1455025 Prep Date: 7/30/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	339.2	13	326.8	12.98	99.8	85-115	0			

MSD Sample ID: 0807553-02AMSD Units: µg/Kg Analysis Date: 7/30/2008 02:21 PM

Client ID: Caustic Spill (South) Run ID: MERCURY_080730A SeqNo: 1455026 Prep Date: 7/30/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	334.8	13	332.8	12.98	96.7	85-115	339.2	1.32	20	

DUP Sample ID: 0807553-02ADUP Units: µg/Kg Analysis Date: 7/30/2008 02:15 PM

Client ID: Caustic Spill (South) Run ID: MERCURY_080730A SeqNo: 1455024 Prep Date: 7/30/2008 DF: 1

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	13.05	13	0	0	0		12.98	0	20	J

The following samples were analyzed in this batch:

0807553-01A 0807553-02A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

Client: Navajo Refining Company
Work Order: 0807553
Project: Lovington Caustic Spill

QC BATCH REPORT

Batch ID: **R65988** Instrument ID: **WetChem** Method: **SW9045B**

LCS Sample ID: **WLCSS1-072808-R65988** Units: **pH Units** Analysis Date: **7/28/2008 06:00 PM**
 Client ID: Run ID: **WETCHEM_080728J** SeqNo: **1452827** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.02	0.10	6	0	100	90-110	0			

DUP Sample ID: **0807478-01ADUP** Units: **pH Units** Analysis Date: **7/28/2008 06:00 PM**
 Client ID: Run ID: **WETCHEM_080728J** SeqNo: **1452845** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.44	0.10	0	0	0	0-0	8.52	0.943	20	

DUP Sample ID: **0807553-02ADUP** Units: **pH Units** Analysis Date: **7/28/2008 06:00 PM**
 Client ID: **Caustic Spill (South)** Run ID: **WETCHEM_080728J** SeqNo: **1452846** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.64	0.10	0	0	0	0-0	8.61	0.348	20	

The following samples were analyzed in this batch:

0807553-01A	0807553-02A
-------------	-------------

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

[illegible]

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

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.

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Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 7/24/2008 09:10

Work Order Number 0807553

Received by: RSZ

Checklist completed by

Lera Terwith
Signature

7/24/08
Date

Reviewed by

gn
Initials

7/28/08
Date

Matrix: S

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):

3.4

002

Cooler(s)/Klt(s):

1438

Water - VOA vials have zero headspace?

Yes ☒

No ☐

No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Adjusted? _____ Checked by _____

Login Notes:

No tests assigned for (South). Assigned same tests as (East)

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

This portion can be removed for recipient's records.
 Date 7-23-08 FedEx Tracking Number 858220389394
 Name CATHY TRUETT Phone 505 394-5111
 Company NAVAJO REFINING CO. (EAS)
 Address 740A S MAIN ST 12403/110
 City LOUTINGTON State NM ZIP 88240
 For Internal Billing Reference



ALS e-Lab Analytical
 10450 Stancilff Rd., Suite 210
 Houston, Texas 77099
 Tel: 281.530.5656
 Fax: 218.530.5887

Date: 7-23-08
 Time: 9:08
 Name: Cathy Truett
 Company: NAVAJO REFINING CO.

QUALITY SEAL
 Date: 7-23-08 Time: 9:08
 Name: Cathy Truett
 Company: NAVAJO REFINING CO.

Seal Broken By: [Signature]
 Date: 7-23-08

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, July 10, 2008 3:38 PM
To: 'Moore, Darrell'; Johnson, Larry, EMNRD
Cc: Price, Wayne, EMNRD
Subject: RE: Lea Refinery (GW-14) Caustic Scrubber Spill

Darrell:

The OCD wants 2 bottom hole samples (analyses: pH and metals) and waste manifest for disposal. The locations of bottom hole samples E and S of the Caustic Scrubber.

Also, for all C-141 releases, a manifest for disposal to confirm excavation removal, etc. is needed to confirm physical action was taken at the release. A photo before and after should also be submitted.

Please contact me if you have questions. Thank you.

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) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [<mailto:Darrell.Moore@hollycorp.com>]
Sent: Thursday, July 10, 2008 3:07 PM
To: Johnson, Larry, EMNRD; Chavez, Carl J, EMNRD
Subject: Caustic Scrubber Spill

Gentlemen,

Attached, please find a C-141 for a caustic spill that occurred at our Lovington facility today. Bottom Hole samples for TPH and pH will be forwarded as soon as we get them. If you have any questions, please call me at 575-746-5281.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, L.P.
P.O. Box 159
Artesia, NM 88211-0159
Darrell.moore@navajo-refining.com
phone: 505.746.5281
cell: 505.703.5058
fax: 505.746.5451

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This inbound email has been scanned by the MessageLabs Email Security System.

7/10/2008

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Thursday, July 10, 2008 3:07 PM
To: Johnson, Larry, EMNRD; Chavez, Carl J, EMNRD
Subject: Caustic Scrubber Spill
Attachments: Caustic Scrubber Spill.pdf

Gentlemen,

Attached, please find a C-141 for a caustic spill that occurred at our Lovington facility today. Bottom Hole samples for TPH and pH will be forwarded as soon as we get them. If you have any questions, please call me at 575-746-5281.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, L.P.
P.O. Box 159
Artesia, NM 88211-0159
Darrell.moore@navajo-refining.com
phone: 505.746.5281
cell: 505.703.5058
fax: 505.746.5451

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7/10/2008

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999
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 E&E Refining Co. LLC	Contact Darrell Moore
Address 7406 S. Main Lovington, NM 88260	Telephone No. 505-703-5058
Facility Name	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
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NATURE OF RELEASE


Type of Release Caustic	Volume of Release 150 Bbls	Volume Recovered 120 Bbls
Source of Release Caustic Scrubber	Date and Hour of Occurrence 7/10/08 5:30 am	Date and Hour of Discovery 7/10/08 6:00 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Relief valve hung in the open position and filled sump. Which then over flowed. Valve is being replaced.

Describe Area Affected and Cleanup Action Taken.* Area affected is to the east and south of caustic scrubber. Happened during a rain event, so most of material was floating on water. Vacuum truck sucked up spill material. Contaminated soil will be removed.

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 & Waste	Approval Date:	Expiration Date:	
Date: 7/10/08 Phone: 575-703-5058	Conditions of Approval:		Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary