GW - 032

C-141s

Remediation Plans

Western Refining

GALLUP

WNR LISTED NYSE

RECEIVED OCD

2012 FEB -9 A 10: 17

RECEIV

2012 FEB -9

February 7, 2012

New Mexico Environmental Department
Hazardous Waste Bureau (HWB)
1301 Siler Road, Building B
Santa Fe, NM 87507
Attn: Ms Kristen Van Horn

New Mexico Energy, Minerals, and Natural Resources
Oil Conservation Division (OCD)
1220 South St. Francis Drive
Santa Fe, NM 87505
✓ Attn: Mr. Carl J. Chavez

Re: Tank (T-35) Overflow Cleanup and Final (C-141) Submittal

Dear Ms Van Horn and Mr. Chavez:

Western Refining Company - Gallup Refinery is submitting the following report as a final to the Tank 35 (T-35) cleanup of a release that occurred on October 2, 2011. Western Refining (Gallup Refinery) previously submitted an initial C-141 along with the Confirmation Soil Sampling Plan as presented in the letter that was addressed to the Agency of November 10, 2011. The initial plan addresses the soil excavation and removal of contamination from the Tank 35 (T-35) area. Due to the area and processes involved, it was decided to manage this excavated soil as a Hazardous Waste and to dispose of this material off-site to an approved TSD Facility.

Approximately one inch of visually stained soil was first removed prior to conducting the initial Confirmation cleanup and sampling assessment requirements. A third party Environmental Consulting firm (Trihydro Corporation) was came out on October 28, 2011 in order to perform visual assessment and extent of the contaminated area. As a result of this initial assessment, Trihydro identified five distinct locations, (T-35-1, T-35-2, T-35-3, T-35-4, and T-35-5), as shown in the map from the November 10, 2011 (Confirmation Sampling Plan) report. Each of the five locations that were identified were also staked out for sampling.

In December 2011, Trihydro was called back to perform the initial sampling in accordance with the Confirmation Sampling Plan. On December 15, 2011, Trihydro Consultants began sampling at these five locations. The laboratory analysis was conducted by Hall Environmental Laboratory using Method 8260 (VOC, Volatile Organic Compounds), Method 8270 (Semi volatile Organic compounds), Method 8015B (Diesel and Gasoline Range Organics (DRO/GRO)), and RCRA Metals. One sample was taken at each of the five locations. The analytical report was received on December 27, 2011. Upon receipt of the analytical data on December 27, it was noticed that all of the parameters were Total Values. Therefore, Western requested additional testing for TCLP for Methods 8260, 8270, and RCRA 8 Metals. Also, Western requested that an RCI to be conducted. The final Analysis (Order #: 1112721) for the initial sampling is enclosed. The results of this analysis indicated a high value of TPH in areas T-35-1 and T-35-5, in particular, DRO and MRO. Based on this evaluation, additional remediation would be required in these two areas. Based on the analysis contractors were give the authorization to replace the excavated soil from T-35-2, T-35-3, and T-35-4 areas with clean soil and gravel.

Contract personnel were given permission to conduct additional remediation in the two areas of question, i.e. around Tank 35 (T-35-1 and T-35-5). Contractors were to remove about 1 to 2 inches of additional soil in area T-35-1 and about 2 to 3 inches of additional soil in area T-35-5.Once contractors finished the remediation from these two areas, additional sampling was

conducted using the same criteria as performed previously. On January 5, additional sampling was conducted in these two locations (T-35-1 and T-35-5) was sent to Hall Laboratory for analysis. The final Analysis (Order #: 1201183) for the additional confirmation sampling was received on January 13, 2012. Again upon receipt of the analysis as mentioned above, Western requested additional analysis on January 16, 2012. A modified report that is attached was received with the additional testing in the final report of January 24, 2012. Based on the analysis contractors were give the authorization to replace the excavated soil from T-35-1 and T-35-5 areas with clean soil and gravel.

If you should require additional information, please feel free to contact me at (505) 722-0258.

Sincerely,

Beck Larsen, CHMM/REM
Western Refining-Southwest (Gallup Refinery)
Office: (505) 722-0258
Cell: (505) 862-1749

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: Western Refining	Contact: Beck Larsen
Address I-40 / Exit 39, Jamestown, NM 87347	Telephone No: (505) 722-0258
Facility Name: Western Refining (Gallup)	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
	28	15 N	15 W					McKinley

Latitude 35° 29' 022" **Longitude** 108° 24' 024"

NATURE OF RELEASE

Type of Release 13 bbls (oil) / 1240 bbls (process and stormwater mixture)	Volume of Release Estimated 13 bbls (oil)	Volume Recovered 1240 bbls (stormwater and oily process water)/ 13 bbls (oil)
Source of Release: Tank (T-35) Overflow	Date and Hour of Occurrence 10/02/2011; 1540 hrs (3:40 PM)	Date and Hour of Discovery 10/02/2011; 1540 hrs (3:40 PM)
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Ruth Horowitz, NMED HWB (telephone call); Kristen Van Horn, NMED HWB (telephone call) Brandon Powell, NMED HWB (telephone call) Carl J Chavez, OCD (telephone call)	
By Whom? Loretta Morgan	Date and Hour 10/3/201; 1323 hrs (1:23 PM) (approximately)	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

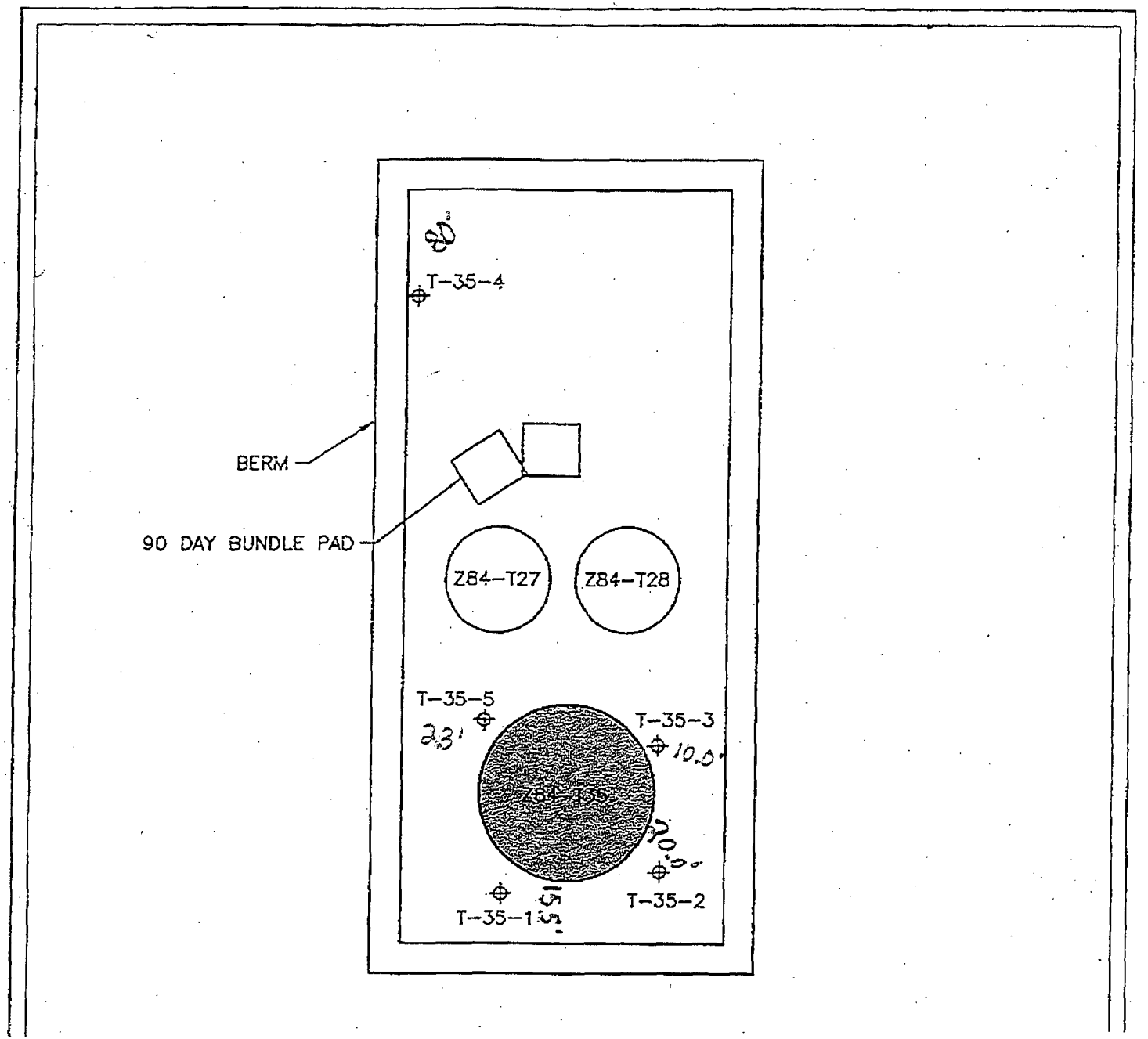
Describe Cause of Problem and Remedial Action Taken.* The cause was previously described in the C-141 (Initial Report) of 10/26/2011. The initial cleanup around T-35 began via vacuum truck that removed the stormwater and oily process water surrounding T-35. Once the water was removed and T-35 area was dry to allow access of heavy equipment, soil remedial activity operations commenced. Initially 1 inch of contaminated soil was removed around T-35.

Describe Area Affected and Cleanup Action Taken.*
Initial soil samples were collected on 12/15/2011 according to diagram. Sample results indicated the additional samples were required in areas T-35-1 and T-35-5 (according to diagram). Contractors began remediation activities in areas T-35-1 and T-35-5. Approximately 1 to 3 inches of additional soil were removed in areas 1 and 5 at T-35. Confirmation sampling was again conducted on 1/5/2012. Sample results indicated that areas were clean and could be covered with clean fill dirt and gravel. All contaminated soil is being shipped off-site as Hazardous Waste to an approved TSD Facility in accordance to all applicable regulations.

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: Beck Larsen	Approved by District Supervisor:	
Title: Environmental Engineer	Approval Date:	Expiration Date:
E-mail Address: Thurman.larsen@wnr.com	Conditions of Approval:	Attached ☐
Date: 2/07/2012 Phone: (505) 722-0258		

* Attach Additional Sheets If Necessary


T-35-4
BERM
90 DAY BUNDLE PAD
Z84-T27
Z84-T28
T-35-5
T-35-3
T-35-1
T-35-2

Larsen, Thurman

From: Riege, Ed
Sent: Thursday, November 10, 2011 12:37 PM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Morgan, Loretta; Dorsey, Alvin
Subject: Confirmation Soil Sampling Plan
Attachments: 20111110122317137.pdf

Carl,
The soil cleanup work is to begin on Monday November 14. The Confirmation Soil Sampling Plan is attached for your and Kristen's approval.

Thanks,
Ed

Ed Riege
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, October 27, 2011 7:31 AM
To: Morgan, Loretta
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

Good morning.

The C-141 Form is marked final report, but the corrective actions have not been completely implemented yet. Please resubmit the form as the initial report and when the corrective actions are completed, Western must submit the final report with all of the attached supporting documentation of the actions taken to correct the situation. Also, please notify the agencies when the work is scheduled to begin so we may be present to witness the corrective action(s).

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/
"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: Morgan, Loretta [mailto:Loretta.Morgan@wnr.com]
Sent: Wednesday, October 26, 2011 3:50 PM
To: Chavez, Carl J, EMNRD
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Hi Carl

Sorry I had the incorrect date. Attached is the revised C-141 and original placed in mail to you. Thanks.

Loretta Morgan
Environmental Specialist

Western Refining
Route 3 Box 7
Gallup, NM 87301
Phone: (505) 722-0242
Fax: (505) 722-0268
loretta.morgan@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, October 25, 2011 4:33 PM
To: Morgan, Loretta
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

The C-141 does not concur with the OCD e-mail dated October 3, 2011 (see OCD Online C-141s thumbnail page 2). Could you please re-evaluate the C-141 information and revise it and resend it with the revised information by COB tomorrow.

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: Morgan, Loretta [mailto:Loretta.Morgan@wnr.com]
Sent: Tuesday, October 25, 2011 3:27 PM
To: Chavez, Carl J, EMNRD
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Hi Carl

Sorry, the report was sent out in the mail today. Attached is copy of the C141. Thanks

Loretta Morgan
Environmental Specialist

Western Refining
Route 3 Box 7
Gallup, NM 87301
Phone: (505) 722-0242
Fax: (505) 722-0268
loretta.morgan@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, October 25, 2011 2:50 PM
To: Morgan, Loretta
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV
Subject: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

Good afternoon. Did Western send the C-141 for this release that was reported on 10/3/2011?

OCD does not see this form in our files. 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)

Western Refining
GALLUP

WNR LISTED NYSE

November 10, 2011

Mr. Carl J. Chavez
Environmental Engineer
New Mexico Energy, Minerals, and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Confirmation Soil Sampling Plan, October 2, 2011 Tank 35 Release, Western Refining Company Southwest, Inc., Gallup Refinery, Gallup, New Mexico

Dear Mr. Chavez:

Western Refining Company's Gallup Refinery (Gallup) has prepared this Confirmation Soil Sampling Plan to guide Tank 35 confirmation soil sampling activities. Confirmation soil sampling will be conducted to verify that soil contaminated as a result of the October 2, 2011 release is removed during soil removal activities. A release of a mixture of stormwater, process water, and oily wastewater occurred when Tank 35 overflowed on October 2, 2011. The location of Tank 35 is shown on Figure 1. Form C-141 was completed and submitted to the New Mexico Oil Conservation Division (OCD) to report the release on October 3, 2011. A copy of From C-141 is included as Attachment A. At the time of the release, Tank 35 was being used to temporarily hold process waters so that API separator issues could be addressed. A heavy rain event occurred during this time frame and runoff water from the process units caused Tank 35 to overflow. Released fluids were contained by the tank berm. The refinery's Maintenance Department immediately began recovery of released fluids using a vacuum truck. Recovered fluids were temporarily stored in Tank 105 (slop oil tank). Based on the volume of fluids stored in Tank 105, approximately 1,240 barrels of process water/stormwater and 13 barrels of oily wastewater were recovered from the Tank 35 overflow.

Soil removal work, consisting of excavating contaminated gravel and soil, is scheduled to commence on November 14, 2011. Gallup believes that contaminated soil may be visually identified by staining and intends to excavate visually stained soil within the Tank 35 berm. Contaminated soil will be managed as hazardous waste and will be shipped off-site for disposal. After visually stained soil is excavated, Gallup proposes to collect five confirmation soil samples to confirm that the contamination associated with the October 2, 2011 release has been removed.

Trihydro Corporation (Trihydro) inspected the release area on October 28, 2011. Areas exhibiting staining were evident during Trihydro's inspection. Trihydro assisted in identifying five locations representative of the areas exhibiting the highest degree of staining. These locations were staked by Trihydro. Gallup intends to collect the confirmation samples from these five locations after soil removal is complete. Approximate confirmation sample locations are shown on Figure 2. Based on the observed staining, these five locations are representative of areas most heavily impacted by the October 2, 2011 release. Therefore, if contaminant concentrations in the confirmation soil samples are less than applicable cleanup standards, contamination associated with the October 2, 2011 release has likely been removed.

Care will be taken during soil removal activities to preserve the staked locations (i.e. staked locations will be surveyed with a global positioning system or their distance from a stationary reference point will be measured so that the areas can be relocated after soil removal activities are complete.) Soil samples will be collected using a clean, stainless steel trowel from approximately 0 to 6 inches below the post-excavated ground surface. The trowel will be decontaminated before and after sample collection using an Alconox or Simple Green solution followed by a de-ionized water rinse. The sampler will use clean latex gloves in order to minimize cross contamination. The sampler will use a new pair of latex gloves for each sample location. Samples will be collected in laboratory-provided sample containers and placed on ice or refrigerated immediately after collection. The soil samples will be analyzed for volatile organic compounds (VOCs) by EPA Method 8260, semi volatile organic compounds (SVOCs) by EPA Method 8270, diesel range organics extended (DRO) and gasoline range organics (GRO) by EPA Method 8015M, and RCRA metals. One sample will be submitted from each of the five locations; samples will not be composited.

Analytical results will be compared to the New Mexico Environment Department (NMED) industrial/occupational soil screening standards. If exceedances of the NMED industrial/occupational soil screening standards are identified, additional excavation will be conducted in the area from which the exceeding sample was collected. An additional confirmation sample will be collected to confirm that the additional excavation was successful in removing soil contamination. This process will be repeated until confirmation samples do not exceed the NMED industrial/occupational soil screening standards.

Soil removal activities are scheduled to commence on November 14. Confirmation soil samples will be collected pending OCD approval of this correspondence. If you have any questions or comments, please do not hesitate to call me at (505) 722-0217.

Sincerely,
Western Refining Company

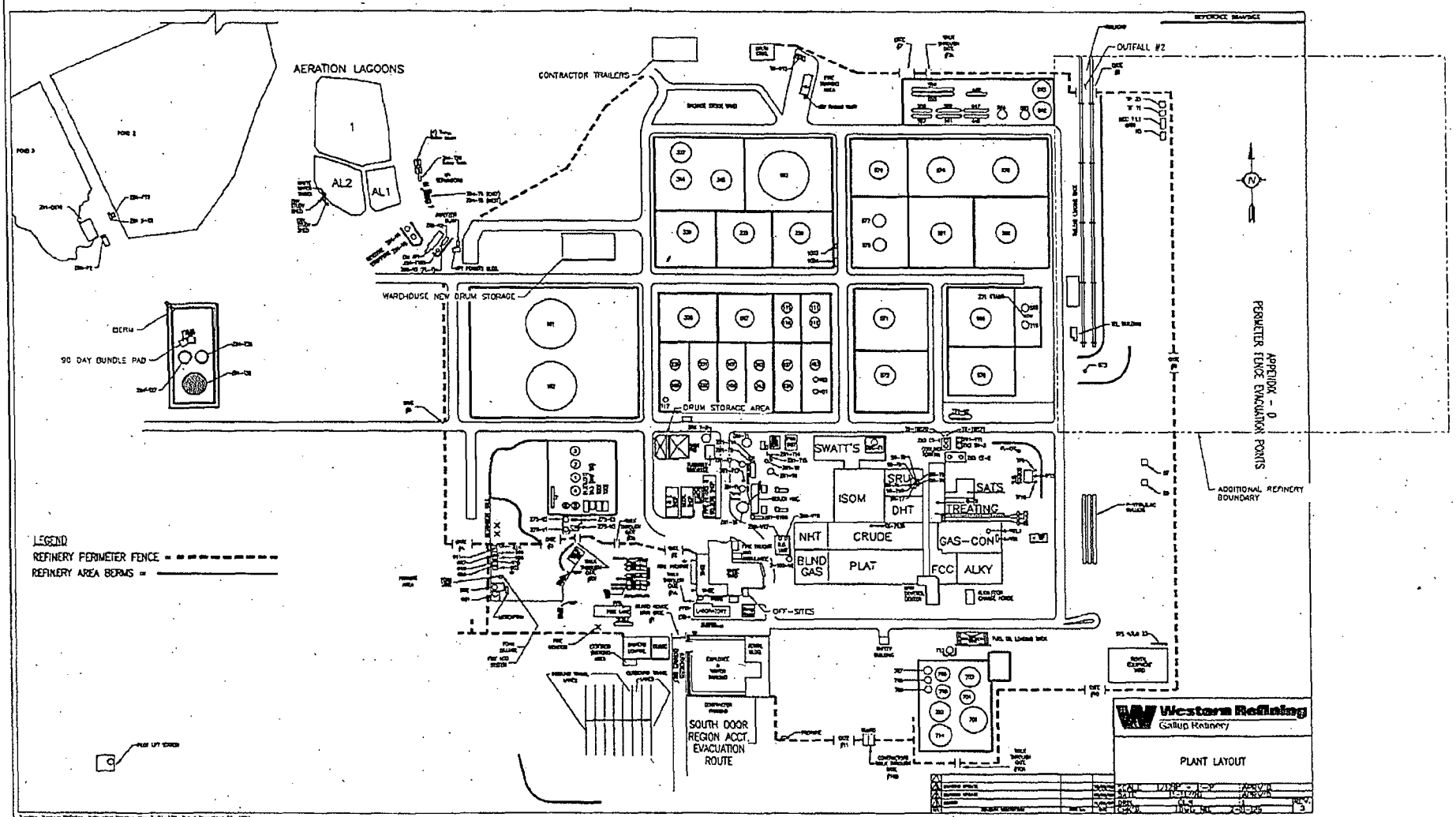
Ed Riege
Environmental Manager

697-039-002

Attachments

cc: L. Morgan, Western Refining
G. Price, Trihydro Corporation
K. Van Horn, NM

FIGURES



EXPLANATION

TANK 35

0 ~250' ~500'

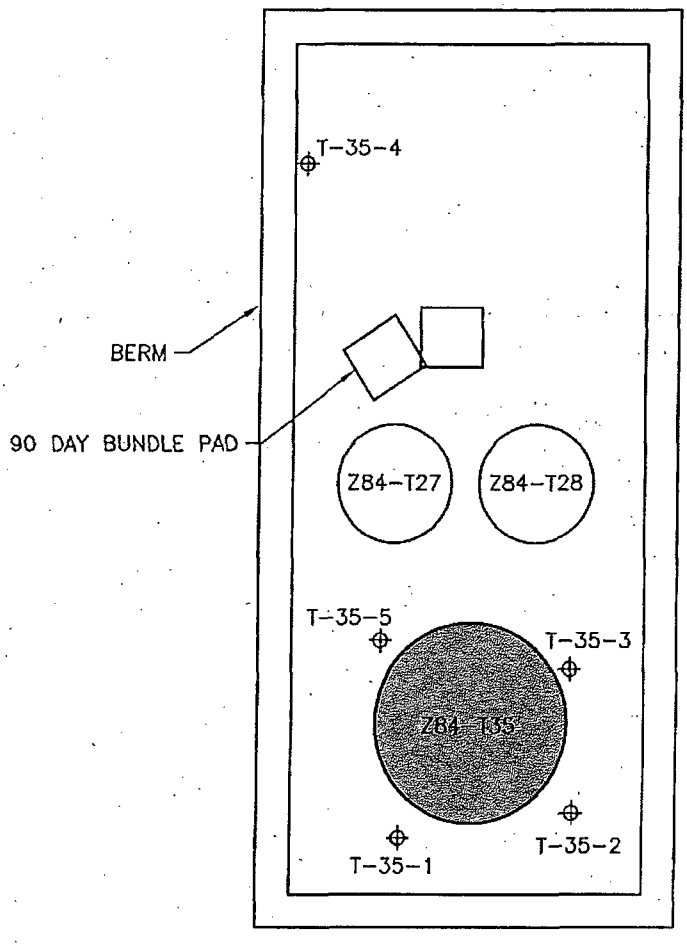
Trihydro Corporation
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 1

LOCATION OF TANK 35
TANK 35 CONFIRMATION SOIL SAMPLING PLAN

WESTERN REFINING COMPANY L.L.C.
GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: REP	Checked By: GP	Scale: 1" = ~250'	Date: 11/1/11	File: 697-TANK35LAYOUT-201111



EXPLANATION

T-35-1 APPROXIMATE LOCATION OF PROPOSED CONFIRMATION SOIL SAMPLE

TANK 35

N

0' ~80'

Trihydro CORPORATION
1252 Commerce Drive
Laramie, Wyoming 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 2

APPROXIMATE LOCATIONS OF PROPOSED CONFIRMATION SOIL SAMPLES TANK 35 CONFIRMATION SOIL SAMPLING PLAN

WESTERN REFINING COMPANY L.L.C.
GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: REP	Checked By: GP	Scale: 1" = ~80'	Date: 11/1/11	File: 697-TANK35LAYOUT-201111

ATTACHMENT A

FORM 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: Western Refining Southwest Inc.	Contact: Loretta Morgan
Address: I-40 Exit 39 Jamestown, NM 87347	Telephone No: 505-722-3833
Facility Name: Gallup Refinery	Facility Type: Oil Refinery

Surface Owner: Western Refining	Mineral Owner: Western Refining	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	23&33	15N	15W					McKinley

Latitude 35°29'22" Longitude 108°25'24"

NATURE OF RELEASE

Type of Release: Oily Waste Water 13 bbls (oil) / 1240 bbls (process and stormwater)	Volume of Release: Estimate 13 barrel of oil	Volume Recovered:
Source of Release: Tank 35 overflow	Date and Hour of Occurrence: 10/2/2011 3:40 pm	Date and Hour of Discovery: 10/2/2011 3:40 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Ruth Horowitz, NMED Hazardous Waste Bureau (phone call) Kristen VanHorn, NMED Hazardous Waste Bureau (phone call) Brando Powell, NMED Hazardous Waste Bureau (phone call) Carl J. Chavez, NMEMNRD, Oil Conservation Division (phone call)	
By Whom? Loretta Morgan	Date and Hour: 10/3/2011 1:23 pm (approximately)	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. No, did not impact watercourse.	

If a Watercourse was Impacted, Describe Fully.
Not applicable

Describe Cause of Problem and Remedial Action Taken:

At approximately 3:40 pm on 10/2/2011, Tank 35 overflowed due to heavy rain. API was shutdown due to foaming issues so Tank 35 was holding process water while waiting for the API operator to troubleshoot the API foaming issue. During this period, it started to rain heavily and all runoff water from the process units overfilled Tank 35. API operator was trying to manually open the valves to the overflow tanks (Tank 27 and 28), but did not open in time. Tank 35 overflowed water from the vents. Immediate action was taken to clean up the spill. The Maintenance Department was called out to start vacuuming up the area. Overflow did not reach any watercourse and was contained in the berm area of the tank. Approximately 75,600 gallons of rain water and process water first was removed by the vacuum truck and put into T-105 (slop oil tank). Water was then decanted from T-105. The decanting sent process water and storm water from T-105 back to T-35 for reprocessing. The final oil volume in T-105 was determined from a T-105 strapping chart and estimated to be 13 bbls. Rain water was included because during cleanup process, it was still raining. Soil clean-up will commence when able to get heavy equipment into the area.

Describe Area Affected and Cleanup Action Taken:

The area affected is in the dirt berm area of Tank 35. The area is approximately 15 feet by 50 feet where an oily-water mixture had settled. A vacuum truck was used to collect the oily-water mixture. The soil in this berm area is stained with oil. In further cleanup actions, contaminated soils will be excavated, confirmatory environmental samples will be collected and analyzed, and all contaminated materials will be disposed off in accordance with applicable regulations.

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: Mark B. Turri	OIL CONSERVATION DIVISION	
Printed Name: Mark B. Turri	Approved by District Supervisor:	
Title: Refinery Manager – Gallup	Approval Date:	Expiration Date:
E-mail Address: Mark.Turri@wnr.com	Conditions of Approval:	Attached ☐
Date: 10-26-2011 Phone: 505-722-3833		

- Attach Additional Sheets If Necessary

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 30, 2012

Thurman B. Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: Tank 35 Cleanup

OrderNo.: 1201585

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/20/2012 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative. Analytical results designated with a "J" qualifier are estimated and represent a detection above the Method Detection Limit (MDL) and less than the Reporting Limit (PQL). These analytes are not reviewed nor narrated as to whether they are laboratory artifacts.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-5
Project: Tank 35 Cleanup
Collection Date: 1/17/2012 11:20:00 AM
Lab ID: 1201585-001
Matrix: SOIL
Received Date: 1/20/2012 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	43	9.8		mg/Kg	1	1/24/2012 8:59:41 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/24/2012 8:59:41 AM
Surr: DNOP	85.8	77.4-131		%REC	1	1/24/2012 8:59:41 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/23/2012 5:29:09 PM
Surr: BFB	94.7	69.7-121		%REC	1	1/23/2012 5:29:09 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	1/23/2012 3:26:45 PM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/24/2012 6:22:56 AM
Barium	ND	100		mg/L	5	1/24/2012 6:47:47 AM
Cadmium	ND	1.0		mg/L	1	1/24/2012 6:22:56 AM
Chromium	ND	5.0		mg/L	1	1/24/2012 6:22:56 AM
Lead	ND	5.0		mg/L	1	1/24/2012 6:22:56 AM
Selenium	ND	1.0		mg/L	1	1/24/2012 6:22:56 AM
Silver	ND	5.0		mg/L	1	1/24/2012 6:22:56 AM
EPA METHOD 8270C TCLP						Analyst: **JDC**
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/25/2012 12:36:32 PM
Hexachlorobenzene	ND	0.13		mg/L	1	1/25/2012 12:36:32 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/25/2012 12:36:32 PM
Hexachloroethane	ND	3.0		mg/L	1	1/25/2012 12:36:32 PM
Nitrobenzene	ND	2.0		mg/L	1	1/25/2012 12:36:32 PM
Pentachlorophenol	ND	100		mg/L	1	1/25/2012 12:36:32 PM
Pyridine	ND	5.0		mg/L	1	1/25/2012 12:36:32 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/25/2012 12:36:32 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/25/2012 12:36:32 PM
Cresols, Total	ND	200		mg/L	1	1/25/2012 12:36:32 PM
2-Methylphenol	ND	200		mg/L	1	1/25/2012 12:36:32 PM
3+4-Methylphenol	ND	200		mg/L	1	1/25/2012 12:36:32 PM
Phenol	ND	200		mg/L	1	1/25/2012 12:36:32 PM
Surr: 2,4,6-Tribromophenol	75.3	18.2-136		%REC	1	1/25/2012 12:36:32 PM
Surr: 2-Fluorobiphenyl	78.0	40.5-108		%REC	1	1/25/2012 12:36:32 PM
Surr: 2-Fluorophenol	46.9	23-101		%REC	1	1/25/2012 12:36:32 PM
Surr: 4-Terphenyl-d14	66.9	40.9-112		%REC	1	1/25/2012 12:36:32 PM
Surr: Nitrobenzene-d5	74.6	41-115		%REC	1	1/25/2012 12:36:32 PM
Surr: Phenol-d5	37.9	23.4-73.6		%REC	1	1/25/2012 12:36:32 PM
VOLATILES BY 8260B/1311						Analyst: **JDJ**
Benzene	ND	0.50		mg/L	1	1/25/2012 10:20:42 PM
2-Butanone	ND	10		mg/L	1	1/25/2012 10:20:42 PM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-5
Project: Tank 35 Cleanup
Collection Date: 1/17/2012 11:20:00 AM
Lab ID: 1201585-001
Matrix: SOIL
Received Date: 1/20/2012 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: JDJ
Carbon Tetrachloride	ND	0.50		mg/L	1	1/25/2012 10:20:42 PM
Chlorobenzene	ND	100		mg/L	1	1/25/2012 10:20:42 PM
Chloroform	ND	6.0		mg/L	1	1/25/2012 10:20:42 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	1/25/2012 10:20:42 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	1/25/2012 10:20:42 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	1/25/2012 10:20:42 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/25/2012 10:20:42 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	1/25/2012 10:20:42 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	1/25/2012 10:20:42 PM
Vinyl chloride	ND	0.20		mg/L	1	1/25/2012 10:20:42 PM
Surr: 1,2-Dichloroethane-d4	81.2	69.9-130		%REC	1	1/25/2012 10:20:42 PM
Surr: 4-Bromofluorobenzene	92.8	71.2-123		%REC	1	1/25/2012 10:20:42 PM
Surr: Dibromofluoromethane	86.7	73.9-134		%REC	1	1/25/2012 10:20:42 PM
Surr: Toluene-d8	85.8	81.9-122		%REC	1	1/25/2012 10:20:42 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201585

30-Jan-12

Client: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup

Sample ID **MB-373**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **373**	RunNo: **517**
Prep Date: **1/20/2012**	Analysis Date: **1/23/2012**	SeqNo: **14910** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	77.4	131			

Sample ID **LCS-373**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **373**	RunNo: **517**
Prep Date: **1/20/2012**	Analysis Date: **1/23/2012**	SeqNo: **14913** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.5	62.7	139			
Surr: DNOP	6.1		5.000		122	77.4	131			

Sample ID **1201584-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **373**	RunNo: **517**
Prep Date: **1/20/2012**	Analysis Date: **1/24/2012**	SeqNo: **15102** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.9	49.65	0	75.9	57.2	146			
Surr: DNOP	7.2		4.965		145	77.4	131			S

Sample ID **1201584-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **373**	RunNo: **517**
Prep Date: **1/20/2012**	Analysis Date: **1/24/2012**	SeqNo: **15200** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.9	57.2	146	14.2	26.7	
Surr: DNOP	7.5		5.000		151	77.4	131	0	0	S

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201585

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID MB-370	SampType: MBLK	TestCode: EPA Method 8015B: Gasoline Range
Client ID: PBS	Batch ID: 370	RunNo: 522
Prep Date: 1/20/2012	Analysis Date: 1/23/2012	SeqNo: 15530 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1,000		93.9	69.7	121			

Sample ID LCS-370	SampType: LCS	TestCode: EPA Method 8015B: Gasoline Range
Client ID: LCSS	Batch ID: 370	RunNo: 522
Prep Date: 1/20/2012	Analysis Date: 1/23/2012	SeqNo: 15534 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	86.4	132			
Surr: BFB	990		1,000		99.4	69.7	121			

Sample ID 1201584-001AMS	SampType: MS	TestCode: EPA Method 8015B: Gasoline Range
Client ID: BatchQC	Batch ID: 370	RunNo: 522
Prep Date: 1/20/2012	Analysis Date: 1/23/2012	SeqNo: 15535 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.8	23.97	0	110	72.4	149			
Surr: BFB	970		958.8		101	69.7	121			

Sample ID 1201584-001AMSD	SampType: MSD	TestCode: EPA Method 8015B: Gasoline Range
Client ID: BatchQC	Batch ID: 370	RunNo: 522
Prep Date: 1/20/2012	Analysis Date: 1/23/2012	SeqNo: 15536 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.27	0	113	86	149	4.02	19.2	
Surr: BFB	990		970.9		102	69.7	121	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201585

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID mb-404	SampType: MBLK	TestCode: Volatiles by 8260B/1311
Client ID: PBS	Batch ID: 404	RunNo: 591
Prep Date: 1/23/2012	Analysis Date: 1/25/2012	SeqNo: 16884 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	10								
Carbon Tetrachloride	ND	0.50								
Chlorobenzene	ND	100								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,2-Dichloroethane (EDC)	ND	0.50								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.16		0.2000		81.1	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2000		89.0	71.2	123			
Surr: Dibromofluoromethane	0.17		0.2000		87.0	73.9	134			
Surr: Toluene-d8	0.17		0.2000		82.9	81.9	122			

Sample ID lcs-404	SampType: LCS	TestCode: Volatiles by 8260B/1311
Client ID: LCSS	Batch ID: 404	RunNo: 591
Prep Date: 1/23/2012	Analysis Date: 1/25/2012	SeqNo: 16885 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.45	0.10	0.4000	0	113	51.1	171			
Chlorobenzene	0.42	0.10	0.4000	0	106	36.1	191			
1,1-Dichloroethene	0.45	0.10	0.4000	0	112	49.1	162			
Trichloroethene (TCE)	0.41	0.10	0.4000	0	103	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.15		0.2000		75.8	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.2000		90.2	71.2	123			
Surr: Dibromofluoromethane	0.17		0.2000		84.3	73.9	134			
Surr: Toluene-d8	0.17		0.2000		87.2	81.9	122			

Sample ID 1201447-003ams	SampType: MS	TestCode: Volatiles by 8260B/1311
Client ID: BatchQC	Batch ID: 404	RunNo: 591
Prep Date: 1/23/2012	Analysis Date: 1/25/2012	SeqNo: 16886 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.44	0.10	0.3995	0	111	51.1	171			
Chlorobenzene	0.41	0.10	0.3995	0	103	36.1	191			
1,1-Dichloroethene	0.43	0.10	0.3995	0	108	49.1	162			
Trichloroethene (TCE)	0.42	0.10	0.3995	0	106	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.16		0.1998		79.6	69.9	130			
Surr: 4-Bromofluorobenzene	0.18		0.1998		92.5	71.2	123			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201585**

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **1201447-003ams** SampType: **MS** TestCode: **Volatiles by 8260B/1311**

Client ID: **BatchQC** Batch ID: **404** RunNo: **591**

Prep Date: **1/23/2012** Analysis Date: **1/25/2012** SeqNo: **16886** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.17		0.1998		83.6	73.9	134			
Surr: Toluene-d8	0.16		0.1998		82.3	81.9	122			

Sample ID **1201447-003amsd** SampType: **MSD** TestCode: **Volatiles by 8260B/1311**

Client ID: **BatchQC** Batch ID: **404** RunNo: **591**

Prep Date: **1/23/2012** Analysis Date: **1/25/2012** SeqNo: **16887** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.41	0.10	0.3995	0	102	51.1	171	8.36	0	
Chlorobenzene	0.38	0.10	0.3995	0	96.3	36.1	191	6.83	0	
1,1-Dichloroethene	0.41	0.10	0.3995	0	103	49.1	162	5.34	0	
Trichloroethene (TCE)	0.37	0.10	0.3995	0	93.3	41.2	166	12.7	0	
Surr: 1,2-Dichloroethane-d4	0.16		0.1998		78.0	69.9	130	0	0	
Surr: 4-Bromofluorobenzene	0.19		0.1998		93.3	71.2	123	0	0	
Surr: Dibromofluoromethane	0.17		0.1998		82.9	73.9	134	0	0	
Surr: Toluene-d8	0.17		0.1998		85.5	81.9	122	0	0	

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201585

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **mb-420**	SampType: **MBLK**	TestCode: **EPA Method 8270C TCLP**
Client ID: **PBS**	Batch ID: **420**	RunNo: **573**
Prep Date: **1/25/2012**	Analysis Date: **1/25/2012**	SeqNo: **16253** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
Surr: 2,4,6-Tribromophenol	0.18		0.2000		87.8	18.2	136			
Surr: 2-Fluorobiphenyl	0.090		0.1000		90.3	40.5	108			
Surr: 2-Fluorophenol	0.13		0.2000		64.3	23	101			
Surr: 4-Terphenyl-d14	0.083		0.1000		82.6	40.9	112			
Surr: Nitrobenzene-d5	0.092		0.1000		91.7	41	115			
Surr: Phenol-d5	0.11		0.2000		52.8	23.4	73.6			

Sample ID **lcs-420**	SampType: **LCS**	TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS**	Batch ID: **420**	RunNo: **573**
Prep Date: **1/25/2012**	Analysis Date: **1/25/2012**	SeqNo: **16254** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	0.077	0.010	0.1000	0	77.4	18.2	108			
Hexachlorobenzene	0.064	0.010	0.1000	0	64.1	34.2	74.5			
Hexachlorobutadiene	0.063	0.010	0.1000	0	63.2	31.3	88.5			
Hexachloroethane	0.064	0.010	0.1000	0	63.7	31.6	94.6			
Nitrobenzene	0.074	0.010	0.1000	0	73.7	39.7	107			
Pentachlorophenol	0.042	0.010	0.1000	0	41.9	15.9	86.7			
Pyridine	0.043	0.010	0.1000	0	43.2	14.7	73.6			
2,4,5-Trichlorophenol	0.064	0.010	0.1000	0	64.0	18.9	102			
2,4,6-Trichlorophenol	0.055	0.010	0.1000	0	55.0	12.3	103			
Cresols, Total	0.21	0.010	0.3000	0	68.6	25.9	99.2			
2-Methylphenol	0.063	0.010	0.1000	0	62.6	22	81.7			
3+4-Methylphenol	0.14	0.010	0.2000	0	71.6	2.89	157			
Surr: 2,4,6-Tribromophenol	0.16		0.2000		78.2	18.2	136			
Surr: 2-Fluorobiphenyl	0.080		0.1000		80.2	40.5	108			
Surr: 2-Fluorophenol	0.099		0.2000		49.3	23	101			
Surr: 4-Terphenyl-d14	0.069		0.1000		68.9	40.9	112			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201585

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID lcs-420	SampType: LCS	TestCode: EPA Method 8270C TCLP
Client ID: LCSS	Batch ID: 420	RunNo: 573
Prep Date: 1/25/2012	Analysis Date: 1/25/2012	SeqNo: 16254 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	0.075		0.1000		75.0	41	115			
Surr: Phenol-d5	0.089		0.2000		44.7	23.4	73.6			

Sample ID 1201447-003Ams	SampType: MS	TestCode: EPA Method 8270C TCLP
Client ID: BatchQC	Batch ID: 420	RunNo: 573
Prep Date: 1/25/2012	Analysis Date: 1/25/2012	SeqNo: 16259 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	0.10	0.010	0.1000	0	104	9.57	115			
Hexachlorobenzene	0.080	0.010	0.1000	0	80.4	15.9	96.9			
Hexachlorobutadiene	0.079	0.010	0.1000	0	78.5	21.1	97.9			
Hexachloroethane	0.076	0.010	0.1000	0	76.4	18.1	105			
Nitrobenzene	0.099	0.010	0.1000	0	99.4	23.3	123			
Pentachlorophenol	0.073	0.010	0.1000	0	72.8	10	150			
Pyridine	0.050	0.010	0.1000	0	50.0	9.15	86.2			
2,4,5-Trichlorophenol	0.092	0.010	0.1000	0	91.7	8.46	119			
2,4,6-Trichlorophenol	0.090	0.010	0.1000	0	90.2	4.44	115			
Cresols, Total	0.26	0.010	0.3000	0	85.4	8.35	114			
2-Methylphenol	0.074	0.010	0.1000	0	73.8	17.5	78.8			
3+4-Methylphenol	0.18	0.010	0.2000	0	91.2	17.5	78.8			S
Surr: 2,4,6-Tribromophenol	0.21		0.2000		107	18.2	136			
Surr: 2-Fluorobiphenyl	0.11		0.1000		108	40.5	108			
Surr: 2-Fluorophenol	0.14		0.2000		69.6	23	101			
Surr: 4-Terphenyl-d14	0.097		0.1000		96.9	40.9	112			
Surr: Nitrobenzene-d5	0.10		0.1000		103	41	115			
Surr: Phenol-d5	0.11		0.2000		55.6	23.4	73.6			

Sample ID 1201447-003Amsd	SampType: MSD	TestCode: EPA Method 8270C TCLP
Client ID: BatchQC	Batch ID: 420	RunNo: 573
Prep Date: 1/25/2012	Analysis Date: 1/25/2012	SeqNo: 16263 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	0.11	0.010	0.1000	0	114	9.57	115	9.49	20	
Hexachlorobenzene	0.086	0.010	0.1000	0	86.4	15.9	96.9	7.20	20	
Hexachlorobutadiene	0.075	0.010	0.1000	0	75.2	21.1	97.9	4.35	20	
Hexachloroethane	0.086	0.010	0.1000	0	85.8	18.1	105	11.6	20	
Nitrobenzene	0.097	0.010	0.1000	0	97.5	23.3	123	1.93	20	
Pentachlorophenol	0.071	0.010	0.1000	0	71.1	10	150	2.31	20	
Pyridine	0.051	0.010	0.1000	0	51.4	9.15	86.2	2.84	20	
2,4,5-Trichlorophenol	0.099	0.010	0.1000	0	99.4	8.46	119	8.02	20	
2,4,6-Trichlorophenol	0.090	0.010	0.1000	0	90.0	4.44	115	0.266	20	
Cresols, Total	0.30	0.010	0.3000	0	99.6	8.35	114	15.4	20	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201585

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID 1201447-003Amsd	SampType: MSD	TestCode: EPA Method 8270C TCLP
Client ID: BatchQC	Batch ID: 420	RunNo: 573
Prep Date: 1/25/2012	Analysis Date: 1/25/2012	SeqNo: 16263 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.089	0.010	0.1000	0	89.1	17.5	78.8	0	20	S
3+4-Methylphenol	0.21	0.010	0.2000	0	105	17.5	78.8	0	20	S
Surr: 2,4,6-Tribromophenol	0.23		0.2000		113	18.2	136	0	0	
Surr: 2-Fluorobiphenyl	0.11		0.1000		109	40.5	108	0	0	S
Surr: 2-Fluorophenol	0.16		0.2000		78.0	23	101	0	0	
Surr: 4-Terphenyl-d14	0.10		0.1000		101	40.9	112	0	0	
Surr: Nitrobenzene-d5	0.11		0.1000		107	41	115	0	0	
Surr: Phenol-d5	0.12		0.2000		60.7	23.4	73.6	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201585**

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID	MB-392	SampType:	MBLK	TestCode:	MERCURY, TCLP					
Client ID:	PBW	Batch ID:	392	RunNo:	532					
Prep Date:	1/23/2012	Analysis Date:	1/23/2012	SeqNo:	15158	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID	LCS-392	SampType:	LCS	TestCode:	MERCURY, TCLP					
Client ID:	LCSW	Batch ID:	392	RunNo:	532					
Prep Date:	1/23/2012	Analysis Date:	1/23/2012	SeqNo:	15159	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	96.9	80	120			

Sample ID	1201427-001AMS	SampType:	MS	TestCode:	MERCURY, TCLP					
Client ID:	BatchQC	Batch ID:	392	RunNo:	532					
Prep Date:	1/23/2012	Analysis Date:	1/23/2012	SeqNo:	15161	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	97.3	75	125			

Sample ID	1201427-001AMSD	SampType:	MSD	TestCode:	MERCURY, TCLP					
Client ID:	BatchQC	Batch ID:	392	RunNo:	532					
Prep Date:	1/23/2012	Analysis Date:	1/23/2012	SeqNo:	15162	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	97.6	75	125	0	20	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201585

30-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID MB-393	SampType: MBLK	TestCode: EPA Method 6010B: TCLP Metals
Client ID: PBW	Batch ID: 393	RunNo: 529
Prep Date: 1/23/2012	Analysis Date: 1/24/2012	SeqNo: 15082 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								
Selenium	ND	1.0								
Silver	ND	5.0								

Sample ID LCS-393	SampType: LCS	TestCode: EPA Method 6010B: TCLP Metals
Client ID: LCSW	Batch ID: 393	RunNo: 529
Prep Date: 1/23/2012	Analysis Date: 1/24/2012	SeqNo: 15083 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	101	80	120			
Barium	ND	100	0.5000	0	91.7	80	120			
Cadmium	ND	1.0	0.5000	0	96.3	80	120			
Chromium	ND	5.0	0.5000	0	93.3	80	120			
Lead	ND	5.0	0.5000	0	90.6	80	120			
Selenium	ND	1.0	0.5000	0	102	80	120			
Silver	ND	5.0	0.1000	0	101	80	120			

Sample ID 1201447-003AMS	SampType: MS	TestCode: EPA Method 6010B: TCLP Metals
Client ID: BatchQC	Batch ID: 393	RunNo: 529
Prep Date: 1/23/2012	Analysis Date: 1/24/2012	SeqNo: 15089 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.02046	103	75	125			
Cadmium	ND	1.0	0.5000	0.05392	98.8	75	125			
Chromium	ND	5.0	0.5000	0	92.5	75	125			
Lead	ND	5.0	0.5000	0.3232	88.7	75	125			
Selenium	ND	1.0	0.5000	0	98.6	75	125			
Silver	ND	5.0	0.1000	0	100	75	125			

Sample ID 1201447-003AMSD	SampType: MSD	TestCode: EPA Method 6010B: TCLP Metals
Client ID: BatchQC	Batch ID: 393	RunNo: 529
Prep Date: 1/23/2012	Analysis Date: 1/24/2012	SeqNo: 15090 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.02046	96.7	75	125	0	20	
Cadmium	ND	1.0	0.5000	0.05392	91.3	75	125	0	20	
Chromium	ND	5.0	0.5000	0	85.9	75	125	0	20	
Lead	ND	5.0	0.5000	0.3232	78.0	75	125	0	20	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201585**

30-Jan-12

Client: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup

Sample ID **1201447-003AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: TCLP Metals**
Client ID: **BatchQC**	Batch ID: **393**	RunNo: **529**
Prep Date: **1/23/2012**	Analysis Date: **1/24/2012**	SeqNo: **15090** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	1.0	0.5000	0	94.2	75	125	0	20	
Silver	ND	5.0	0.1000	0	93.2	75	125	0	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Chain-of-Custody Record

Client: WESTERN Refining
Gallup Refinery
Mailing Address: RT 3 Box 7
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 722-0210
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush _____
Project Name: TANK 35 CLEANUP
Project #: N/A
Project Manager: BECK LARSEN
Sampler: A. Dorsey
On Ice: ☒ Yes ☐ No
Sample Temperature: 2.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1201535	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals TCLP	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) TCLP	8270 (Semi-VOA) TCLP	GRO/DRO (8015M) TCLP				Air Bubbles (Y or N)
1-17-12	11:20	SOIL	T-35-5	3-8oz	N/A	-1							X			X	X	X				

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
1-17-12	12:00				
Date:	Time:	Relinquished by:	Received by:	1/20/12	0745

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1201585

Logged by: Lindsay Mangin 1/20/2012 7:45:00 AM

Completed By: Lindsay Mangin 1/20/2012 8:54:44 AM

Reviewed By: 1/20/12

Chain of Custody

1. Were seals intact?	Yes ✔	No	Not Present
2. Is Chain of Custody complete?	Yes ✔	No	Not Present
3. How was the sample delivered?	FedEx		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ✔	No	NA
5. Was an attempt made to cool the samples?	Yes ✔	No	NA
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA
7. Sample(s) in proper container(s)?	Yes ✔	No	
8. Sufficient sample volume for indicated test(s)?	Yes ✔	No	
9. Are samples (except VOA and ONG) properly preserved?	Yes ✔	No	
10. Was preservative added to bottles?	Yes	No ✔	NA
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm?	Yes	No	No VOA Vials ✔
12. Were any sample containers received broken?	Yes	No ✔	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	# of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	(<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes ✔	No	Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: _____ Date: _____

By Whom: _____ Via: eMail Phone Fax In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good	Yes			

Chain-of-Custody Record

Client: WESTERN Refining
Gallup Refinery
Mailing Address: RT 3 Box 7
Gallup NM 87301
Phone #: 505 722 3833
email or Fax#: 505 722-0210
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other ______
☐ EDD (Type) ______

Turn-Around Time:
☐ Standard ☒ Rush ______
Project Name: TANK 35 Cleanup
Project #: N/A
Project Manager: BECK LARSEN
Sampler: A. Dorsey
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1201535	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals TCLP	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B ~~(VOA)~~ TCLP	8270 (Semi-VOA) TCLP	DRO/GRO (8015M) Z TCLP				Air Bubbles (Y or N)
1-17-12	11:20	SOIL	T-35-5	3-8oz	N/A	-1							X			X	X	X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
1-17-12	12:00	Alvin D	[signature]	1/20/12	0745
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 24, 2012

TOTAL + TCLP

Thurman B. Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: Tank 35 Cleanup

OrderNo.: 1201183

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/9/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 13, 2012

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
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Website: www.hallenvironmental.com

Case Narrative

WO#: **1201183**
Date: **1/24/2012**

CLIENT: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup

Any comments or problems with the analytical events associated with this report are noted below.

Analytical Comments for METHOD 8270_S, SAMPLE 1201183-001C, Batch ID 194: Oily Matrix, surrogates not recovered due to dilution.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup
Lab ID: 1201183-001 **Matrix:** SOIL

Client Sample ID: T-35-5
Collection Date: 1/5/2012 10:15:00 AM
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	85	9.7		mg/Kg	1	1/10/2012 1:45:12 PM
Motor Oil Range Organics (MRO)	240	49		mg/Kg	1	1/10/2012 1:45:12 PM
Surr: DNOP	118	77.4-131		%REC	1	1/10/2012 1:45:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2012 4:29:46 PM
Surr: BFB	106	69.7-121		%REC	1	1/10/2012 4:29:46 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/kg	1	1/11/2012 2:42:52 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	1/18/2012 3:01:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	3.5	2.5		mg/L	1	1/11/2012 9:30:55 AM
Cadmium	ND	0.10		mg/L	1	1/11/2012 9:30:55 AM
Chromium	7.8	0.30		mg/L	1	1/11/2012 9:30:55 AM
Lead	8.6	0.25		mg/L	1	1/11/2012 9:30:55 AM
Selenium	ND	2.5		mg/L	1	1/11/2012 9:30:55 AM
Silver	ND	0.25		mg/L	1	1/11/2012 9:30:55 AM
Barium	310	1.0		mg/L	10	1/11/2012 10:19:09 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/19/2012 6:48:00 AM
Cadmium	ND	1.0		mg/L	1	1/19/2012 6:48:00 AM
Chromium	ND	5.0		mg/L	1	1/19/2012 6:48:00 AM
Lead	ND	5.0		mg/L	1	1/19/2012 6:48:00 AM
Selenium	ND	1.0		mg/L	1	1/19/2012 6:48:00 AM
Silver	ND	5.0		mg/L	1	1/19/2012 6:48:00 AM
Barium	ND	100		mg/L	5	1/19/2012 6:53:34 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Acenaphthylene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Aniline	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Anthracene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Azobenzene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Benz(a)anthracene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Benzo(a)pyrene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Benzo(b)fluoranthene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Benzo(g,h,i)perylene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Benzo(k)fluoranthene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Benzoic acid	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
Benzyl alcohol	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-5
Project: Tank 35 Cleanup
Collection Date: 1/5/2012 10:15:00 AM
Lab ID: 1201183-001
Matrix: SOIL
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Bis(2-chloroethyl)ether	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Bis(2-chloroisopropyl)ether	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Bis(2-ethylhexyl)phthalate	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
4-Bromophenyl phenyl ether	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Butyl benzyl phthalate	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Carbazole	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
4-Chloro-3-methylphenol	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
4-Chloroaniline	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
2-Chloronaphthalene	ND	5.0		mg/Kg	1	1/10/2012 8:34:41 PM
2-Chlorophenol	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
4-Chlorophenyl phenyl ether	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Chrysene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Di-n-butyl phthalate	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
Di-n-octyl phthalate	ND	5.0		mg/Kg	1	1/10/2012 8:34:41 PM
Dibenz(a,h)anthracene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Dibenzofuran	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
1,2-Dichlorobenzene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
1,3-Dichlorobenzene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
1,4-Dichlorobenzene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
3,3'-Dichlorobenzidine	ND	5.0		mg/Kg	1	1/10/2012 8:34:41 PM
Diethyl phthalate	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Dimethyl phthalate	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
2,4-Dichlorophenol	ND	7.9		mg/Kg	1	1/10/2012 8:34:41 PM
2,4-Dimethylphenol	ND	6.0		mg/Kg	1	1/10/2012 8:34:41 PM
4,6-Dinitro-2-methylphenol	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
2,4-Dinitrophenol	ND	7.9		mg/Kg	1	1/10/2012 8:34:41 PM
2,4-Dinitrotoluene	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
2,6-Dinitrotoluene	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
Fluoranthene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Fluorene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Hexachlorobenzene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Hexachlorobutadiene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Hexachlorocyclopentadiene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Hexachloroethane	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Indeno(1,2,3-cd)pyrene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Isophorone	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
1-Methylnaphthalene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
2-Methylnaphthalene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
2-Methylphenol	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
3+4-Methylphenol	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
N-Nitrosodi-n-propylamine	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM

Qualifiers:
- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-5
Project: Tank 35 Cleanup
Collection Date: 1/5/2012 10:15:00 AM
Lab ID: 1201183-001
Matrix: SOIL
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Naphthalene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
2-Nitroaniline	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
3-Nitroaniline	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
4-Nitroaniline	ND	7.9		mg/Kg	1	1/10/2012 8:34:41 PM
Nitrobenzene	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
2-Nitrophenol	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
4-Nitrophenol	ND	5.0		mg/Kg	1	1/10/2012 8:34:41 PM
Pentachlorophenol	ND	7.9		mg/Kg	1	1/10/2012 8:34:41 PM
Phenanthrene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Phenol	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Pyrene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Pyridine	ND	9.9		mg/Kg	1	1/10/2012 8:34:41 PM
1,2,4-Trichlorobenzene	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
2,4,5-Trichlorophenol	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
2,4,6-Trichlorophenol	ND	4.0		mg/Kg	1	1/10/2012 8:34:41 PM
Surr: 2,4,6-Tribromophenol	0	24.9-115	S	%REC	1	1/10/2012 8:34:41 PM
Surr: 2-Fluorobiphenyl	0	26.2-108	S	%REC	1	1/10/2012 8:34:41 PM
Surr: 2-Fluorophenol	0	17.7-98	S	%REC	1	1/10/2012 8:34:41 PM
Surr: 4-Terphenyl-d14	0	33.8-108	S	%REC	1	1/10/2012 8:34:41 PM
Surr: Nitrobenzene-d5	0	23-109	S	%REC	1	1/10/2012 8:34:41 PM
Surr: Phenol-d5	0	22.1-103	S	%REC	1	1/10/2012 8:34:41 PM
EPA METHOD 8270C TCLP						Analyst: **JDC**
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/19/2012 10:19:56 AM
Hexachlorobenzene	ND	0.13		mg/L	1	1/19/2012 10:19:56 AM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/19/2012 10:19:56 AM
Hexachloroethane	ND	3.0		mg/L	1	1/19/2012 10:19:56 AM
Nitrobenzene	ND	2.0		mg/L	1	1/19/2012 10:19:56 AM
Pentachlorophenol	ND	100		mg/L	1	1/19/2012 10:19:56 AM
Pyridine	ND	5.0		mg/L	1	1/19/2012 10:19:56 AM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/19/2012 10:19:56 AM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/19/2012 10:19:56 AM
Cresols, Total	ND	200		mg/L	1	1/19/2012 10:19:56 AM
2-Methylphenol	ND	200		mg/L	1	1/19/2012 10:19:56 AM
3+4-Methylphenol	ND	200		mg/L	1	1/19/2012 10:19:56 AM
Phenol	ND	200		mg/L	1	1/19/2012 10:19:56 AM
Surr: 2,4,6-Tribromophenol	78.5	18.2-136		%REC	1	1/19/2012 10:19:56 AM
Surr: 2-Fluorobiphenyl	88.8	40.5-108		%REC	1	1/19/2012 10:19:56 AM
Surr: 2-Fluorophenol	67.9	23-101		%REC	1	1/19/2012 10:19:56 AM
Surr: 4-Terphenyl-d14	80.2	40.9-112		%REC	1	1/19/2012 10:19:56 AM
Surr: Nitrobenzene-d5	89.6	41-115		%REC	1	1/19/2012 10:19:56 AM

Qualifiers:
- */X Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-5
Project: Tank 35 Cleanup
Collection Date: 1/5/2012 10:15:00 AM
Lab ID: 1201183-001
Matrix: SOIL
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Surr: Phenol-d5	52.4	23.4-73.6		%REC	1	1/19/2012 10:19:56 AM
EPA METHOD 8260B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Toluene	0.067	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Naphthalene	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	1/11/2012 5:50:37 AM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	1/11/2012 5:50:37 AM
Acetone	ND	0.73		mg/Kg	1	1/11/2012 5:50:37 AM
Bromobenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Bromodichloromethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Bromoform	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Bromomethane	ND	0.15		mg/Kg	1	1/11/2012 5:50:37 AM
2-Butanone	ND	0.49		mg/Kg	1	1/11/2012 5:50:37 AM
Carbon disulfide	ND	0.49		mg/Kg	1	1/11/2012 5:50:37 AM
Carbon tetrachloride	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
Chlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Chloroethane	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
Chloroform	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Chloromethane	ND	0.15		mg/Kg	1	1/11/2012 5:50:37 AM
2-Chlorotoluene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
4-Chlorotoluene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
cis-1,2-DCE	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,2-Dibromo-3-chloropropane	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
Dibromochloromethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Dibromomethane	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,1-Dichloroethane	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
2,2-Dichloropropane	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-5
Project: Tank 35 Cleanup
Collection Date: 1/5/2012 10:15:00 AM
Lab ID: 1201183-001
Matrix: SOIL
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **NSB**
1,1-Dichloropropene	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
Hexachlorobutadiene	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
2-Hexanone	ND	0.49		mg/Kg	1	1/11/2012 5:50:37 AM
Isopropylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	1/11/2012 5:50:37 AM
Methylene chloride	ND	0.15		mg/Kg	1	1/11/2012 5:50:37 AM
n-Butylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
n-Propylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
sec-Butylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Styrene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
tert-Butylbenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
trans-1,2-DCE	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,2,3-Trichlorobenzene	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
1,2,3-Trichloropropane	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
Vinyl chloride	ND	0.049		mg/Kg	1	1/11/2012 5:50:37 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/11/2012 5:50:37 AM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	1	1/11/2012 5:50:37 AM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	1	1/11/2012 5:50:37 AM
Surr: Dibromofluoromethane	112	63.1-128		%REC	1	1/11/2012 5:50:37 AM
Surr: Toluene-d8	92.5	70-130		%REC	1	1/11/2012 5:50:37 AM
VOLATILES BY 8260B/1311						Analyst: **NSB**
Benzene	ND	0.50		mg/L	1	1/17/2012 4:39:38 PM
2-Butanone	ND	10		mg/L	1	1/17/2012 4:39:38 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	1/17/2012 4:39:38 PM
Chlorobenzene	ND	100		mg/L	1	1/17/2012 4:39:38 PM
Chloroform	ND	6.0		mg/L	1	1/17/2012 4:39:38 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	1/17/2012 4:39:38 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	1/17/2012 4:39:38 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	1/17/2012 4:39:38 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/17/2012 4:39:38 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	1/17/2012 4:39:38 PM

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-5
Project: Tank 35 Cleanup
Collection Date: 1/5/2012 10:15:00 AM
Lab ID: 1201183-001
Matrix: SOIL
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: **NSB**
Trichloroethene (TCE)	ND	0.50		mg/L	1	1/17/2012 4:39:38 PM
Vinyl chloride	ND	0.20		mg/L	1	1/17/2012 4:39:38 PM
Surr: 1,2-Dichloroethane-d4	92.7	69.9-130		%REC	1	1/17/2012 4:39:38 PM
Surr: 4-Bromofluorobenzene	95.2	71.2-123		%REC	1	1/17/2012 4:39:38 PM
Surr: Dibromofluoromethane	109	73.9-134		%REC	1	1/17/2012 4:39:38 PM
Surr: Toluene-d8	95.8	81.9-122		%REC	1	1/17/2012 4:39:38 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup
Lab ID: 1201183-002 **Matrix:** SOIL

Client Sample ID: T-35-1
Collection Date: 1/5/2012 10:30:00 AM
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	34	10		mg/Kg	1	1/10/2012 12:36:46 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/10/2012 12:36:46 PM
Surr: DNOP	130	77.4-131		%REC	1	1/10/2012 12:36:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2012 4:59:57 PM
Surr: BFB	99.7	69.7-121		%REC	1	1/10/2012 4:59:57 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/kg	1	1/11/2012 2:48:16 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	1/18/2012 3:03:23 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	ND	2.5		mg/L	1	1/11/2012 9:35:14 AM
Cadmium	ND	0.10		mg/L	1	1/11/2012 9:35:14 AM
Chromium	6.7	0.30		mg/L	1	1/11/2012 9:35:14 AM
Lead	1.9	0.25		mg/L	1	1/11/2012 9:35:14 AM
Selenium	ND	2.5		mg/L	1	1/11/2012 9:35:14 AM
Silver	ND	0.25		mg/L	1	1/11/2012 9:35:14 AM
Barium	320	1.0		mg/L	10	1/11/2012 10:21:11 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/19/2012 6:52:12 AM
Cadmium	ND	1.0		mg/L	1	1/19/2012 6:52:12 AM
Chromium	ND	5.0		mg/L	1	1/19/2012 6:52:12 AM
Lead	ND	5.0		mg/L	1	1/19/2012 6:52:12 AM
Selenium	ND	1.0		mg/L	1	1/19/2012 6:52:12 AM
Silver	ND	5.0		mg/L	1	1/19/2012 6:52:12 AM
Barium	ND	100		mg/L	5	1/19/2012 6:57:42 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Acenaphthylene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Aniline	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Anthracene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Azobenzene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Benzoic acid	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM

Qualifiers:
- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup
Lab ID: 1201183-002 **Matrix:** SOIL

Client Sample ID: T-35-1
Collection Date: 1/5/2012 10:30:00 AM
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Carbazole	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	1/10/2012 8:05:55 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Chrysene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	1/10/2012 8:05:55 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Dibenzofuran	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	1/10/2012 8:05:55 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	1/10/2012 8:05:55 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	1/10/2012 8:05:55 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	1/10/2012 8:05:55 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
Fluoranthene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Fluorene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Hexachloroethane	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Isophorone	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
2-Methylphenol	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup
Lab ID: 1201183-002 **Matrix:** SOIL

Client Sample ID: T-35-1
Collection Date: 1/5/2012 10:30:00 AM
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Naphthalene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
3-Nitroaniline	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	1/10/2012 8:05:55 PM
Nitrobenzene	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	1/10/2012 8:05:55 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	1/10/2012 8:05:55 PM
Phenanthrene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Phenol	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Pyrene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Pyridine	ND	5.0		mg/Kg	1	1/10/2012 8:05:55 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	1/10/2012 8:05:55 PM
Surr: 2,4,6-Tribromophenol	42.4	24.9-115		%REC	1	1/10/2012 8:05:55 PM
Surr: 2-Fluorobiphenyl	65.3	26.2-108		%REC	1	1/10/2012 8:05:55 PM
Surr: 2-Fluorophenol	63.3	17.7-98		%REC	1	1/10/2012 8:05:55 PM
Surr: 4-Terphenyl-d14	50.3	33.8-108		%REC	1	1/10/2012 8:05:55 PM
Surr: Nitrobenzene-d5	47.1	23-109		%REC	1	1/10/2012 8:05:55 PM
Surr: Phenol-d5	57.2	22.1-103		%REC	1	1/10/2012 8:05:55 PM
EPA METHOD 8270C TCLP						Analyst: **JDC**
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/19/2012 11:47:03 AM
Hexachlorobenzene	ND	0.13		mg/L	1	1/19/2012 11:47:03 AM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/19/2012 11:47:03 AM
Hexachloroethane	ND	3.0		mg/L	1	1/19/2012 11:47:03 AM
Nitrobenzene	ND	2.0		mg/L	1	1/19/2012 11:47:03 AM
Pentachlorophenol	ND	100		mg/L	1	1/19/2012 11:47:03 AM
Pyridine	ND	5.0		mg/L	1	1/19/2012 11:47:03 AM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/19/2012 11:47:03 AM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/19/2012 11:47:03 AM
Cresols, Total	ND	200		mg/L	1	1/19/2012 11:47:03 AM
2-Methylphenol	ND	200		mg/L	1	1/19/2012 11:47:03 AM
3+4-Methylphenol	ND	200		mg/L	1	1/19/2012 11:47:03 AM
Phenol	ND	200		mg/L	1	1/19/2012 11:47:03 AM
Surr: 2,4,6-Tribromophenol	75.3	18.2-136		%REC	1	1/19/2012 11:47:03 AM
Surr: 2-Fluorobiphenyl	84.0	40.5-108		%REC	1	1/19/2012 11:47:03 AM
Surr: 2-Fluorophenol	54.6	23-101		%REC	1	1/19/2012 11:47:03 AM
Surr: 4-Terphenyl-d14	80.8	40.9-112		%REC	1	1/19/2012 11:47:03 AM
Surr: Nitrobenzene-d5	93.9	41-115		%REC	1	1/19/2012 11:47:03 AM

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- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup
Lab ID: 1201183-002 **Matrix:** SOIL

Client Sample ID: T-35-1
Collection Date: 1/5/2012 10:30:00 AM
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Surr: Phenol-d5	37.1	23.4-73.6		%REC	1	1/19/2012 11:47:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Toluene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Naphthalene	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	1/11/2012 6:18:35 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	1/11/2012 6:18:35 AM
Acetone	ND	0.74		mg/Kg	1	1/11/2012 6:18:35 AM
Bromobenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Bromodichloromethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Bromoform	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Bromomethane	ND	0.15		mg/Kg	1	1/11/2012 6:18:35 AM
2-Butanone	ND	0.49		mg/Kg	1	1/11/2012 6:18:35 AM
Carbon disulfide	ND	0.49		mg/Kg	1	1/11/2012 6:18:35 AM
Carbon tetrachloride	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
Chlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Chloroethane	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
Chloroform	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Chloromethane	ND	0.15		mg/Kg	1	1/11/2012 6:18:35 AM
2-Chlorotoluene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
4-Chlorotoluene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
cis-1,2-DCE	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,2-Dibromo-3-chloropropane	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
Dibromochloromethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Dibromomethane	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,1-Dichloroethane	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
2,2-Dichloropropane	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: T-35-1
Project: Tank 35 Cleanup
Collection Date: 1/5/2012 10:30:00 AM
Lab ID: 1201183-002
Matrix: SOIL
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **NSB**
1,1-Dichloropropene	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
Hexachlorobutadiene	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
2-Hexanone	ND	0.49		mg/Kg	1	1/11/2012 6:18:35 AM
Isopropylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	1/11/2012 6:18:35 AM
Methylene chloride	ND	0.15		mg/Kg	1	1/11/2012 6:18:35 AM
n-Butylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
n-Propylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
sec-Butylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Styrene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
tert-Butylbenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
trans-1,2-DCE	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,2,3-Trichlorobenzene	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
1,2,3-Trichloropropane	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
Vinyl chloride	ND	0.049		mg/Kg	1	1/11/2012 6:18:35 AM
Xylenes, Total	ND	0.099		mg/Kg	1	1/11/2012 6:18:35 AM
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	1/11/2012 6:18:35 AM
Surr: 4-Bromofluorobenzene	91.0	70-130		%REC	1	1/11/2012 6:18:35 AM
Surr: Dibromofluoromethane	111	63.1-128		%REC	1	1/11/2012 6:18:35 AM
Surr: Toluene-d8	91.2	70-130		%REC	1	1/11/2012 6:18:35 AM
VOLATILES BY 8260B/1311						Analyst: **NSB**
Benzene	ND	0.50		mg/L	1	1/17/2012 5:07:21 PM
2-Butanone	ND	10		mg/L	1	1/17/2012 5:07:21 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	1/17/2012 5:07:21 PM
Chlorobenzene	ND	100		mg/L	1	1/17/2012 5:07:21 PM
Chloroform	ND	6.0		mg/L	1	1/17/2012 5:07:21 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	1/17/2012 5:07:21 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	1/17/2012 5:07:21 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	1/17/2012 5:07:21 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/17/2012 5:07:21 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	1/17/2012 5:07:21 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup
Lab ID: 1201183-002 **Matrix:** SOIL

Client Sample ID: T-35-1
Collection Date: 1/5/2012 10:30:00 AM
Received Date: 1/9/2012 12:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: **NSB**
Trichloroethene (TCE)	ND	0.50		mg/L	1	1/17/2012 5:07:21 PM
Vinyl chloride	ND	0.20		mg/L	1	1/17/2012 5:07:21 PM
Surr: 1,2-Dichloroethane-d4	90.3	69.9-130		%REC	1	1/17/2012 5:07:21 PM
Surr: 4-Bromofluorobenzene	96.2	71.2-123		%REC	1	1/17/2012 5:07:21 PM
Surr: Dibromofluoromethane	109	73.9-134		%REC	1	1/17/2012 5:07:21 PM
Surr: Toluene-d8	95.6	81.9-122		%REC	1	1/17/2012 5:07:21 PM

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120117018
Project Name: 1201183

Analytical Results Report

Sample Number	120117018-001	**Sampling Date**	1/5/2012	**Date/Time Received**	1/17/2012	10:36 AM
Client Sample ID	1201183-001C / T-35-5	**Sampling Time**	10:15 AM			
Matrix	Soil	**Sample Location**				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	10	1/19/2012	CRW	SW846 CH7	
Ignitability	Negative			1/18/2012	JWC	EPA 1030	
pH	8.96	ph Units		1/18/2012	KFG	EPA 9045	
Reactive sulfide	ND	mg/kg	15	1/19/2012	JTT	SW846 CH7	
%moisture	8.6	Percent		1/19/2012	KFG	%moisture	

Sample Number	120117018-002	**Sampling Date**	1/5/2012	**Date/Time Received**	1/17/2012	10:36 AM
Client Sample ID	1201183-002C / T-35-1	**Sampling Time**	10:30 AM			
Matrix	Soil	**Sample Location**				
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	10	1/19/2012	CRW	SW846 CH7	
Ignitability	Negative			1/18/2012	JWC	EPA 1030	
pH	9.16	ph Units		1/18/2012	KFG	EPA 9045	
Reactive sulfide	ND	mg/kg	15	1/19/2012	JTT	SW846 CH7	
%moisture	12.9	Percent		1/19/2012	KFG	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

This report shall not be reproduced except in full, without the written approval of the laboratory.
The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **MB-189**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **189**	RunNo: **279**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **8701** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		89.3	77.4	131			

Sample ID **LCS-189**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **189**	RunNo: **279**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **8765** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	75.2	62.7	139			
Surr: DNOP	4.5		5.000		90.3	77.4	131			

Sample ID **1201046-011AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **189**	RunNo: **279**
Prep Date: **1/9/2012**	Analysis Date: **1/11/2012**	SeqNo: **9652** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110	9.7	48.31	69.41	90.7	57.2	146			
Surr: DNOP	7.9		4.831		164	77.4	131			S

Sample ID **1201046-011AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **189**	RunNo: **279**
Prep Date: **1/9/2012**	Analysis Date: **1/11/2012**	SeqNo: **9887** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	130	10	49.80	69.41	119	57.2	146	12.6	26.7	
Surr: DNOP	8.4		4.980		168	77.4	131	0	0	S

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **MB-187**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **187**	RunNo: **310**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9559** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1,000		96.4	69.7	121			

Sample ID **LCS-187**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **187**	RunNo: **310**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9562** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	31	5.0	25.00	0	125	86.4	132			
Surr: BFB	1,100		1,000		107	69.7	121			

Sample ID **1201167-005AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **187**	RunNo: **310**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9563** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	34	5.0	24.75	1.958	130	72.4	149			
Surr: BFB	1,100		990.1		106	69.7	121			

Sample ID **1201167-005AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **187**	RunNo: **310**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9564** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.9	24.44	1.958	114	72.4	149	13.3	19.2	
Surr: BFB	950		977.5		97.3	69.7	121	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **mb-187**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **187**	RunNo: **304**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9303** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **mb-187**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **187**	RunNo: **304**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9303** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		89.8	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		95.0	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		107	63.1	128			
Surr: Toluene-d8	0.47		0.5000		93.8	70	130			

Sample ID **lcs-187**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **187**	RunNo: **304**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9304** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	70.7	123			
Toluene	1.0	0.050	1.000	0	101	80	120			
Chlorobenzene	1.0	0.050	1.000	0	101	70	130			
1,1-Dichloroethene	0.98	0.050	1.000	0	98.4	63.1	148			
Trichloroethene (TCE)	0.96	0.050	1.000	0	95.9	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.2	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.2	70	130			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **lcs-187**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **187**	RunNo: **304**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9304** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.56		0.5000		112	63.1	128			
Surr: Toluene-d8	0.47		0.5000		94.1	70	130			

Sample ID **1201167-006AMS**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **187**	RunNo: **304**
Prep Date: **1/9/2012**	Analysis Date: **1/11/2012**	SeqNo: **9305** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9881	0	111	60	126			
Toluene	1.0	0.049	0.9881	0	106	68.7	132			
Chlorobenzene	1.0	0.049	0.9881	0	106	71.8	134			
1,1-Dichloroethene	1.0	0.049	0.9881	0	106	34.5	155			
Trichloroethene (TCE)	1.0	0.049	0.9881	0	105	47.2	121			
Surr: 1,2-Dichloroethane-d4	0.45		0.4941		90.8	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4941		90.9	70	130			
Surr: Dibromofluoromethane	0.55		0.4941		112	63.1	128			
Surr: Toluene-d8	0.45		0.4941		91.2	70	130			

Sample ID **1201167-006AMSD**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **187**	RunNo: **304**
Prep Date: **1/9/2012**	Analysis Date: **1/11/2012**	SeqNo: **9306** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.048	0.9551	0	106	60	126	7.97	15.7	
Toluene	0.94	0.048	0.9551	0	98.8	68.7	132	10.4	16.2	
Chlorobenzene	0.93	0.048	0.9551	0	97.5	71.8	134	11.6	14.9	
1,1-Dichloroethene	0.99	0.048	0.9551	0	104	34.5	155	5.66	31.8	
Trichloroethene (TCE)	0.92	0.048	0.9551	0	96.6	47.2	121	11.6	16.5	
Surr: 1,2-Dichloroethane-d4	0.44		0.4776		93.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.44		0.4776		91.7	70	130	0	0	
Surr: Dibromofluoromethane	0.55		0.4776		115	63.1	128	0	0	
Surr: Toluene-d8	0.43		0.4776		90.8	70	130	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **mb-294**	SampType: **MBLK**	TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS**	Batch ID: **294**	RunNo: **432**
Prep Date: **1/16/2012**	Analysis Date: **1/17/2012**	SeqNo: **12533** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	10								
Carbon Tetrachloride	ND	0.50								
Chlorobenzene	ND	100								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,2-Dichloroethane (EDC)	ND	0.50								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.18		0.2000		92.2	69.9	130			
Surr: 4-Bromofluorobenzene	0.19		0.2000		93.5	71.2	123			
Surr: Dibromofluoromethane	0.22		0.2000		109	73.9	134			
Surr: Toluene-d8	0.19		0.2000		96.2	81.9	122			

Sample ID **lcs-294**	SampType: **LCS**	TestCode: **Volatiles by 8260B/1311**
Client ID: **LCSS**	Batch ID: **294**	RunNo: **432**
Prep Date: **1/16/2012**	Analysis Date: **1/17/2012**	SeqNo: **12534** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.40	0.10	0.4000	0	101	51.1	171			
Chlorobenzene	0.39	0.10	0.4000	0	96.4	36.1	191			
1,1-Dichloroethene	0.39	0.10	0.4000	0	98.5	49.1	162			
Trichloroethene (TCE)	0.36	0.10	0.4000	0	89.4	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.18		0.2000		90.4	69.9	130			
Surr: 4-Bromofluorobenzene	0.20		0.2000		100	71.2	123			
Surr: Dibromofluoromethane	0.21		0.2000		107	73.9	134			
Surr: Toluene-d8	0.19		0.2000		94.9	81.9	122			

Sample ID **1201183-002BMS**	SampType: **MS**	TestCode: **Volatiles by 8260B/1311**
Client ID: **T-35-1**	Batch ID: **294**	RunNo: **432**
Prep Date:	Analysis Date: **1/17/2012**	SeqNo: **12537** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.42	0.10	0.4000	0	105	51.1	171			
Chlorobenzene	0.38	0.10	0.4000	0	94.2	36.1	191			
1,1-Dichloroethene	0.40	0.10	0.4000	0	99.3	49.1	162			
Trichloroethene (TCE)	0.37	0.10	0.4000	0	91.6	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.19		0.2000		96.9	69.9	130			
Surr: 4-Bromofluorobenzene	0.20		0.2000		98.0	71.2	123			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **1201183-002BMS** SampType: **MS** TestCode: **Volatiles by 8260B/1311**

Client ID: **T-35-1** Batch ID: **294** RunNo: **432**

Prep Date: Analysis Date: **1/17/2012** SeqNo: **12537** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.22		0.2000		112	73.9	134			
Surr: Toluene-d8	0.19		0.2000		93.8	81.9	122			

Sample ID **1201183-002BMSD** SampType: **MSD** TestCode: **Volatiles by 8260B/1311**

Client ID: **T-35-1** Batch ID: **294** RunNo: **432**

Prep Date: Analysis Date: **1/17/2012** SeqNo: **12538** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.40	0.10	0.4000	0	99.9	51.1	171	4.74	0	
Chlorobenzene	0.37	0.10	0.4000	0	93.5	36.1	191	0.772	0	
1,1-Dichloroethene	0.39	0.10	0.4000	0	97.3	49.1	162	2.12	0	
Trichloroethene (TCE)	0.34	0.10	0.4000	0	85.8	41.2	166	6.53	0	
Surr: 1,2-Dichloroethane-d4	0.18		0.2000		92.2	69.9	130	0	0	
Surr: 4-Bromofluorobenzene	0.19		0.2000		93.2	71.2	123	0	0	
Surr: Dibromofluoromethane	0.22		0.2000		111	73.9	134	0	0	
Surr: Toluene-d8	0.19		0.2000		94.6	81.9	122	0	0	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **mb-194**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS**	Batch ID: **194**	RunNo: **290**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9117** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup

Sample ID **mb-194**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS**	Batch ID: **194**	RunNo: **290**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9117** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.3		3.330		69.0	24.9	115			
Surr: 2-Fluorobiphenyl	1.0		1.670		62.4	26.2	108			
Surr: 2-Fluorophenol	2.1		3.330		62.6	17.7	98			
Surr: 4-Terphenyl-d14	1.2		1.670		74.6	33.8	108			
Surr: Nitrobenzene-d5	1.2		1.670		71.9	23	109			
Surr: Phenol-d5	2.2		3.330		64.7	22.1	103			

Sample ID **lcs-194**	SampType: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS**	Batch ID: **194**	RunNo: **290**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9118** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **lcs-194**	SampType: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS**	Batch ID: **194**	RunNo: **290**
Prep Date: **1/9/2012**	Analysis Date: **1/10/2012**	SeqNo: **9118** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.0	0.20	1.670	0	60.4	49.7	98.1			
4-Chloro-3-methylphenol	2.0	0.50	3.330	0	59.4	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	63.5	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	63.5	41	97.4			
2,4-Dinitrotoluene	1.0	0.50	1.670	0	60.0	44.4	104			
N-Nitrosodi-n-propylamine	0.92	0.20	1.670	0	55.4	39.1	86.9			
4-Nitrophenol	1.7	0.25	3.330	0	51.0	44.2	107			
Pentachlorophenol	1.6	0.40	3.330	0	46.8	36.2	80			
Phenol	2.2	0.20	3.330	0	65.3	42.7	92.7			
Pyrene	0.93	0.20	1.670	0	55.8	34.7	98.8			
1,2,4-Trichlorobenzene	0.95	0.20	1.670	0	56.8	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.6		3.330		78.1	24.9	115			
Surr: 2-Fluorobiphenyl	1.1		1.670		67.0	26.2	108			
Surr: 2-Fluorophenol	2.1		3.330		64.2	17.7	98			
Surr: 4-Terphenyl-d14	1.3		1.670		80.7	33.8	108			
Surr: Nitrobenzene-d5	1.2		1.670		72.1	23	109			
Surr: Phenol-d5	2.3		3.330		70.5	22.1	103			

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201183

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **mb-321**	SampType: **MBLK**	TestCode: **EPA Method 8270C TCLP**
Client ID: **PBS**	Batch ID: **321**	RunNo: **463**
Prep Date: **1/18/2012**	Analysis Date: **1/19/2012**	SeqNo: **13368** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
Surr: 2,4,6-Tribromophenol	0.17		0.2000		85.4	18.2	136			
Surr: 2-Fluorobiphenyl	0.11		0.1000		106	40.5	108			
Surr: 2-Fluorophenol	0.14		0.2000		72.2	23	101			
Surr: 4-Terphenyl-d14	0.092		0.1000		91.6	40.9	112			
Surr: Nitrobenzene-d5	0.11		0.1000		109	41	115			
Surr: Phenol-d5	0.11		0.2000		57.4	23.4	73.6			

Sample ID **lcs-321**	SampType: **LCS**	TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS**	Batch ID: **321**	RunNo: **463**
Prep Date: **1/18/2012**	Analysis Date: **1/19/2012**	SeqNo: **13369** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	0.083	0.010	0.1000	0	83.4	18.2	108			
Hexachlorobenzene	0.064	0.010	0.1000	0	63.6	34.2	74.5			
Hexachlorobutadiene	0.069	0.010	0.1000	0	68.9	31.3	88.5			
Hexachloroethane	0.068	0.010	0.1000	0	68.4	31.6	94.6			
Nitrobenzene	0.085	0.010	0.1000	0	85.3	39.7	107			
Pentachlorophenol	0.040	0.010	0.1000	0	39.6	15.9	86.7			
Pyridine	0.051	0.010	0.1000	0	51.4	14.7	73.6			
2,4,5-Trichlorophenol	0.066	0.010	0.1000	0	65.6	18.9	102			
2,4,6-Trichlorophenol	0.054	0.010	0.1000	0	53.5	12.3	103			
Cresols, Total	0.23	0.010	0.3000	0	77.5	25.9	99.2			
2-Methylphenol	0.074	0.010	0.1000	0	73.7	22	81.7			
3+4-Methylphenol	0.16	0.010	0.2000	0	79.5	2.89	157			
Surr: 2,4,6-Tribromophenol	0.15		0.2000		74.2	18.2	136			
Surr: 2-Fluorobiphenyl	0.087		0.1000		87.0	40.5	108			
Surr: 2-Fluorophenol	0.11		0.2000		54.3	23	101			
Surr: 4-Terphenyl-d14	0.076		0.1000		76.1	40.9	112			

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup
Project: Tank 35 Cleanup

Sample ID **lcs-321**	SampType: **LCS**	TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS**	Batch ID: **321**	RunNo: **463**
Prep Date: **1/18/2012**	Analysis Date: **1/19/2012**	SeqNo: **13369** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	0.085		0.1000		85.0	41	115			
Surr: Phenol-d5	0.095		0.2000		47.7	23.4	73.6			

Sample ID **1201183-001Bms**	SampType: **MS**	TestCode: **EPA Method 8270C TCLP**
Client ID: **T-35-5**	Batch ID: **321**	RunNo: **463**
Prep Date: **1/18/2012**	Analysis Date: **1/19/2012**	SeqNo: **13370** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	0.080	0.010	0.1000	0	79.6	9.57	115			
Hexachlorobenzene	0.064	0.010	0.1000	0	63.8	15.9	96.9			
Hexachlorobutadiene	0.064	0.010	0.1000	0	64.5	21.1	97.9			
Hexachloroethane	0.063	0.010	0.1000	0	63.2	18.1	105			
Nitrobenzene	0.085	0.010	0.1000	0	84.7	23.3	123			
Pentachlorophenol	0.048	0.010	0.1000	0	48.2	10	150			
Pyridine	0.052	0.010	0.1000	0	52.1	9.15	86.2			
2,4,5-Trichlorophenol	0.071	0.010	0.1000	0	70.6	8.46	119			
2,4,6-Trichlorophenol	0.065	0.010	0.1000	0	65.3	4.44	115			
Cresols, Total	0.21	0.010	0.3000	0	70.0	8.35	114			
2-Methylphenol	0.065	0.010	0.1000	0	65.0	17.5	78.8			
3+4-Methylphenol	0.15	0.010	0.2000	0	72.6	17.5	78.8			
Surr: 2,4,6-Tribromophenol	0.17		0.2000		85.4	18.2	136			
Surr: 2-Fluorobiphenyl	0.090		0.1000		89.5	40.5	108			
Surr: 2-Fluorophenol	0.12		0.2000		59.7	23	101			
Surr: 4-Terphenyl-d14	0.081		0.1000		80.7	40.9	112			
Surr: Nitrobenzene-d5	0.084		0.1000		84.4	41	115			
Surr: Phenol-d5	0.093		0.2000		46.6	23.4	73.6			

Sample ID **1201183-001Bmsd**	SampType: **MSD**	TestCode: **EPA Method 8270C TCLP**
Client ID: **T-35-5**	Batch ID: **321**	RunNo: **463**
Prep Date: **1/18/2012**	Analysis Date: **1/19/2012**	SeqNo: **13371** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	0.081	0.010	0.1000	0	81.2	9.57	115	1.99	20	
Hexachlorobenzene	0.062	0.010	0.1000	0	62.1	15.9	96.9	2.60	20	
Hexachlorobutadiene	0.061	0.010	0.1000	0	61.1	21.1	97.9	5.35	20	
Hexachloroethane	0.065	0.010	0.1000	0	64.9	18.1	105	2.72	20	
Nitrobenzene	0.082	0.010	0.1000	0	82.3	23.3	123	2.92	20	
Pentachlorophenol	0.050	0.010	0.1000	0	50.4	10	150	4.38	20	
Pyridine	0.053	0.010	0.1000	0	52.7	9.15	86.2	1.11	20	
2,4,5-Trichlorophenol	0.072	0.010	0.1000	0	72.3	8.46	119	2.41	20	
2,4,6-Trichlorophenol	0.064	0.010	0.1000	0	63.7	4.44	115	2.48	20	
Cresols, Total	0.21	0.010	0.3000	0	68.5	8.35	114	2.16	20	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **1201183-001Bmsd** SampType: **MSD** TestCode: **EPA Method 8270C TCLP**

Client ID: **T-35-5** Batch ID: **321** RunNo: **463**

Prep Date: **1/18/2012** Analysis Date: **1/19/2012** SeqNo: **13371** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylphenol	0.064	0.010	0.1000	0	63.5	17.5	78.8	0	20	
3+4-Methylphenol	0.14	0.010	0.2000	0	71.0	17.5	78.8	0	20	
Surr: 2,4,6-Tribromophenol	0.16		0.2000		79.7	18.2	136	0	0	
Surr: 2-Fluorobiphenyl	0.086		0.1000		85.6	40.5	108	0	0	
Surr: 2-Fluorophenol	0.12		0.2000		59.6	23	101	0	0	
Surr: 4-Terphenyl-d14	0.078		0.1000		78.3	40.9	112	0	0	
Surr: Nitrobenzene-d5	0.085		0.1000		84.5	41	115	0	0	
Surr: Phenol-d5	0.094		0.2000		47.0	23.4	73.6	0	0	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID	MB-220	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	220	RunNo:	318					
Prep Date:	1/11/2012	Analysis Date:	1/11/2012	SeqNo:	9633	Units:	mg/kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-220	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	220	RunNo:	318					
Prep Date:	1/11/2012	Analysis Date:	1/11/2012	SeqNo:	9634	Units:	mg/kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	104	80	120			

Sample ID	1201183-001AMS	SampType:	MS	TestCode:	EPA Method 7471: Mercury					
Client ID:	T-35-5	Batch ID:	220	RunNo:	318					
Prep Date:	1/11/2012	Analysis Date:	1/11/2012	SeqNo:	9636	Units:	mg/kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1658	0.01396	104	75	125			

Sample ID	1201183-001AMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	T-35-5	Batch ID:	220	RunNo:	318					
Prep Date:	1/11/2012	Analysis Date:	1/11/2012	SeqNo:	9637	Units:	mg/kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1656	0.01396	96.8	75	125	6.71	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1201183

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID	MB-331	SampType:	MBLK	TestCode:	MERCURY, TCLP					
Client ID:	PBW	Batch ID:	331	RunNo:	443					
Prep Date:	1/18/2012	Analysis Date:	1/18/2012	SeqNo:	12847	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020								

Sample ID	LCS-331	SampType:	LCS	TestCode:	MERCURY, TCLP					
Client ID:	LCSW	Batch ID:	331	RunNo:	443					
Prep Date:	1/18/2012	Analysis Date:	1/18/2012	SeqNo:	12848	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	101	80	120			

Sample ID	1201183-002AMS	SampType:	MS	TestCode:	MERCURY, TCLP					
Client ID:	T-35-1	Batch ID:	331	RunNo:	443					
Prep Date:	1/18/2012	Analysis Date:	1/18/2012	SeqNo:	12851	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	88.0	75	125			

Sample ID	1201183-002AMSD	SampType:	MSD	TestCode:	MERCURY, TCLP					
Client ID:	T-35-1	Batch ID:	331	RunNo:	443					
Prep Date:	1/18/2012	Analysis Date:	1/18/2012	SeqNo:	12852	Units:	mg/L			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	88.9	75	125	0	20	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **MB-206** SampType: **MBLK** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **PBS** Batch ID: **206** RunNo: **308**

Prep Date: **1/10/2012** Analysis Date: **1/11/2012** SeqNo: **9471** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID **LCS-206** SampType: **LCS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **LCSS** Batch ID: **206** RunNo: **308**

Prep Date: **1/10/2012** Analysis Date: **1/11/2012** SeqNo: **9472** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	96.7	80	120			
Barium	23	0.10	25.00	0.03950	90.2	80	120			
Cadmium	23	0.10	25.00	0	91.3	80	120			
Chromium	23	0.30	25.00	0.05350	92.0	80	120			
Lead	23	0.25	25.00	0	90.9	80	120			
Selenium	22	2.5	25.00	0.5060	87.1	80	120			
Silver	4.5	0.25	5.000	0	89.7	80	120			

Sample ID **1201171-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **BatchQC** Batch ID: **206** RunNo: **308**

Prep Date: **1/10/2012** Analysis Date: **1/11/2012** SeqNo: **9500** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	24.35	0	106	75	125			
Barium	24	0.10	24.35	0.5107	98.4	75	125			
Cadmium	24	0.10	24.35	0	98.8	75	125			
Chromium	26	0.30	24.35	3.458	91.2	75	125			
Lead	26	0.25	24.35	3.571	92.3	75	125			
Selenium	24	2.5	24.35	0	98.3	75	125			

Sample ID **1201171-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: Soil Metals**

Client ID: **BatchQC** Batch ID: **206** RunNo: **308**

Prep Date: **1/10/2012** Analysis Date: **1/11/2012** SeqNo: **9501** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	24.56	0	107	75	125	1.80	20	
Barium	25	0.10	24.56	0.5107	97.7	75	125	0.178	20	
Cadmium	24	0.10	24.56	0	99.7	75	125	1.86	20	
Chromium	30	0.30	24.56	3.458	106	75	125	14.0	20	

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID	**1201171-001AMSD**	SampType: **MSD**		TestCode: **EPA Method 6010B: Soil Metals**						
Client ID:	**BatchQC**	Batch ID: **206**		RunNo: **308**						
Prep Date:	**1/10/2012**	Analysis Date: **1/11/2012**		SeqNo: **9501**		Units: **mg/L**				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead		25	0.25	24.56	3.571	89.0	75	125	2.38	20	
Selenium		25	2.5	24.56	0	100	75	125	2.68	20	

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID **LCS-322** SampType: **LCS** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **LCSW** Batch ID: **322** RunNo: **447**

Prep Date: **1/18/2012** Analysis Date: **1/19/2012** SeqNo: **12908** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0	103	80	120			
Barium	ND	100	0.5000	0	91.0	80	120			
Cadmium	ND	1.0	0.5000	0	97.5	80	120			
Chromium	ND	5.0	0.5000	0	93.4	80	120			
Lead	ND	5.0	0.5000	0	89.6	80	120			
Selenium	ND	1.0	0.5000	0	99.8	80	120			
Silver	ND	5.0	0.1000	0	100	80	120			

Sample ID **1201183-001AMS** SampType: **MS** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **T-35-5** Batch ID: **322** RunNo: **447**

Prep Date: **1/18/2012** Analysis Date: **1/19/2012** SeqNo: **12910** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.007170	104	75	125			
Cadmium	ND	1.0	0.5000	0	99.3	75	125			
Chromium	ND	5.0	0.5000	0.001020	90.9	75	125			
Lead	ND	5.0	0.5000	0	86.4	75	125			
Selenium	ND	1.0	0.5000	0	97.1	75	125			
Silver	ND	5.0	0.1000	0	101	75	125			

Sample ID **1201183-001AMSD** SampType: **MSD** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **T-35-5** Batch ID: **322** RunNo: **447**

Prep Date: **1/18/2012** Analysis Date: **1/19/2012** SeqNo: **12911** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0	0.5000	0.007170	101	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	95.4	75	125	0	20	
Chromium	ND	5.0	0.5000	0.001020	88.1	75	125	0	20	
Lead	ND	5.0	0.5000	0	83.6	75	125	0	20	
Selenium	ND	1.0	0.5000	0	93.4	75	125	0	20	
Silver	ND	5.0	0.1000	0	97.5	75	125	0	20	

Sample ID **MB-322** SampType: **MBLK** TestCode: **EPA Method 6010B: TCLP Metals**

Client ID: **PBW** Batch ID: **322** RunNo: **447**

Prep Date: **1/18/2012** Analysis Date: **1/19/2012** SeqNo: **12922** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	5.0								
Barium	ND	100								
Cadmium	ND	1.0								
Chromium	ND	5.0								
Lead	ND	5.0								

Qualifiers:

- */X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1201183**

24-Jan-12

Client: Western Refining Southwest, Gallup

Project: Tank 35 Cleanup

Sample ID	**MB-322**	SampType: **MBLK**		TestCode: **EPA Method 6010B: TCLP Metals**					
Client ID:	**PBW**	Batch ID: **322**		RunNo: **447**					
Prep Date:	**1/18/2012**	Analysis Date: **1/19/2012**		SeqNo: **12922**		Units: **mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	1.0								
Silver	ND	5.0								

Qualifiers:

*/X	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Chain-of-Custody Record

Client: WESTERN REFINING
GALLUP REFINERY
Mailing Address: RT 3 BOX 7
GALLUP NM 87301
Phone #: 505 722 3833
email or Fax#: 505 722 0210
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush
Project Name: TANK 35 CLEANUP
Project #: N/A
Project Manager: BECK LARSEN
Sampler: A. Dorsey J. TSO
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 120183
5-12	10:15	SOIL	T-35-5	3-8oz	N/A	-1
5-12	10:30	SOIL	T-35-1	3-8oz	N/A	-2

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals.	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~)	8270 (Semi-VOA)	DRO/GRO (8015m)	RCI	TCLP 8260, 8270	TCLP RCRA 8	Air Bubbles (Y or N)
						X			X	X	X	X	X	X	
						X			X	X	X	X	X	X	

Date: 11/2 Time: 12:50 Relinquished by:
Date: Time: Relinquished by:
Received by:
Date: 12/9/12 Time: 1250
Received by:

Remarks: 11/6/12 BL Requested TCLP RCRA 8, TCLP 8260, TCLP 8270 & RCI on a Rush
AT 11/6/12

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

TOTAL + TCLP
(Revised)

COVER LETTER

Friday, January 06, 2012

Beck Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-0258
FAX (505) 722-0210

RE: Tank 35 Clean Up

Order No.: 1112721

Dear Beck Larsen:

Hall Environmental Analysis Laboratory, Inc. received 5 sample(s) on 12/16/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682

Hall Environmental Analysis Laboratory, Inc.

Date: *06-Jan-12*

Analytical Report

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-1
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:45:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	21000	510		mg/Kg	50	12/19/2011 12:30:15 PM
Motor Oil Range Organics (MRO)	3800	2500		mg/Kg	50	12/19/2011 12:30:15 PM
Surr: DNOP	0	77.4-131	S	%REC	50	12/19/2011 12:30:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	49		mg/Kg	10	12/20/2011 1:46:45 PM
Surr: BFB	95.2	69.7-121		%REC	10	12/20/2011 1:46:45 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	12/19/2011 1:54:28 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	12/30/2011 1:32:41 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	13		mg/Kg	5	12/19/2011 12:43:25 PM
Barium	220	0.50		mg/Kg	5	12/19/2011 12:43:25 PM
Cadmium	ND	0.50		mg/Kg	5	12/19/2011 12:43:25 PM
Chromium	12	1.5		mg/Kg	5	12/19/2011 12:43:25 PM
Lead	5.5	1.3		mg/Kg	5	12/19/2011 12:43:25 PM
Selenium	ND	13		mg/Kg	5	12/19/2011 12:43:25 PM
Silver	ND	1.3		mg/Kg	5	12/19/2011 12:43:25 PM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/3/2012 8:35:20 AM
Barium	ND	100		mg/L	5	1/3/2012 9:38:39 AM
Cadmium	ND	1.0		mg/L	1	1/3/2012 8:35:20 AM
Chromium	ND	5.0		mg/L	1	1/3/2012 8:35:20 AM
Lead	ND	5.0		mg/L	1	1/3/2012 8:35:20 AM
Selenium	ND	1.0		mg/L	1	1/3/2012 8:35:20 AM
Silver	ND	5.0		mg/L	1	1/3/2012 8:35:20 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Acenaphthylene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Aniline	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Anthracene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Azobenzene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Benz(a)anthracene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-1
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:45:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Benzoic acid	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
Benzyl alcohol	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Bis(2-ethylhexyl)phthalate	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Carbazole	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
4-Chloro-3-methylphenol	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
4-Chloroaniline	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	12/21/2011 12:22:12 AM
2-Chlorophenol	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Chrysene	4.6	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Di-n-butyl phthalate	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	12/21/2011 12:22:12 AM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Dibenzofuran	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	12/21/2011 12:22:12 AM
Diethyl phthalate	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Dimethyl phthalate	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
2,4-Dichlorophenol	ND	3.9		mg/Kg	1	12/21/2011 12:22:12 AM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	12/21/2011 12:22:12 AM
4,6-Dinitro-2-methylphenol	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
2,4-Dinitrophenol	ND	3.9		mg/Kg	1	12/21/2011 12:22:12 AM
2,4-Dinitrotoluene	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
2,6-Dinitrotoluene	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
Fluoranthene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Fluorene	5.9	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Hexachlorobenzene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Hexachloroethane	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-1
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:45:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Isophorone	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
1-Methylnaphthalene	2.9	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
2-Methylphenol	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
3+4-Methylphenol	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Naphthalene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
2-Nitroaniline	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
3-Nitroaniline	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
4-Nitroaniline	ND	3.9		mg/Kg	1	12/21/2011 12:22:12 AM
Nitrobenzene	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
2-Nitrophenol	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
4-Nitrophenol	ND	2.5		mg/Kg	1	12/21/2011 12:22:12 AM
Pentachlorophenol	ND	3.9		mg/Kg	1	12/21/2011 12:22:12 AM
Phenanthrene	36	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Phenol	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Pyrene	6.6	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Pyridine	ND	4.9		mg/Kg	1	12/21/2011 12:22:12 AM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	12/21/2011 12:22:12 AM
Surr: 2,4,6-Tribromophenol	0	24.9-115	S	%REC	1	12/21/2011 12:22:12 AM
Surr: 2-Fluorobiphenyl	95.4	26.2-108		%REC	1	12/21/2011 12:22:12 AM
Surr: 2-Fluorophenol	83.9	17.7-98		%REC	1	12/21/2011 12:22:12 AM
Surr: 4-Terphenyl-d14	0	33.8-108	S	%REC	1	12/21/2011 12:22:12 AM
Surr: Nitrobenzene-d5	82.0	23-109		%REC	1	12/21/2011 12:22:12 AM
Surr: Phenol-d5	80.5	22.1-103		%REC	1	12/21/2011 12:22:12 AM
EPA METHOD 8270C TCLP						Analyst: **JDC**
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/3/2012 1:06:10 PM
Hexachlorobenzene	ND	0.13		mg/L	1	1/3/2012 1:06:10 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/3/2012 1:06:10 PM
Hexachloroethane	ND	3.0		mg/L	1	1/3/2012 1:06:10 PM
Nitrobenzene	ND	2.0		mg/L	1	1/3/2012 1:06:10 PM
Pentachlorophenol	ND	100		mg/L	1	1/3/2012 1:06:10 PM
Pyridine	ND	5.0		mg/L	1	1/3/2012 1:06:10 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/3/2012 1:06:10 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/3/2012 1:06:10 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-1
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:45:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Cresols, Total	ND	200		mg/L	1	1/3/2012 1:06:10 PM
Surr: 2,4,6-Tribromophenol	76.5	18.2-136		%REC	1	1/3/2012 1:06:10 PM
Surr: 2-Fluorobiphenyl	72.5	40.5-108		%REC	1	1/3/2012 1:06:10 PM
Surr: 2-Fluorophenol	47.6	23-101		%REC	1	1/3/2012 1:06:10 PM
Surr: 4-Terphenyl-d14	80.0	40.9-112		%REC	1	1/3/2012 1:06:10 PM
Surr: Nitrobenzene-d5	75.6	41-115		%REC	1	1/3/2012 1:06:10 PM
Surr: Phenol-d5	35.9	23.4-73.6		%REC	1	1/3/2012 1:06:10 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Toluene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Ethylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Methyl tert-butyl ether (MTBE)	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,2,4-Trimethylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,3,5-Trimethylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,2-Dichloroethane (EDC)	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,2-Dibromoethane (EDB)	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Naphthalene	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
1-Methylnaphthalene	2.1	2.0		mg/Kg	10	12/19/2011 12:31:32 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	10	12/19/2011 12:31:32 PM
Acetone	ND	7.4		mg/Kg	10	12/19/2011 12:31:32 PM
Bromobenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Bromodichloromethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Bromoform	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Bromomethane	ND	1.5		mg/Kg	10	12/19/2011 12:31:32 PM
2-Butanone	ND	4.9		mg/Kg	10	12/19/2011 12:31:32 PM
Carbon disulfide	ND	4.9		mg/Kg	10	12/19/2011 12:31:32 PM
Carbon tetrachloride	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
Chlorobenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Chloroethane	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
Chloroform	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Chloromethane	ND	1.5		mg/Kg	10	12/19/2011 12:31:32 PM
2-Chlorotoluene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
4-Chlorotoluene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
cis-1,2-DCE	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
cis-1,3-Dichloropropene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,2-Dibromo-3-chloropropane	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
Dibromochloromethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Dibromomethane	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
1,2-Dichlorobenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-1
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:45:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
1,3-Dichlorobenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,4-Dichlorobenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Dichlorodifluoromethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,1-Dichloroethane	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
1,1-Dichloroethene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,2-Dichloropropane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,3-Dichloropropane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
2,2-Dichloropropane	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
1,1-Dichloropropene	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
2-Hexanone	ND	4.9		mg/Kg	10	12/19/2011 12:31:32 PM
Isopropylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
4-Isopropyltoluene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
4-Methyl-2-pentanone	ND	4.9		mg/Kg	10	12/19/2011 12:31:32 PM
Methylene chloride	ND	1.5		mg/Kg	10	12/19/2011 12:31:32 PM
n-Butylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
n-Propylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
sec-Butylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Styrene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
tert-Butylbenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,1,1,2-Tetrachloroethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,1,2,2-Tetrachloroethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Tetrachloroethene (PCE)	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
trans-1,2-DCE	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
trans-1,3-Dichloropropene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,2,3-Trichlorobenzene	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
1,2,4-Trichlorobenzene	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,1,1-Trichloroethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,1,2-Trichloroethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Trichloroethene (TCE)	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Trichlorofluoromethane	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
1,2,3-Trichloropropane	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
Vinyl chloride	ND	0.49		mg/Kg	10	12/19/2011 12:31:32 PM
Xylenes, Total	ND	0.99		mg/Kg	10	12/19/2011 12:31:32 PM
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%REC	10	12/19/2011 12:31:32 PM
Surr: 4-Bromofluorobenzene	88.3	70-130		%REC	10	12/19/2011 12:31:32 PM
Surr: Dibromofluoromethane	94.8	63.1-128		%REC	10	12/19/2011 12:31:32 PM
Surr: Toluene-d8	104	70-130		%REC	10	12/19/2011 12:31:32 PM
VOLATILES BY 8260B/1311						Analyst: **MMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-1
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:45:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: **MMS**
Benzene	ND	0.50		mg/L	1	12/29/2011 4:00:15 PM
2-Butanone	ND	10		mg/L	1	12/29/2011 4:00:15 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	12/29/2011 4:00:15 PM
Chlorobenzene	ND	100		mg/L	1	12/29/2011 4:00:15 PM
Chloroform	ND	6.0		mg/L	1	12/29/2011 4:00:15 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	12/29/2011 4:00:15 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	12/29/2011 4:00:15 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	12/29/2011 4:00:15 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	12/29/2011 4:00:15 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	12/29/2011 4:00:15 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	12/29/2011 4:00:15 PM
Vinyl chloride	ND	0.20		mg/L	1	12/29/2011 4:00:15 PM
Surr: 1,2-Dichloroethane-d4	83.8	69.9-130		%REC	1	12/29/2011 4:00:15 PM
Surr: 4-Bromofluorobenzene	86.2	71.2-123		%REC	1	12/29/2011 4:00:15 PM
Surr: Dibromofluoromethane	85.3	73.9-134		%REC	1	12/29/2011 4:00:15 PM
Surr: Toluene-d8	89.7	81.9-122		%REC	1	12/29/2011 4:00:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-2
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:55:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/19/2011 8:16:11 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	12/19/2011 8:16:11 AM
Surr: DNOP	109	77.4-131		%REC	1	12/19/2011 8:16:11 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/20/2011 4:18:38 AM
Surr: BFB	97.1	69.7-121		%REC	1	12/20/2011 4:18:38 AM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	12/19/2011 1:59:51 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	12/30/2011 1:34:28 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	5.0		mg/Kg	2	12/20/2011 9:54:41 AM
Barium	280	1.0		mg/Kg	10	12/20/2011 10:02:32 AM
Cadmium	ND	0.20		mg/Kg	2	12/20/2011 9:54:41 AM
Chromium	11	0.60		mg/Kg	2	12/20/2011 9:54:41 AM
Lead	3.3	0.50		mg/Kg	2	12/20/2011 9:54:41 AM
Selenium	ND	5.0		mg/Kg	2	12/20/2011 9:54:41 AM
Silver	ND	0.50		mg/Kg	2	12/20/2011 9:54:41 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/3/2012 8:37:31 AM
Barium	ND	100		mg/L	5	1/3/2012 9:40:37 AM
Cadmium	ND	1.0		mg/L	1	1/3/2012 8:37:31 AM
Chromium	ND	5.0		mg/L	1	1/3/2012 8:37:31 AM
Lead	ND	5.0		mg/L	1	1/3/2012 8:37:31 AM
Selenium	ND	1.0		mg/L	1	1/3/2012 8:37:31 AM
Silver	ND	5.0		mg/L	1	1/3/2012 8:37:31 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Acenaphthylene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Aniline	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Anthracene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Azobenzene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-2
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:55:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Benzoic acid	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Carbazole	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	12/20/2011 10:26:42 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Chrysene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	12/20/2011 10:26:42 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Dibenzofuran	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	12/20/2011 10:26:42 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
2,4-Dichlorophenol	ND	0.39		mg/Kg	1	12/20/2011 10:26:42 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	12/20/2011 10:26:42 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
2,4-Dinitrophenol	ND	0.39		mg/Kg	1	12/20/2011 10:26:42 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
Fluoranthene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Fluorene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Hexachloroethane	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-2
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:55:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Isophorone	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
2-Methylphenol	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Naphthalene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
4-Nitroaniline	ND	0.39		mg/Kg	1	12/20/2011 10:26:42 PM
Nitrobenzene	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	12/20/2011 10:26:42 PM
Pentachlorophenol	ND	0.39		mg/Kg	1	12/20/2011 10:26:42 PM
Phenanthrene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Phenol	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Pyrene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Pyridine	ND	0.49		mg/Kg	1	12/20/2011 10:26:42 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	12/20/2011 10:26:42 PM
Surr: 2,4,6-Tribromophenol	88.8	24.9-115		%REC	1	12/20/2011 10:26:42 PM
Surr: 2-Fluorobiphenyl	60.6	26.2-108		%REC	1	12/20/2011 10:26:42 PM
Surr: 2-Fluorophenol	89.1	17.7-98		%REC	1	12/20/2011 10:26:42 PM
Surr: 4-Terphenyl-d14	86.5	33.8-108		%REC	1	12/20/2011 10:26:42 PM
Surr: Nitrobenzene-d5	81.5	23-109		%REC	1	12/20/2011 10:26:42 PM
Surr: Phenol-d5	86.4	22.1-103		%REC	1	12/20/2011 10:26:42 PM
EPA METHOD 8270C TCLP						Analyst: JDC
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/3/2012 2:33:13 PM
Hexachlorobenzene	ND	0.13		mg/L	1	1/3/2012 2:33:13 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/3/2012 2:33:13 PM
Hexachloroethane	ND	3.0		mg/L	1	1/3/2012 2:33:13 PM
Nitrobenzene	ND	2.0		mg/L	1	1/3/2012 2:33:13 PM
Pentachlorophenol	ND	100		mg/L	1	1/3/2012 2:33:13 PM
Pyridine	ND	5.0		mg/L	1	1/3/2012 2:33:13 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/3/2012 2:33:13 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/3/2012 2:33:13 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-2
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:55:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Cresols, Total	ND	200		mg/L	1	1/3/2012 2:33:13 PM
Surr: 2,4,6-Tribromophenol	75.7	18.2-136		%REC	1	1/3/2012 2:33:13 PM
Surr: 2-Fluorobiphenyl	69.8	40.5-108		%REC	1	1/3/2012 2:33:13 PM
Surr: 2-Fluorophenol	48.8	23-101		%REC	1	1/3/2012 2:33:13 PM
Surr: 4-Terphenyl-d14	70.9	40.9-112		%REC	1	1/3/2012 2:33:13 PM
Surr: Nitrobenzene-d5	78.3	41-115		%REC	1	1/3/2012 2:33:13 PM
Surr: Phenol-d5	35.2	23.4-73.6		%REC	1	1/3/2012 2:33:13 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Toluene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,2,4-Trimethylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,3,5-Trimethylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,2-Dichloroethane (EDC)	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,2-Dibromoethane (EDB)	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Naphthalene	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	12/19/2011 1:27:33 PM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	12/19/2011 1:27:33 PM
Acetone	ND	0.71		mg/Kg	1	12/19/2011 1:27:33 PM
Bromobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Bromodichloromethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Bromoform	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Bromomethane	ND	0.14		mg/Kg	1	12/19/2011 1:27:33 PM
2-Butanone	ND	0.47		mg/Kg	1	12/19/2011 1:27:33 PM
Carbon disulfide	ND	0.47		mg/Kg	1	12/19/2011 1:27:33 PM
Carbon tetrachloride	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
Chlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Chloroethane	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
Chloroform	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Chloromethane	ND	0.14		mg/Kg	1	12/19/2011 1:27:33 PM
2-Chlorotoluene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
4-Chlorotoluene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
cis-1,2-DCE	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
cis-1,3-Dichloropropene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,2-Dibromo-3-chloropropane	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
Dibromochloromethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Dibromomethane	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
1,2-Dichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-2
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:55:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
1,3-Dichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,4-Dichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Dichlorodifluoromethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,1-Dichloroethane	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
1,1-Dichloroethene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,2-Dichloropropane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,3-Dichloropropane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
2,2-Dichloropropane	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
1,1-Dichloropropene	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
Hexachlorobutadiene	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
2-Hexanone	ND	0.47		mg/Kg	1	12/19/2011 1:27:33 PM
Isopropylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
4-Isopropyltoluene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
4-Methyl-2-pentanone	ND	0.47		mg/Kg	1	12/19/2011 1:27:33 PM
Methylene chloride	ND	0.14		mg/Kg	1	12/19/2011 1:27:33 PM
n-Butylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
n-Propylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
sec-Butylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Styrene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
tert-Butylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,1,1,2-Tetrachloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,1,2,2-Tetrachloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Tetrachloroethene (PCE)	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
trans-1,2-DCE	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
trans-1,3-Dichloropropene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,2,3-Trichlorobenzene	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
1,2,4-Trichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,1,1-Trichloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,1,2-Trichloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Trichloroethene (TCE)	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Trichlorofluoromethane	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
1,2,3-Trichloropropane	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
Vinyl chloride	ND	0.047		mg/Kg	1	12/19/2011 1:27:33 PM
Xylenes, Total	ND	0.095		mg/Kg	1	12/19/2011 1:27:33 PM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	1	12/19/2011 1:27:33 PM
Surr: 4-Bromofluorobenzene	86.4	70-130		%REC	1	12/19/2011 1:27:33 PM
Surr: Dibromofluoromethane	102	63.1-128		%REC	1	12/19/2011 1:27:33 PM
Surr: Toluene-d8	97.4	70-130		%REC	1	12/19/2011 1:27:33 PM
VOLATILES BY 8260B/1311						Analyst: **MMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-2
Lab Order:	1112721	**Collection Date:**	12/15/2011 10:55:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: **MMS**
Benzene	ND	0.50		mg/L	1	12/29/2011 5:23:31 PM
2-Butanone	ND	10		mg/L	1	12/29/2011 5:23:31 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	12/29/2011 5:23:31 PM
Chlorobenzene	ND	100		mg/L	1	12/29/2011 5:23:31 PM
Chloroform	ND	6.0		mg/L	1	12/29/2011 5:23:31 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	12/29/2011 5:23:31 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	12/29/2011 5:23:31 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	12/29/2011 5:23:31 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	12/29/2011 5:23:31 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	12/29/2011 5:23:31 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	12/29/2011 5:23:31 PM
Vinyl chloride	ND	0.20		mg/L	1	12/29/2011 5:23:31 PM
Surr: 1,2-Dichloroethane-d4	74.6	69.9-130		%REC	1	12/29/2011 5:23:31 PM
Surr: 4-Bromofluorobenzene	78.7	71.2-123		%REC	1	12/29/2011 5:23:31 PM
Surr: Dibromofluoromethane	80.9	73.9-134		%REC	1	12/29/2011 5:23:31 PM
Surr: Toluene-d8	85.7	81.9-122		%REC	1	12/29/2011 5:23:31 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-3
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:10:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	100	10		mg/Kg	1	12/19/2011 8:45:58 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	12/19/2011 8:45:58 AM
Surr: DNOP	121	77.4-131		%REC	1	12/19/2011 8:45:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/20/2011 4:47:22 AM
Surr: BFB	95.3	69.7-121		%REC	1	12/20/2011 4:47:22 AM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	12/19/2011 2:01:36 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	12/30/2011 1:36:15 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	13		mg/Kg	5	12/19/2011 12:51:30 PM
Barium	140	0.50		mg/Kg	5	12/19/2011 12:51:30 PM
Cadmium	ND	0.50		mg/Kg	5	12/19/2011 12:51:30 PM
Chromium	6.7	1.5		mg/Kg	5	12/19/2011 12:51:30 PM
Lead	3.2	1.3		mg/Kg	5	12/19/2011 12:51:30 PM
Selenium	ND	13		mg/Kg	5	12/19/2011 12:51:30 PM
Silver	ND	1.3		mg/Kg	5	12/19/2011 12:51:30 PM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/3/2012 8:39:39 AM
Barium	ND	100		mg/L	5	1/3/2012 9:44:16 AM
Cadmium	ND	1.0		mg/L	1	1/3/2012 8:39:39 AM
Chromium	ND	5.0		mg/L	1	1/3/2012 8:39:39 AM
Lead	ND	5.0		mg/L	1	1/3/2012 8:39:39 AM
Selenium	ND	1.0		mg/L	1	1/3/2012 8:39:39 AM
Silver	ND	5.0		mg/L	1	1/3/2012 8:39:39 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Acenaphthylene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Aniline	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Anthracene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Azobenzene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-3
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:10:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Benzoic acid	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Carbazole	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	12/20/2011 10:55:37 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Chrysene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	12/20/2011 10:55:37 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Dibenzofuran	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	12/20/2011 10:55:37 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	12/20/2011 10:55:37 PM
2,4-Dimethylphenol	ND	0.59		mg/Kg	1	12/20/2011 10:55:37 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	12/20/2011 10:55:37 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
Fluoranthene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Fluorene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Hexachloroethane	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-3
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:10:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Isophorone	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
2-Methylphenol	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Naphthalene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
3-Nitroaniline	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	12/20/2011 10:55:37 PM
Nitrobenzene	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	12/20/2011 10:55:37 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	12/20/2011 10:55:37 PM
Phenanthrene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Phenol	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Pyrene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Pyridine	ND	0.99		mg/Kg	1	12/20/2011 10:55:37 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	12/20/2011 10:55:37 PM
Surr: 2,4,6-Tribromophenol	113	24.9-115		%REC	1	12/20/2011 10:55:37 PM
Surr: 2-Fluorobiphenyl	103	26.2-108		%REC	1	12/20/2011 10:55:37 PM
Surr: 2-Fluorophenol	97.3	17.7-98		%REC	1	12/20/2011 10:55:37 PM
Surr: 4-Terphenyl-d14	117	33.8-108	S	%REC	1	12/20/2011 10:55:37 PM
Surr: Nitrobenzene-d5	110	23-109	S	%REC	1	12/20/2011 10:55:37 PM
Surr: Phenol-d5	99.5	22.1-103		%REC	1	12/20/2011 10:55:37 PM
EPA METHOD 8270C TCLP						Analyst: JDC
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/3/2012 3:02:05 PM
Hexachlorobenzene	ND	0.13		mg/L	1	1/3/2012 3:02:05 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/3/2012 3:02:05 PM
Hexachloroethane	ND	3.0		mg/L	1	1/3/2012 3:02:05 PM
Nitrobenzene	ND	2.0		mg/L	1	1/3/2012 3:02:05 PM
Pentachlorophenol	ND	100		mg/L	1	1/3/2012 3:02:05 PM
Pyridine	ND	5.0		mg/L	1	1/3/2012 3:02:05 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/3/2012 3:02:05 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/3/2012 3:02:05 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-3
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:10:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Cresols, Total	ND	200		mg/L	1	1/3/2012 3:02:05 PM
Surr: 2,4,6-Tribromophenol	66.7	18.2-136		%REC	1	1/3/2012 3:02:05 PM
Surr: 2-Fluorobiphenyl	62.2	40.5-108		%REC	1	1/3/2012 3:02:05 PM
Surr: 2-Fluorophenol	50.1	23-101		%REC	1	1/3/2012 3:02:05 PM
Surr: 4-Terphenyl-d14	66.8	40.9-112		%REC	1	1/3/2012 3:02:05 PM
Surr: Nitrobenzene-d5	68.8	41-115		%REC	1	1/3/2012 3:02:05 PM
Surr: Phenol-d5	37.2	23.4-73.6		%REC	1	1/3/2012 3:02:05 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Toluene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Ethylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,2,4-Trimethylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,3,5-Trimethylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,2-Dichloroethane (EDC)	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,2-Dibromoethane (EDB)	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Naphthalene	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	12/19/2011 1:55:34 PM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	12/19/2011 1:55:34 PM
Acetone	ND	0.71		mg/Kg	1	12/19/2011 1:55:34 PM
Bromobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Bromodichloromethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Bromoform	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Bromomethane	ND	0.14		mg/Kg	1	12/19/2011 1:55:34 PM
2-Butanone	ND	0.47		mg/Kg	1	12/19/2011 1:55:34 PM
Carbon disulfide	ND	0.47		mg/Kg	1	12/19/2011 1:55:34 PM
Carbon tetrachloride	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
Chlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Chloroethane	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
Chloroform	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Chloromethane	ND	0.14		mg/Kg	1	12/19/2011 1:55:34 PM
2-Chlorotoluene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
4-Chlorotoluene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
cis-1,2-DCE	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
cis-1,3-Dichloropropene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,2-Dibromo-3-chloropropane	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
Dibromochloromethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Dibromomethane	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
1,2-Dichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-3
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:10:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
1,3-Dichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,4-Dichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Dichlorodifluoromethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,1-Dichloroethane	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
1,1-Dichloroethene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,2-Dichloropropane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,3-Dichloropropane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
2,2-Dichloropropane	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
1,1-Dichloropropene	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
Hexachlorobutadiene	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
2-Hexanone	ND	0.47		mg/Kg	1	12/19/2011 1:55:34 PM
Isopropylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
4-Isopropyltoluene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
4-Methyl-2-pentanone	ND	0.47		mg/Kg	1	12/19/2011 1:55:34 PM
Methylene chloride	ND	0.14		mg/Kg	1	12/19/2011 1:55:34 PM
n-Butylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
n-Propylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
sec-Butylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Styrene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
tert-Butylbenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,1,1,2-Tetrachloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,1,2,2-Tetrachloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Tetrachloroethene (PCE)	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
trans-1,2-DCE	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
trans-1,3-Dichloropropene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,2,3-Trichlorobenzene	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
1,2,4-Trichlorobenzene	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,1,1-Trichloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,1,2-Trichloroethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Trichloroethene (TCE)	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Trichlorofluoromethane	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
1,2,3-Trichloropropane	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
Vinyl chloride	ND	0.047		mg/Kg	1	12/19/2011 1:55:34 PM
Xylenes, Total	ND	0.095		mg/Kg	1	12/19/2011 1:55:34 PM
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	12/19/2011 1:55:34 PM
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	1	12/19/2011 1:55:34 PM
Surr: Dibromofluoromethane	95.5	63.1-128		%REC	1	12/19/2011 1:55:34 PM
Surr: Toluene-d8	103	70-130		%REC	1	12/19/2011 1:55:34 PM
VOLATILES BY 8260B/1311						Analyst: **MMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-3
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:10:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: **MMS**
Benzene	ND	0.50		mg/L	1	12/29/2011 5:51:09 PM
2-Butanone	ND	10		mg/L	1	12/29/2011 5:51:09 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	12/29/2011 5:51:09 PM
Chlorobenzene	ND	100		mg/L	1	12/29/2011 5:51:09 PM
Chloroform	ND	6.0		mg/L	1	12/29/2011 5:51:09 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	12/29/2011 5:51:09 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	12/29/2011 5:51:09 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	12/29/2011 5:51:09 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	12/29/2011 5:51:09 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	12/29/2011 5:51:09 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	12/29/2011 5:51:09 PM
Vinyl chloride	ND	0.20		mg/L	1	12/29/2011 5:51:09 PM
Surr: 1,2-Dichloroethane-d4	76.9	69.9-130		%REC	1	12/29/2011 5:51:09 PM
Surr: 4-Bromofluorobenzene	81.0	71.2-123		%REC	1	12/29/2011 5:51:09 PM
Surr: Dibromofluoromethane	82.4	73.9-134		%REC	1	12/29/2011 5:51:09 PM
Surr: Toluene-d8	89.7	81.9-122		%REC	1	12/29/2011 5:51:09 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-4
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:37:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	120	9.9		mg/Kg	1	12/19/2011 2:04:09 PM
Motor Oil Range Organics (MRO)	160	49		mg/Kg	1	12/19/2011 2:04:09 PM
Surr: DNOP	111	77.4-131		%REC	1	12/19/2011 2:04:09 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	24	4.8		mg/Kg	1	12/20/2011 5:16:03 AM
Surr: BFB	174	69.7-121	S	%REC	1	12/20/2011 5:16:03 AM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	12/19/2011 2:03:23 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	12/30/2011 1:38:03 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	25		mg/Kg	10	12/20/2011 10:06:43 AM
Barium	290	1.0		mg/Kg	10	12/20/2011 10:06:43 AM
Cadmium	ND	1.0		mg/Kg	10	12/20/2011 10:06:43 AM
Chromium	12	3.0		mg/Kg	10	12/20/2011 10:06:43 AM
Lead	10	2.5		mg/Kg	10	12/20/2011 10:06:43 AM
Selenium	ND	25		mg/Kg	10	12/20/2011 10:06:43 AM
Silver	ND	2.5		mg/Kg	10	12/20/2011 10:06:43 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/3/2012 8:41:45 AM
Barium	ND	100		mg/L	5	1/3/2012 9:46:25 AM
Cadmium	ND	1.0		mg/L	1	1/3/2012 8:41:45 AM
Chromium	ND	5.0		mg/L	1	1/3/2012 8:41:45 AM
Lead	ND	5.0		mg/L	1	1/3/2012 8:41:45 AM
Selenium	ND	1.0		mg/L	1	1/3/2012 8:41:45 AM
Silver	ND	5.0		mg/L	1	1/3/2012 8:41:45 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Acenaphthylene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Aniline	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Anthracene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Azobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-4
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:37:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Benzoic acid	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Bis(2-ethylhexyl)phthalate	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Carbazole	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
4-Chloro-3-methylphenol	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
4-Chloroaniline	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	12/20/2011 11:24:29 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Chrysene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Di-n-butyl phthalate	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	12/20/2011 11:24:29 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Dibenzofuran	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	12/20/2011 11:24:29 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
2,4-Dichlorophenol	ND	3.9		mg/Kg	1	12/20/2011 11:24:29 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	12/20/2011 11:24:29 PM
4,6-Dinitro-2-methylphenol	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
2,4-Dinitrophenol	ND	3.9		mg/Kg	1	12/20/2011 11:24:29 PM
2,4-Dinitrotoluene	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
2,6-Dinitrotoluene	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
Fluoranthene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Fluorene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Hexachloroethane	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-4
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:37:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Isophorone	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
2-Methylphenol	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Naphthalene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
3-Nitroaniline	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
4-Nitroaniline	ND	3.9		mg/Kg	1	12/20/2011 11:24:29 PM
Nitrobenzene	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	12/20/2011 11:24:29 PM
Pentachlorophenol	ND	3.9		mg/Kg	1	12/20/2011 11:24:29 PM
Phenanthrene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Phenol	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Pyrene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Pyridine	ND	4.9		mg/Kg	1	12/20/2011 11:24:29 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	12/20/2011 11:24:29 PM
Surr: 2,4,6-Tribromophenol	72.6	24.9-115		%REC	1	12/20/2011 11:24:29 PM
Surr: 2-Fluorobiphenyl	89.0	26.2-108		%REC	1	12/20/2011 11:24:29 PM
Surr: 2-Fluorophenol	70.5	17.7-98		%REC	1	12/20/2011 11:24:29 PM
Surr: 4-Terphenyl-d14	83.6	33.8-108		%REC	1	12/20/2011 11:24:29 PM
Surr: Nitrobenzene-d5	69.7	23-109		%REC	1	12/20/2011 11:24:29 PM
Surr: Phenol-d5	68.9	22.1-103		%REC	1	12/20/2011 11:24:29 PM
EPA METHOD 8270C TCLP						Analyst: JDC
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/3/2012 3:31:01 PM
Hexachlorobenzene	ND	0.13		mg/L	1	1/3/2012 3:31:01 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/3/2012 3:31:01 PM
Hexachloroethane	ND	3.0		mg/L	1	1/3/2012 3:31:01 PM
Nitrobenzene	ND	2.0		mg/L	1	1/3/2012 3:31:01 PM
Pentachlorophenol	ND	100		mg/L	1	1/3/2012 3:31:01 PM
Pyridine	ND	5.0		mg/L	1	1/3/2012 3:31:01 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/3/2012 3:31:01 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/3/2012 3:31:01 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-4
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:37:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Cresols, Total	ND	200		mg/L	1	1/3/2012 3:31:01 PM
Surr: 2,4,6-Tribromophenol	76.4	18.2-136		%REC	1	1/3/2012 3:31:01 PM
Surr: 2-Fluorobiphenyl	65.0	40.5-108		%REC	1	1/3/2012 3:31:01 PM
Surr: 2-Fluorophenol	49.2	23-101		%REC	1	1/3/2012 3:31:01 PM
Surr: 4-Terphenyl-d14	78.7	40.9-112		%REC	1	1/3/2012 3:31:01 PM
Surr: Nitrobenzene-d5	77.6	41-115		%REC	1	1/3/2012 3:31:01 PM
Surr: Phenol-d5	38.3	23.4-73.6		%REC	1	1/3/2012 3:31:01 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Toluene	0.062	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,2,4-Trimethylbenzene	0.39	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,3,5-Trimethylbenzene	0.44	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,2-Dichloroethane (EDC)	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,2-Dibromoethane (EDB)	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Naphthalene	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
1-Methylnaphthalene	0.25	0.19		mg/Kg	1	12/19/2011 2:23:38 PM
2-Methylnaphthalene	0.43	0.19		mg/Kg	1	12/19/2011 2:23:38 PM
Acetone	ND	0.72		mg/Kg	1	12/19/2011 2:23:38 PM
Bromobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Bromodichloromethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Bromoform	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Bromomethane	ND	0.14		mg/Kg	1	12/19/2011 2:23:38 PM
2-Butanone	ND	0.48		mg/Kg	1	12/19/2011 2:23:38 PM
Carbon disulfide	ND	0.48		mg/Kg	1	12/19/2011 2:23:38 PM
Carbon tetrachloride	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
Chlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Chloroethane	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
Chloroform	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Chloromethane	ND	0.14		mg/Kg	1	12/19/2011 2:23:38 PM
2-Chlorotoluene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
4-Chlorotoluene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
cis-1,2-DCE	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
cis-1,3-Dichloropropene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,2-Dibromo-3-chloropropane	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
Dibromochloromethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Dibromomethane	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
1,2-Dichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-4
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:37:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
1,3-Dichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,4-Dichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Dichlorodifluoromethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,1-Dichloroethane	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
1,1-Dichloroethene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,2-Dichloropropane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,3-Dichloropropane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
2,2-Dichloropropane	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
1,1-Dichloropropene	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
Hexachlorobutadiene	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
2-Hexanone	ND	0.48		mg/Kg	1	12/19/2011 2:23:38 PM
Isopropylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
4-Isopropyltoluene	0.056	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
4-Methyl-2-pentanone	ND	0.48		mg/Kg	1	12/19/2011 2:23:38 PM
Methylene chloride	ND	0.14		mg/Kg	1	12/19/2011 2:23:38 PM
n-Butylbenzene	0.072	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
n-Propylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
sec-Butylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Styrene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
tert-Butylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,1,1,2-Tetrachloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,1,2,2-Tetrachloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Tetrachloroethene (PCE)	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
trans-1,2-DCE	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
trans-1,3-Dichloropropene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,2,3-Trichlorobenzene	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
1,2,4-Trichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,1,1-Trichloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,1,2-Trichloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Trichloroethene (TCE)	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Trichlorofluoromethane	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
1,2,3-Trichloropropane	ND	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
Vinyl chloride	ND	0.048		mg/Kg	1	12/19/2011 2:23:38 PM
Xylenes, Total	1.0	0.097		mg/Kg	1	12/19/2011 2:23:38 PM
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	12/19/2011 2:23:38 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	1	12/19/2011 2:23:38 PM
Surr: Dibromofluoromethane	94.1	63.1-128		%REC	1	12/19/2011 2:23:38 PM
Surr: Toluene-d8	95.2	70-130		%REC	1	12/19/2011 2:23:38 PM
VOLATILES BY 8260B/1311						Analyst: **MMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-4
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:37:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: **MMS**
Benzene	ND	0.50		mg/L	1	12/29/2011 6:18:54 PM
2-Butanone	ND	10		mg/L	1	12/29/2011 6:18:54 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	12/29/2011 6:18:54 PM
Chlorobenzene	ND	100		mg/L	1	12/29/2011 6:18:54 PM
Chloroform	ND	6.0		mg/L	1	12/29/2011 6:18:54 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	12/29/2011 6:18:54 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	12/29/2011 6:18:54 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	12/29/2011 6:18:54 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	12/29/2011 6:18:54 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	12/29/2011 6:18:54 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	12/29/2011 6:18:54 PM
Vinyl chloride	ND	0.20		mg/L	1	12/29/2011 6:18:54 PM
Surr: 1,2-Dichloroethane-d4	76.4	69.9-130		%REC	1	12/29/2011 6:18:54 PM
Surr: 4-Bromofluorobenzene	81.4	71.2-123		%REC	1	12/29/2011 6:18:54 PM
Surr: Dibromofluoromethane	80.6	73.9-134		%REC	1	12/29/2011 6:18:54 PM
Surr: Toluene-d8	93.8	81.9-122		%REC	1	12/29/2011 6:18:54 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-5
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:30:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	160	10		mg/Kg	1	12/19/2011 2:33:50 PM
Motor Oil Range Organics (MRO)	230	51		mg/Kg	1	12/19/2011 2:33:50 PM
Surr: DNOP	114	77.4-131		%REC	1	12/19/2011 2:33:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/20/2011 5:44:48 AM
Surr: BFB	108	69.7-121		%REC	1	12/20/2011 5:44:48 AM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	12/19/2011 2:05:08 PM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	12/30/2011 1:43:18 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	ND	25		mg/Kg	10	12/20/2011 10:08:35 AM
Barium	280	1.0		mg/Kg	10	12/20/2011 10:08:35 AM
Cadmium	ND	1.0		mg/Kg	10	12/20/2011 10:08:35 AM
Chromium	9.2	3.0		mg/Kg	10	12/20/2011 10:08:35 AM
Lead	9.4	2.5		mg/Kg	10	12/20/2011 10:08:35 AM
Selenium	ND	25		mg/Kg	10	12/20/2011 10:08:35 AM
Silver	ND	2.5		mg/Kg	10	12/20/2011 10:08:35 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	1/3/2012 8:43:52 AM
Barium	ND	100		mg/L	5	1/3/2012 9:48:26 AM
Cadmium	ND	1.0		mg/L	1	1/3/2012 8:43:52 AM
Chromium	ND	5.0		mg/L	1	1/3/2012 8:43:52 AM
Lead	ND	5.0		mg/L	1	1/3/2012 8:43:52 AM
Selenium	ND	1.0		mg/L	1	1/3/2012 8:43:52 AM
Silver	ND	5.0		mg/L	1	1/3/2012 8:43:52 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Acenaphthylene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Aniline	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Anthracene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Azobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-5
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:30:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Benzoic acid	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Carbazole	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	12/20/2011 11:53:20 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Chrysene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	12/20/2011 11:53:20 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Dibenzofuran	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	12/20/2011 11:53:20 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	12/20/2011 11:53:20 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	12/20/2011 11:53:20 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	12/20/2011 11:53:20 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
Fluoranthene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Fluorene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Hexachloroethane	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-5
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:30:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Isophorone	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
2-Methylphenol	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Naphthalene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
3-Nitroaniline	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	12/20/2011 11:53:20 PM
Nitrobenzene	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	12/20/2011 11:53:20 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	12/20/2011 11:53:20 PM
Phenanthrene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Phenol	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Pyrene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Pyridine	ND	5.0		mg/Kg	1	12/20/2011 11:53:20 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	12/20/2011 11:53:20 PM
Surr: 2,4,6-Tribromophenol	74.5	24.9-115		%REC	1	12/20/2011 11:53:20 PM
Surr: 2-Fluorobiphenyl	92.4	26.2-108		%REC	1	12/20/2011 11:53:20 PM
Surr: 2-Fluorophenol	80.9	17.7-98		%REC	1	12/20/2011 11:53:20 PM
Surr: 4-Terphenyl-d14	90.8	33.8-108		%REC	1	12/20/2011 11:53:20 PM
Surr: Nitrobenzene-d5	77.6	23-109		%REC	1	12/20/2011 11:53:20 PM
Surr: Phenol-d5	74.9	22.1-103		%REC	1	12/20/2011 11:53:20 PM
EPA METHOD 8270C TCLP						Analyst: **JDC**
2,4-Dinitrotoluene	ND	0.13		mg/L	1	1/3/2012 4:00:05 PM
Hexachlorobenzene	ND	0.13		mg/L	1	1/3/2012 4:00:05 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	1/3/2012 4:00:05 PM
Hexachloroethane	ND	3.0		mg/L	1	1/3/2012 4:00:05 PM
Nitrobenzene	ND	2.0		mg/L	1	1/3/2012 4:00:05 PM
Pentachlorophenol	ND	100		mg/L	1	1/3/2012 4:00:05 PM
Pyridine	ND	5.0		mg/L	1	1/3/2012 4:00:05 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	1/3/2012 4:00:05 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	1/3/2012 4:00:05 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-5
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:30:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Cresols, Total	ND	200		mg/L	1	1/3/2012 4:00:05 PM
Surr: 2,4,6-Tribromophenol	78.0	18.2-136		%REC	1	1/3/2012 4:00:05 PM
Surr: 2-Fluorobiphenyl	74.5	40.5-108		%REC	1	1/3/2012 4:00:05 PM
Surr: 2-Fluorophenol	57.2	23-101		%REC	1	1/3/2012 4:00:05 PM
Surr: 4-Terphenyl-d14	78.9	40.9-112		%REC	1	1/3/2012 4:00:05 PM
Surr: Nitrobenzene-d5	87.1	41-115		%REC	1	1/3/2012 4:00:05 PM
Surr: Phenol-d5	41.7	23.4-73.6		%REC	1	1/3/2012 4:00:05 PM
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
Benzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Toluene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Ethylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,2,4-Trimethylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,3,5-Trimethylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,2-Dichloroethane (EDC)	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,2-Dibromoethane (EDB)	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Naphthalene	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	12/19/2011 2:51:39 PM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	12/19/2011 2:51:39 PM
Acetone	ND	0.72		mg/Kg	1	12/19/2011 2:51:39 PM
Bromobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Bromodichloromethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Bromoform	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Bromomethane	ND	0.14		mg/Kg	1	12/19/2011 2:51:39 PM
2-Butanone	ND	0.48		mg/Kg	1	12/19/2011 2:51:39 PM
Carbon disulfide	ND	0.48		mg/Kg	1	12/19/2011 2:51:39 PM
Carbon tetrachloride	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
Chlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Chloroethane	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
Chloroform	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Chloromethane	ND	0.14		mg/Kg	1	12/19/2011 2:51:39 PM
2-Chlorotoluene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
4-Chlorotoluene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
cis-1,2-DCE	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
cis-1,3-Dichloropropene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,2-Dibromo-3-chloropropane	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
Dibromochloromethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Dibromomethane	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
1,2-Dichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL Maximum Contaminant Level
- NC Non-Chlorinated
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitation Limit
- S Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-5
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:30:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **MMS**
1,3-Dichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,4-Dichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Dichlorodifluoromethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,1-Dichloroethane	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
1,1-Dichloroethene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,2-Dichloropropane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,3-Dichloropropane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
2,2-Dichloropropane	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
1,1-Dichloropropene	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
Hexachlorobutadiene	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
2-Hexanone	ND	0.48		mg/Kg	1	12/19/2011 2:51:39 PM
Isopropylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
4-Isopropyltoluene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
4-Methyl-2-pentanone	ND	0.48		mg/Kg	1	12/19/2011 2:51:39 PM
Methylene chloride	ND	0.14		mg/Kg	1	12/19/2011 2:51:39 PM
n-Butylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
n-Propylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
sec-Butylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Styrene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
tert-Butylbenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,1,1,2-Tetrachloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,1,2,2-Tetrachloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Tetrachloroethene (PCE)	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
trans-1,2-DCE	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
trans-1,3-Dichloropropene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,2,3-Trichlorobenzene	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
1,2,4-Trichlorobenzene	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,1,1-Trichloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,1,2-Trichloroethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Trichloroethene (TCE)	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Trichlorofluoromethane	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
1,2,3-Trichloropropane	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
Vinyl chloride	ND	0.048		mg/Kg	1	12/19/2011 2:51:39 PM
Xylenes, Total	ND	0.097		mg/Kg	1	12/19/2011 2:51:39 PM
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%REC	1	12/19/2011 2:51:39 PM
Surr: 4-Bromofluorobenzene	84.7	70-130		%REC	1	12/19/2011 2:51:39 PM
Surr: Dibromofluoromethane	95.8	63.1-128		%REC	1	12/19/2011 2:51:39 PM
Surr: Toluene-d8	98.0	70-130		%REC	1	12/19/2011 2:51:39 PM
VOLATILES BY 8260B/1311						Analyst: **MMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	T-35-5
Lab Order:	1112721	**Collection Date:**	12/15/2011 11:30:00 AM
Project:	Tank 35 Clean Up	**Date Received:**	12/16/2011
Lab ID:	1112721-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260B/1311						Analyst: **MMS**
Benzene	ND	0.50		mg/L	1	12/29/2011 6:46:39 PM
2-Butanone	ND	10		mg/L	1	12/29/2011 6:46:39 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	12/29/2011 6:46:39 PM
Chlorobenzene	ND	100		mg/L	1	12/29/2011 6:46:39 PM
Chloroform	ND	6.0		mg/L	1	12/29/2011 6:46:39 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	12/29/2011 6:46:39 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	12/29/2011 6:46:39 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	12/29/2011 6:46:39 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	12/29/2011 6:46:39 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	12/29/2011 6:46:39 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	12/29/2011 6:46:39 PM
Vinyl chloride	ND	0.20		mg/L	1	12/29/2011 6:46:39 PM
Surr: 1,2-Dichloroethane-d4	77.3	69.9-130		%REC	1	12/29/2011 6:46:39 PM
Surr: 4-Bromofluorobenzene	83.7	71.2-123		%REC	1	12/29/2011 6:46:39 PM
Surr: Dibromofluoromethane	87.5	73.9-134		%REC	1	12/29/2011 6:46:39 PM
Surr: Toluene-d8	98.8	81.9-122		%REC	1	12/29/2011 6:46:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
NC	Non-Chlorinated	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit	S	Spike recovery outside accepted recovery limits

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	111229020
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1112721
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	111229020-001	**Sampling Date**	12/15/2011	**Date/Time Received**	12/29/2011 11:43 AM
Client Sample ID	1112721-01A / T-35-1	**Sampling Time**	10:45 AM		
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	10	12/30/2011	CRW	SW846 CH7	
Ignitability	Negative			1/3/2012	JWC	EPA 1030	
pH	8.27	ph Units		12/30/2011	KFG	EPA 9045	
Reactive sulfide	203	mg/kg	30	1/5/2012	JTT	SW846 CH7	
%moisture	16.4	Percent		12/30/2011	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	111229020
Address:	4901 HAWKINS NE SUITE D	**Project Name:**	1112721
	ALBUQUERQUE, NM 87109		
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	111229020-002	**Sampling Date**	12/15/2011	**Date/Time Received**	12/29/2011 11:43 AM
Client Sample ID	1112721-02A / T-35-2	**Sampling Time**	10:55 AM		
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	10	12/30/2011	CRW	SW846 CH7	
Ignitability	Negative			1/3/2012	JWC	EPA 1030	
pH	9.01	ph Units		12/30/2011	KFG	EPA 9045	
Reactive sulfide	ND	mg/kg	30	1/5/2012	JTT	SW846 CH7	
%moisture	21.2	Percent		12/30/2011	CRW	%moisture	

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	111229020
Address:	4901 HAWKINS NE SUITE D	**Project Name:**	1112721
	ALBUQUERQUE, NM 87109		
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	111229020-003	**Sampling Date**	12/15/2011	**Date/Time Received**	12/29/2011 11:43 AM
Client Sample ID	1112721-03A / T-35-3	**Sampling Time**	11:10 AM		
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	10	12/30/2011	CRW	SW846 CH7	
Ignitability	Negative			1/3/2012	JWC	EPA 1030	
pH	9.00	ph Units		12/30/2011	KFG	EPA 9045	
Reactive sulfide	ND	mg/kg	30	1/5/2012	JTT	SW846 CH7	
%moisture	11.1	Percent		12/30/2011	CRW	%moisture	

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	111229020
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1112721
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	111229020-004	**Sampling Date**	12/15/2011	**Date/Time Received**	12/29/2011 11:43 AM
Client Sample ID	1112721-04A / T-35-4	**Sampling Time**	11:37 AM		
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	10	12/30/2011	CRW	SW846 CH7	
Ignitability	Negative			1/3/2012	JWC	EPA 1030	
pH	8.54	ph Units		12/30/2011	KFG	EPA 9045	
Reactive sulfide	ND	mg/kg	30	1/5/2012	JTT	SW846 CH7	
%moisture	6.2	Percent		12/30/2011	CRW	%moisture	

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Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	111229020
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1112721
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	111229020-005	**Sampling Date**	12/15/2011	**Date/Time Received**	12/29/2011 11:43 AM
Client Sample ID	1112721-05A / T-35-5	**Sampling Time**	11:30 AM		
Matrix	Soil	**Sample Location**			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide (reactive)	ND	mg/Kg	10	12/30/2011	CRW	SW846 CH7	
Ignitability	Negative			1/3/2012	JWC	EPA 1030	
pH	8.86	ph Units		12/30/2011	KFG	EPA 9045	
Reactive sulfide	ND	mg/kg	30	1/5/2012	JTT	SW846 CH7	
%moisture	12.4	Percent		12/30/2011	CRW	%moisture	

Authorized Signature

John Coddington, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0026; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; CA:Cert2632; ID:WA00169; WA:C585; MT:Cert0095

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: MB-29798		*MBLK*				Batch ID:	**29798**	Analysis Date:	12/18/2011 2:59:58 PM		
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Motor Oil Range Organics (MRO)	ND	mg/Kg	50								
Sample ID: LCS-29798		*LCS*				Batch ID:	**29798**	Analysis Date:	12/18/2011 3:29:56 PM		
Diesel Range Organics (DRO)	51.15	mg/Kg	10	50	0	102	62.7	139			
Method: EPA Method 8015B: Gasoline Range											
Sample ID: MB-29797		*MBLK*				Batch ID:	**29797**	Analysis Date:	12/19/2011 12:23:44 PM		
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: LCS-29797		*LCS*				Batch ID:	**29797**	Analysis Date:	12/19/2011 11:54:58 AM		
Gasoline Range Organics (GRO)	25.04	mg/Kg	5.0	25	0	100	86.4	132			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: mb-29797		*MBLK*				Batch ID:	**29797**	Analysis Date:	12/19/2011 11:35:58 AM		
Benzene	ND	mg/Kg	0.050								
Toluene	ND	mg/Kg	0.050								
Ethylbenzene	ND	mg/Kg	0.050								
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050								
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050								
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050								
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050								
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050								
Naphthalene	ND	mg/Kg	0.10								
1-Methylnaphthalene	ND	mg/Kg	0.20								
2-Methylnaphthalene	ND	mg/Kg	0.20								
Acetone	ND	mg/Kg	0.75								
Bromobenzene	ND	mg/Kg	0.050								
Bromodichloromethane	ND	mg/Kg	0.050								
Bromoform	ND	mg/Kg	0.050								
Bromomethane	ND	mg/Kg	0.15								
2-Butanone	ND	mg/Kg	0.50								
Carbon disulfide	ND	mg/Kg	0.50								
Carbon tetrachloride	ND	mg/Kg	0.10								
Chlorobenzene	ND	mg/Kg	0.050								
Chloroethane	ND	mg/Kg	0.10								
Chloroform	ND	mg/Kg	0.050								
Chloromethane	ND	mg/Kg	0.15								
2-Chlorotoluene	ND	mg/Kg	0.050								
4-Chlorotoluene	ND	mg/Kg	0.050								
cis-1,2-DCE	ND	mg/Kg	0.050								
cis-1,3-Dichloropropene	ND	mg/Kg	0.050								
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10								
Dibromochloromethane	ND	mg/Kg	0.050								
Dibromomethane	ND	mg/Kg	0.10								
1,2-Dichlorobenzene	ND	mg/Kg	0.050								
1,3-Dichlorobenzene	ND	mg/Kg	0.050								
1,4-Dichlorobenzene	ND	mg/Kg	0.050								
Dichlorodifluoromethane	ND	mg/Kg	0.050								
1,1-Dichloroethane	ND	mg/Kg	0.10								
1,1-Dichloroethene	ND	mg/Kg	0.050								
1,2-Dichloropropane	ND	mg/Kg	0.050								
1,3-Dichloropropane	ND	mg/Kg	0.050								
2,2-Dichloropropane	ND	mg/Kg	0.10								
1,1-Dichloropropene	ND	mg/Kg	0.10								
Hexachlorobutadiene	ND	mg/Kg	0.10								
2-Hexanone	ND	mg/Kg	0.50								
Isopropylbenzene	ND	mg/Kg	0.050								
4-Isopropyltoluene	ND	mg/Kg	0.050								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: mb-29797		*MBLK*				Batch ID:	**29797**	Analysis Date:	12/19/2011 11:35:58 AM		
4-Methyl-2-pentanone	ND	mg/Kg	0.50								
Methylene chloride	ND	mg/Kg	0.15								
n-Butylbenzene	ND	mg/Kg	0.050								
n-Propylbenzene	ND	mg/Kg	0.050								
sec-Butylbenzene	ND	mg/Kg	0.050								
Styrene	ND	mg/Kg	0.050								
tert-Butylbenzene	ND	mg/Kg	0.050								
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050								
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050								
Tetrachloroethene (PCE)	ND	mg/Kg	0.050								
trans-1,2-DCE	ND	mg/Kg	0.050								
trans-1,3-Dichloropropene	ND	mg/Kg	0.050								
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10								
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050								
1,1,1-Trichloroethane	ND	mg/Kg	0.050								
1,1,2-Trichloroethane	ND	mg/Kg	0.050								
Trichloroethene (TCE)	ND	mg/Kg	0.050								
Trichlorofluoromethane	ND	mg/Kg	0.050								
1,2,3-Trichloropropane	ND	mg/Kg	0.10								
Vinyl chloride	ND	mg/Kg	0.050								
Xylenes, Total	ND	mg/Kg	0.10								
Sample ID: lcs-29797		*LCS*				Batch ID:	**29797**	Analysis Date:	12/19/2011 12:03:53 PM		
Benzene	1.092	mg/Kg	0.050	1	0	109	70.7	123			
Toluene	1.002	mg/Kg	0.050	1	0	100	80	120			
Chlorobenzene	1.089	mg/Kg	0.050	1	0	109	70	130			
1,1-Dichloroethene	1.100	mg/Kg	0.050	1	0	110	63.1	148			
Trichloroethene (TCE)	1.013	mg/Kg	0.050	1	0	101	63.2	114			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: Volatiles by 8260B/1311											
Sample ID: 1112721-01AMSD		*MSD*				Batch ID:	**29900**	Analysis Date:		12/29/2011 4:55:52 PM	
Benzene	0.4054	mg/L	0.10	0.4	0	101	51.1	171	2.69	0	
Chlorobenzene	0.4119	mg/L	0.10	0.4	0	103	36.1	191	2.73	0	
1,1-Dichloroethene	0.3894	mg/L	0.10	0.4	0	97.3	49.1	162	5.46	0	
Trichloroethene (TCE)	0.3582	mg/L	0.10	0.4	0	89.6	41.2	166	3.01	0	
Sample ID: mb-29900		*MBLK*				Batch ID:	**29900**	Analysis Date:		12/29/2011 3:04:18 PM	
Benzene	ND	mg/L	0.50								
2-Butanone	ND	mg/L	10								
Carbon Tetrachloride	ND	mg/L	0.50								
Chlorobenzene	ND	mg/L	100								
Chloroform	ND	mg/L	6.0								
1,4-Dichlorobenzene	ND	mg/L	7.5								
1,2-Dichloroethane (EDC)	ND	mg/L	0.50								
1,1-Dichloroethene	ND	mg/L	0.70								
Hexachlorobutadiene	ND	mg/L	0.50								
Tetrachloroethene (PCE)	ND	mg/L	0.70								
Trichloroethene (TCE)	ND	mg/L	0.50								
Vinyl chloride	ND	mg/L	0.20								
Sample ID: lcs-29900		*LCS*				Batch ID:	**29900**	Analysis Date:		12/29/2011 3:32:18 PM	
Benzene	0.4022	mg/L	0.10	0.4	0	101	51.1	171			
Chlorobenzene	0.4188	mg/L	0.10	0.4	0	105	36.1	191			
1,1-Dichloroethene	0.3931	mg/L	0.10	0.4	0	98.3	49.1	162			
Trichloroethene (TCE)	0.3806	mg/L	0.10	0.4	0	95.2	41.2	166			
Sample ID: 1112721-01AMS		*MS*				Batch ID:	**29900**	Analysis Date:		12/29/2011 4:27:56 PM	
Benzene	0.4164	mg/L	0.10	0.4	0	104	51.1	171			
Chlorobenzene	0.4233	mg/L	0.10	0.4	0	106	36.1	191			
1,1-Dichloroethene	0.4112	mg/L	0.10	0.4	0	103	49.1	162			
Trichloroethene (TCE)	0.3692	mg/L	0.10	0.4	0	92.3	41.2	166			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: mb-29816		*MBLK*				Batch ID:	**29816**	Analysis Date:	12/20/2011 8:09:06 PM		
Acenaphthene	ND	mg/Kg	0.20								
Acenaphthylene	ND	mg/Kg	0.20								
Aniline	ND	mg/Kg	0.20								
Anthracene	ND	mg/Kg	0.20								
Azobenzene	ND	mg/Kg	0.20								
Benz(a)anthracene	ND	mg/Kg	0.20								
Benzo(a)pyrene	ND	mg/Kg	0.20								
Benzo(b)fluoranthene	ND	mg/Kg	0.20								
Benzo(g,h,i)perylene	ND	mg/Kg	0.20								
Benzo(k)fluoranthene	ND	mg/Kg	0.20								
Benzoic acid	ND	mg/Kg	0.50								
Benzyl alcohol	ND	mg/Kg	0.20								
Bis(2-chloroethoxy)methane	ND	mg/Kg	0.20								
Bis(2-chloroethyl)ether	ND	mg/Kg	0.20								
Bis(2-chloroisopropyl)ether	ND	mg/Kg	0.20								
Bis(2-ethylhexyl)phthalate	ND	mg/Kg	0.50								
4-Bromophenyl phenyl ether	ND	mg/Kg	0.20								
Butyl benzyl phthalate	ND	mg/Kg	0.20								
Carbazole	ND	mg/Kg	0.20								
4-Chloro-3-methylphenol	ND	mg/Kg	0.50								
4-Chloroaniline	ND	mg/Kg	0.50								
2-Chloronaphthalene	ND	mg/Kg	0.25								
2-Chlorophenol	ND	mg/Kg	0.20								
4-Chlorophenyl phenyl ether	ND	mg/Kg	0.20								
Chrysene	ND	mg/Kg	0.20								
Di-n-butyl phthalate	ND	mg/Kg	0.50								
Di-n-octyl phthalate	ND	mg/Kg	0.25								
Dibenz(a,h)anthracene	ND	mg/Kg	0.20								
Dibenzofuran	ND	mg/Kg	0.20								
1,2-Dichlorobenzene	ND	mg/Kg	0.20								
1,3-Dichlorobenzene	ND	mg/Kg	0.20								
1,4-Dichlorobenzene	ND	mg/Kg	0.20								
3,3'-Dichlorobenzidine	ND	mg/Kg	0.25								
Diethyl phthalate	ND	mg/Kg	0.20								
Dimethyl phthalate	ND	mg/Kg	0.20								
2,4-Dichlorophenol	ND	mg/Kg	0.40								
2,4-Dimethylphenol	ND	mg/Kg	0.30								
4,6-Dinitro-2-methylphenol	ND	mg/Kg	0.50								
2,4-Dinitrophenol	ND	mg/Kg	0.40								
2,4-Dinitrotoluene	ND	mg/Kg	0.50								
2,6-Dinitrotoluene	ND	mg/Kg	0.50								
Fluoranthene	ND	mg/Kg	0.20								
Fluorene	ND	mg/Kg	0.20								
Hexachlorobenzene	ND	mg/Kg	0.20								

Qualifiers:

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles											
Sample ID: mb-29816		*MBLK*				Batch ID:	**29816**	Analysis Date:	12/20/2011 8:09:06 PM		
Hexachlorobutadiene	ND	mg/Kg	0.20								
Hexachlorocyclopentadiene	ND	mg/Kg	0.20								
Hexachloroethane	ND	mg/Kg	0.20								
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.20								
Isophorone	ND	mg/Kg	0.50								
2-Methylnaphthalene	ND	mg/Kg	0.20								
1-Methylnaphthalene	ND	mg/Kg	0.20								
2-Methylphenol	ND	mg/Kg	0.50								
3+4-Methylphenol	ND	mg/Kg	0.20								
N-Nitrosodi-n-propylamine	ND	mg/Kg	0.20								
N-Nitrosodiphenylamine	ND	mg/Kg	0.20								
Naphthalene	ND	mg/Kg	0.20								
2-Nitroaniline	ND	mg/Kg	0.20								
3-Nitroaniline	ND	mg/Kg	0.20								
4-Nitroaniline	ND	mg/Kg	0.40								
Nitrobenzene	ND	mg/Kg	0.50								
2-Nitrophenol	ND	mg/Kg	0.20								
4-Nitrophenol	ND	mg/Kg	0.25								
Pentachlorophenol	ND	mg/Kg	0.40								
Phenanthrene	ND	mg/Kg	0.20								
Phenol	ND	mg/Kg	0.20								
Pyrene	ND	mg/Kg	0.20								
Pyridine	ND	mg/Kg	0.50								
1,2,4-Trichlorobenzene	ND	mg/Kg	0.20								
2,4,5-Trichlorophenol	ND	mg/Kg	0.20								
2,4,6-Trichlorophenol	ND	mg/Kg	0.20								
Sample ID: lcs-29816		*LCS*				Batch ID:	**29816**	Analysis Date:	12/20/2011 8:38:08 PM		
Acenaphthene	1.216	mg/Kg	0.20	1.67	0	72.8	49.7	98.1			
4-Chloro-3-methylphenol	2.332	mg/Kg	0.50	3.33	0	70.0	43.8	89.1			
2-Chlorophenol	2.338	mg/Kg	0.20	3.33	0	70.2	41.1	96.9			
1,4-Dichlorobenzene	1.212	mg/Kg	0.20	1.67	0	72.6	41	97.4			
2,4-Dinitrotoluene	1.345	mg/Kg	0.50	1.67	0	80.6	44.4	104			
N-Nitrosodi-n-propylamine	0.9913	mg/Kg	0.20	1.67	0	59.4	39.1	86.9			
4-Nitrophenol	2.253	mg/Kg	0.25	3.33	0	67.7	44.2	107			
Pentachlorophenol	1.685	mg/Kg	0.40	3.33	0	50.6	36.2	80			
Phenol	2.445	mg/Kg	0.20	3.33	0	73.4	42.7	92.7			
Pyrene	1.114	mg/Kg	0.20	1.67	0	66.7	34.7	98.8			
1,2,4-Trichlorobenzene	1.068	mg/Kg	0.20	1.67	0	64.0	37.8	98.3			

Qualifiers:

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C TCLP											
Sample ID: 1112721-01Amsd		*MSD*				Batch ID:	**29917**	Analysis Date:		1/3/2012 2:04:13 PM	
2,4-Dinitrotoluene	0.09830	mg/L	0.010	0.1	0	98.3	9.57	115	14.0	20	
Hexachlorobenzene	0.06686	mg/L	0.010	0.1	0	66.9	15.9	96.9	2.51	20	
Hexachlorobutadiene	0.07474	mg/L	0.010	0.1	0	74.7	21.1	97.9	1.59	20	
Hexachloroethane	0.07794	mg/L	0.010	0.1	0	77.9	18.1	105	5.48	20	
Nitrobenzene	0.08286	mg/L	0.010	0.1	0	82.9	23.3	123	6.97	20	
Pentachlorophenol	0.05194	mg/L	0.010	0.1	0	51.9	10	150	1.38	20	
Pyridine	0.05118	mg/L	0.010	0.1	0	51.2	9.15	86.2	6.83	20	
2,4,5-Trichlorophenol	0.07234	mg/L	0.010	0.1	0	72.3	8.46	119	4.78	20	
2,4,6-Trichlorophenol	0.06908	mg/L	0.010	0.1	0	69.1	4.44	115	3.54	20	
Cresols, Total	0.2429	mg/L	0.010	0.3	0	81.0	8.35	114	11.0	20	
Sample ID: mb-29917		*MBLK*				Batch ID:	**29917**	Analysis Date:		1/3/2012 12:07:57 PM	
2,4-Dinitrotoluene	ND	mg/L	0.13								
Hexachlorobenzene	ND	mg/L	0.13								
Hexachlorobutadiene	ND	mg/L	0.50								
Hexachloroethane	ND	mg/L	3.0								
Nitrobenzene	ND	mg/L	2.0								
Pentachlorophenol	ND	mg/L	100								
Pyridine	ND	mg/L	5.0								
2,4,5-Trichlorophenol	ND	mg/L	400								
2,4,6-Trichlorophenol	ND	mg/L	2.0								
Cresols, Total	ND	mg/L	200								
Sample ID: lcs-29917		*LCS*				Batch ID:	**29917**	Analysis Date:		1/3/2012 12:37:08 PM	
2,4-Dinitrotoluene	0.09236	mg/L	0.010	0.1	0	92.4	18.2	108			
Hexachlorobenzene	0.06614	mg/L	0.010	0.1	0	66.1	34.2	74.5			
Hexachlorobutadiene	0.06722	mg/L	0.010	0.1	0	67.2	31.3	88.5			
Hexachloroethane	0.06796	mg/L	0.010	0.1	0	68.0	31.6	94.6			
Nitrobenzene	0.07686	mg/L	0.010	0.1	0	76.9	39.7	107			
Pentachlorophenol	0.04042	mg/L	0.010	0.1	0	40.4	15.9	86.7			
Pyridine	0.05476	mg/L	0.010	0.1	0	54.8	14.7	73.6			
2,4,5-Trichlorophenol	0.06834	mg/L	0.010	0.1	0	68.3	18.9	102			
2,4,6-Trichlorophenol	0.06020	mg/L	0.010	0.1	0	60.2	12.3	103			
Cresols, Total	0.2326	mg/L	0.010	0.3	0	77.5	25.9	99.2			
Sample ID: 1112721-01Ams		*MS*				Batch ID:	**29917**	Analysis Date:		1/3/2012 1:35:09 PM	
2,4-Dinitrotoluene	0.08542	mg/L	0.010	0.1	0	85.4	9.57	115			
Hexachlorobenzene	0.06856	mg/L	0.010	0.1	0	68.6	15.9	96.9			
Hexachlorobutadiene	0.07356	mg/L	0.010	0.1	0	73.6	21.1	97.9			
Hexachloroethane	0.07378	mg/L	0.010	0.1	0	73.8	18.1	105			
Nitrobenzene	0.07728	mg/L	0.010	0.1	0	77.3	23.3	123			
Pentachlorophenol	0.05266	mg/L	0.010	0.1	0	52.7	10	150			
Pyridine	0.04780	mg/L	0.010	0.1	0	47.8	9.15	86.2			
2,4,5-Trichlorophenol	0.06896	mg/L	0.010	0.1	0	69.0	8.46	119			
2,4,6-Trichlorophenol	0.06668	mg/L	0.010	0.1	0	66.7	4.44	115			
Cresols, Total	0.2176	mg/L	0.010	0.3	0	72.5	8.35	114			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 7471: Mercury											
Sample ID: 1112721-01AMSD		*MSD*				Batch ID: **29809**		Analysis Date:		12/19/2011 1:58:03 PM	
Mercury	0.1911	mg/Kg	0.033	0.166	0.0182	104	75	125	0.587	20	
Sample ID: MB-29809		*MBLK*				Batch ID: **29809**		Analysis Date:		12/19/2011 1:50:53 PM	
Mercury	ND	mg/Kg	0.033								
Sample ID: LCS-29809		*LCS*				Batch ID: **29809**		Analysis Date:		12/19/2011 1:52:40 PM	
Mercury	0.1667	mg/Kg	0.033	0.167	0	100	80	120			
Sample ID: 1112721-01AMS		*MS*				Batch ID: **29809**		Analysis Date:		12/19/2011 1:56:16 PM	
Mercury	0.1900	mg/Kg	0.033	0.165	0.0182	104	75	125			
Method: MERCURY, TCLP											
Sample ID: 1112721-04AMSD		*MSD*				Batch ID: **29918**		Analysis Date:		12/30/2011 1:41:33 PM	
Mercury	ND	mg/L	0.020	0.005	0	101	75	125	0	20	
Sample ID: MB-29918		*MBLK*				Batch ID: **29918**		Analysis Date:		12/30/2011 1:29:08 PM	
Mercury	ND	mg/L	0.020								
Sample ID: LCS-29918		*LCS*				Batch ID: **29918**		Analysis Date:		12/30/2011 1:30:54 PM	
Mercury	ND	mg/L	0.020	0.005	0	106	80	120			
Sample ID: 1112721-04AMS		*MS*				Batch ID: **29918**		Analysis Date:		12/30/2011 1:39:48 PM	
Mercury	ND	mg/L	0.020	0.005	0	97.1	75	125			
Method: EPA Method 6010B: Soil Metals											
Sample ID: MB-29800		*MBLK*				Batch ID: **29800**		Analysis Date:		12/19/2011 12:31:41 PM	
Arsenic	ND	mg/Kg	2.5								
Barium	ND	mg/Kg	0.10								
Cadmium	ND	mg/Kg	0.10								
Chromium	ND	mg/Kg	0.30								
Lead	ND	mg/Kg	0.25								
Selenium	ND	mg/Kg	2.5								
Silver	ND	mg/Kg	0.25								
Sample ID: LCS-29800		*LCS*				Batch ID: **29800**		Analysis Date:		12/19/2011 12:33:36 PM	
Arsenic	27.57	mg/Kg	2.5	25	0	110	80	120			
Barium	25.67	mg/Kg	0.10	25	0	103	80	120			
Cadmium	26.20	mg/Kg	0.10	25	0	105	80	120			
Chromium	25.93	mg/Kg	0.30	25	0.1172	103	80	120			
Lead	26.15	mg/Kg	0.25	25	0	105	80	120			
Selenium	28.34	mg/Kg	2.5	25	0	113	80	120			
Silver	5.113	mg/Kg	0.25	5	0	102	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: Tank 35 Clean Up **Work Order:** 1112721

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: TCLP Metals											
Sample ID: 1112721-05AMSD		*MSD*				Batch ID:	**29915**	Analysis Date:		1/3/2012 8:48:23 AM	
Arsenic	ND	mg/L	5.0	0.5	0	98.5	75	125	0	20	
Cadmium	ND	mg/L	1.0	0.5	0	92.3	75	125	0	20	
Chromium	ND	mg/L	5.0	0.5	0	84.6	75	125	0	20	
Lead	ND	mg/L	5.0	0.5	0.0021	84.4	75	125	0	20	
Selenium	ND	mg/L	1.0	0.5	0	89.1	75	125	0	20	
Silver	ND	mg/L	5.0	0.1	0	91.6	75	125	0	20	
Sample ID: 1112721-05AMSD		*MSD*				Batch ID:	**29915**	Analysis Date:		1/3/2012 9:52:30 AM	
Barium	ND	mg/L	100	0.5	1.611	93.6	75	125	0	20	
Sample ID: MB-29915		*MBLK*				Batch ID:	**29915**	Analysis Date:		1/3/2012 7:57:28 AM	
Arsenic	ND	mg/L	5.0								
Barium	ND	mg/L	100								
Cadmium	ND	mg/L	1.0								
Chromium	ND	mg/L	5.0								
Lead	ND	mg/L	5.0								
Selenium	ND	mg/L	1.0								
Silver	ND	mg/L	5.0								
Sample ID: LCS-29915		*LCS*				Batch ID:	**29915**	Analysis Date:		1/3/2012 8:01:58 AM	
Arsenic	ND	mg/L	5.0	0.5	0	113	80	120			
Barium	ND	mg/L	100	0.5	0	100	80	120			
Cadmium	ND	mg/L	1.0	0.5	0	106	80	120			
Chromium	ND	mg/L	5.0	0.5	0	101	80	120			
Lead	ND	mg/L	5.0	0.5	0	100	80	120			
Selenium	ND	mg/L	1.0	0.5	0	108	80	120			
Silver	ND	mg/L	5.0	0.1	0	155	80	120			S
Sample ID: 1112721-05AMS		*MS*				Batch ID:	**29915**	Analysis Date:		1/3/2012 8:46:04 AM	
Arsenic	ND	mg/L	5.0	0.5	0	123	75	125			
Cadmium	ND	mg/L	1.0	0.5	0	114	75	125			
Chromium	ND	mg/L	5.0	0.5	0	104	75	125			
Lead	ND	mg/L	5.0	0.5	0.0021	104	75	125			
Selenium	ND	mg/L	1.0	0.5	0	109	75	125			
Silver	ND	mg/L	5.0	0.1	0	115	75	125			
Sample ID: 1112721-05AMS		*MS*				Batch ID:	**29915**	Analysis Date:		1/3/2012 9:50:28 AM	
Barium	ND	mg/L	100	0.5	1.611	93.4	75	125			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Chain-of-Custody Record

Client: Western Refining
Gallup Refinery
Mailing Address: RT 3 Box 7
Gallup, NM 87301
Phone #: 505-722-3833
email or Fax#: 505-722-0210
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other ______
☐ EDD (Type) ______

Turn-Around Time: NJ 12/14
☐ Standard ☑ Rush 3 day
Project Name: TANK 35 CLEAN UP
Project #: NA
Project Manager: Beck Larsen
Sampler: Sean Ukele
On Ice: ☑ Yes ☐ No
Sample Temperature: 6.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1112721	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B ~~(VOA)~~ (full)	8270 (Semi-VOA)	DRO/GRO (8015M)				Air Bubbles (Y or N)
12-15-11	1045	SOIL	T-35-1	1 - 8oz	NA	1							X			X	X	X				
↓	1055	↓	T-35-2	↓	↓	2							X			X	X	X				
↓	1110	↓	T-35-3	↓	↓	3							X			X	X	X				
↓	1137	↓	T-35-4	↓	↓	4							X			X	X	X				
↓	1130	↓	T-~~36~~ 35-5 AT 12/16/11	↓	↓	5							X			X	X	X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
12-15-11	1300	Sean Ukele *[signature]*	Tom Fleeres	12-15-11	1300
12/16/11	1040	Tom Fleeres *[signature]*	*[signature]*	12/16/11	1040

Remarks: Per Beck - Add TCLP RCRA 8, 8260, 8270, RCI to all samples AT 12/27. AT 12/27

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, November 18, 2011 1:12 PM
To: 'Riege, Ed'; VanHorn, Kristen, NMENV
Cc: Cobrain, Dave, NMENV; Larsen, Thurman; Dorsey, Alvin
Subject: RE: Confirmation Soil Sampling Plan Gallup Refinery Tank 35 Release (GW-032)

Ed:

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: Riege, Ed [mailto:Ed.Riege@wnr.com]
Sent: Friday, November 18, 2011 12:39 PM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Cobrain, Dave, NMENV; Larsen, Thurman; Dorsey, Alvin
Subject: FW: Confirmation Soil Sampling Plan Gallup Refinery Tank 35 Release (GW-032)

Carl and Kristen,
Thanks for the comments which I have addressed below in red.

Ed

Ed Riege
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Wednesday, November 16, 2011 9:30 AM
To: Riege, Ed
Cc: VanHorn, Kristen, NMENV; Cobrain, Dave, NMENV
Subject: FW: Confirmation Soil Sampling Plan Gallup Refinery Tank 35 Release (GW-032)

Ed:

NMED Comments:

NMED has comments regarding the November 10, 2011 letter from Western Refining about their soil sampling plan for the spill at Tank 35.

1. The Permittee states that they will excavate visually stained soil within the Tank 35 berm. It is not clear whether or not the berm itself was affected by the oily water. If the berm was affected, the Permittee must remove the affected soils and repair the berm.

Lower portions of the Tank 35 berm were affected in some areas. Stained vegetation is visible along the northwest side of the berm near proposed sample location T-35-4 (Photos 4 and 5). In areas where the berm appears to be affected, Gallup does intend to excavate the stained material from the berm and repair the berm.

2. a) The Permittee delineated five stained areas to be excavated and plans to conduct confirmation sampling at five locations. Describe the size of stained areas.

Locations were chosen to represent the most impacted areas (see attached photos), but these areas were not delineated. The contaminated areas appear to be identifiable by staining. Gallup intends to remove all stained soil. We didn't see a necessity to delineate stained soil prior to removing it, however, approximate excavation dimensions will be provided upon completion.

2.b) Describe where will confirmation samples will be taken from (i.e., sides or center of excavation) and what the basis for choosing the location within the stained area for samples will be areas chosen (i.e., from field observation of odor/visible staining).

Gallup intends to collect confirmation samples from the bottom of the excavation at the staked locations. Staked locations were chosen because they appeared to be representative of the most impacted areas (highest degree of staining), suggesting that these areas were in contact with the released fluids for the longest period of time. These locations should represent a worst-case-scenario and were based on field observations of visual staining.

3. A report with the sampling results must be submitted within (90) days of the sampling event.

Gallup will submit a report with sampling days within (90) days of the sampling event.

OCD Comments:

1. Provide a final C-141 with attached photos of the excavation(s), disposition of excavated soils with volume, bottom hole sample (include chloride and sulfate to analytical suite) after stained soils, soils displaying olfactory properties, etc. have been removed.

Gallup will provide a final C-141 with the above-mentioned requirements after the excavation is complete and analytical results are available.

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/

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

From: Chavez, Carl J, EMNRD
Sent: Thursday, November 10, 2011 2:02 PM
To: 'Riege, Ed'; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Morgan, Loretta; Dorsey, Alvin
Subject: RE: Confirmation Soil Sampling Plan

Ed:

OCD is in receipt of your remediation plan based on the Tank 35 release.

I'll be discussing the soil sampling plan with Kristen soon and we'll get back with you soon. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
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From: Riege, Ed [mailto:Ed.Riege@wnr.com]
Sent: Thursday, November 10, 2011 12:37 PM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Morgan, Loretta; Dorsey, Alvin
Subject: Confirmation Soil Sampling Plan

Carl,
The soil cleanup work is to begin on Monday November 14. The Confirmation Soil Sampling Plan is attached for your and Kristen's approval.

Thanks,
Ed

Ed Riege
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, October 27, 2011 7:31 AM
To: Morgan, Loretta

Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

Good morning.

The C-141 Form is marked final report, but the corrective actions have not been completely implemented yet. Please resubmit the form as the initial report and when the corrective actions are completed, Western must submit the final report with all of the attached supporting documentation of the actions taken to correct the situation. Also, please notify the agencies when the work is scheduled to begin so we may be present to witness the corrective action(s).

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
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http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental)

From: Morgan, Loretta [mailto:Loretta.Morgan@wnr.com]
Sent: Wednesday, October 26, 2011 3:50 PM
To: Chavez, Carl J, EMNRD
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Hi Carl

Sorry I had the incorrect date. Attached is the revised C-141 and original placed in mail to you. Thanks.

Loretta Morgan
Environmental Specialist

Western Refining
Route 3 Box 7
Gallup, NM 87301
Phone: (505) 722-0242
Fax: (505) 722-0268
loretta.morgan@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, October 25, 2011 4:33 PM
To: Morgan, Loretta
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

The C-141 does not concur with the OCD e-mail dated October 3, 2011 (see OCD Online C-141s thumbnail page 2). Could you please re-evaluate the C-141 information and revise it and resend it with the revised information by COB tomorrow.

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: Morgan, Loretta [mailto:Loretta.Morgan@wnr.com]
Sent: Tuesday, October 25, 2011 3:27 PM
To: Chavez, Carl J, EMNRD
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Hi Carl

Sorry, the report was sent out in the mail today. Attached is copy of the C141. Thanks

Loretta Morgan
Environmental Specialist

Western Refining
Route 3 Box 7
Gallup, NM 87301
Phone: (505) 722-0242
Fax: (505) 722-0268
loretta.morgan@wnr.com

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Tuesday, October 25, 2011 2:50 PM
To: Morgan, Loretta
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV
Subject: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

Good afternoon. Did Western send the C-141 for this release that was reported on 10/3/2011?

OCD does not see this form in our files. 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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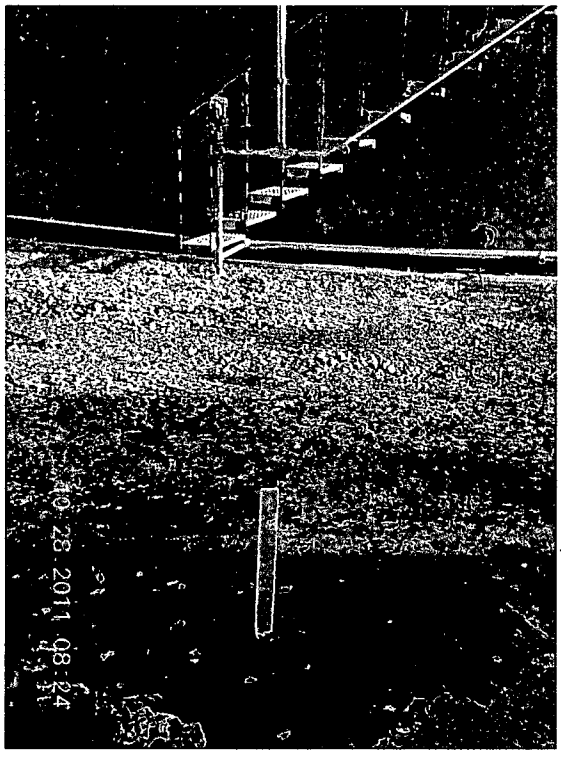
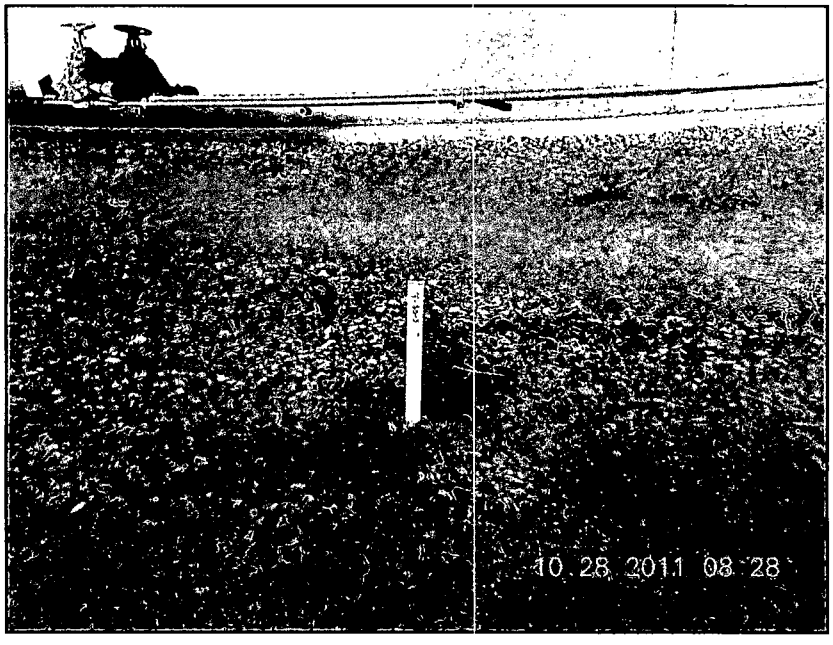
Western Refining
Proposed Confirmation Soil Sample Locations



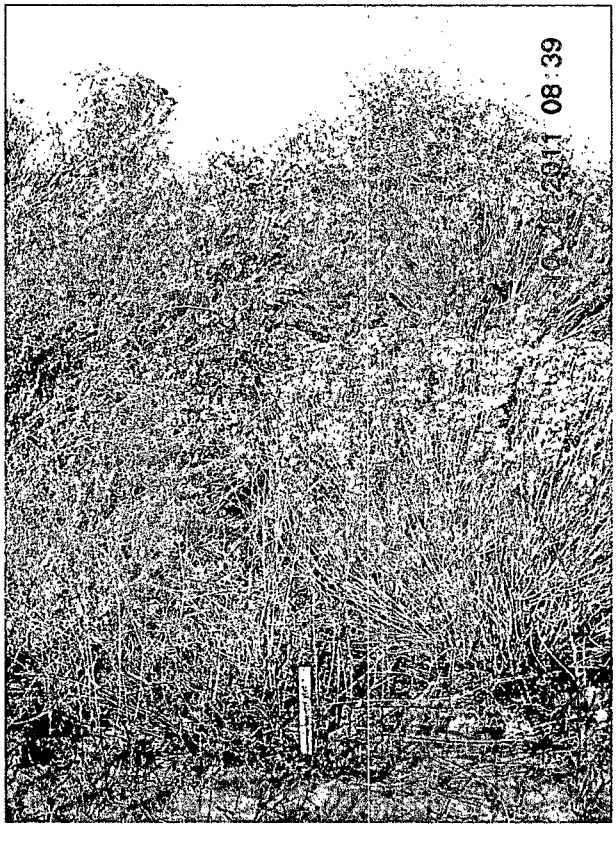
Proposed confirmation soil sample location T-35-1, SW of Tank 35.

Proposed confirmation soil sample location T-35-2, SE of Tank 35.

Western Refining
Proposed Confirmation Soil Sample Locations

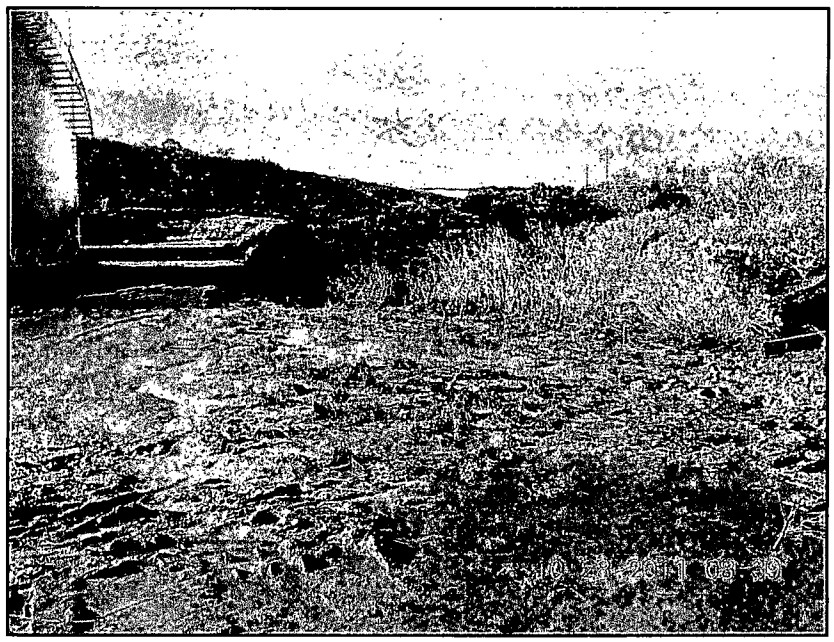


Proposed confirmation soil sample location T-35-3, NW of Tank 35.

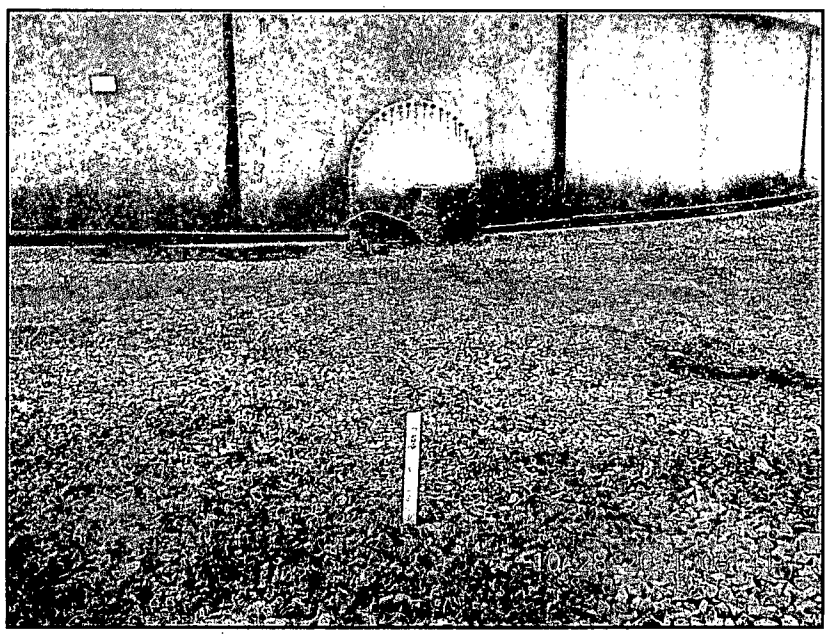


Proposed confirmation soil sample location T-35-4 (zoomed in), NW side of berm.

Western Refining
Proposed Confirmation Soil Sample Locations



Proposed confirmation soil sample location T-35-4 (zoomed out), NW side of berm.



Proposed confirmation soil sample location T-35-5, NW of Tank 35.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, November 16, 2011 9:30 AM
To: 'Riege, Ed'
Cc: VanHorn, Kristen, NMENV; Cobrain, Dave, NMENV
Subject: FW: Confirmation Soil Sampling Plan Gallup Refinery Tank 35 Release (GW-032)

Ed:

NMED Comments:

NMED has comments regarding the November 10, 2011 letter from Western Refining about their soil sampling plan for the spill at Tank 35.

1. The Permittee states that they will excavate visually stained soil within the Tank 35 berm. It is not clear whether or not the berm itself was affected by the oily water. If the berm was affected, the Permittee must remove the affected soils and repair the berm.

2. The Permittee delineated five stained areas to be excavated and plans to conduct confirmation sampling at five locations. Describe the size of stained areas. Describe where will confirmation samples will be taken from (i.e., sides or center of excavation) and what the basis for choosing the location within the stained area for samples will be areas chosen (i.e., from field observation of odor/visible staining).

3. A report with the sampling results must be submitted within (90) days of the sampling event.

OCD Comments:

1. Provide a final C-141 with attached photos of the excavation(s), disposition of excavated soils with volume, bottom hole sample (include chloride and sulfate to analytical suite) after stained soils, soils displaying olfactory properties, etc. have been 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/ocd/
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http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental)

From: Chavez, Carl J, EMNRD
Sent: Thursday, November 10, 2011 2:02 PM
To: 'Riege, Ed'; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Morgan, Loretta; Dorsey, Alvin
Subject: RE: Confirmation Soil Sampling Plan

Ed:

OCD is in receipt of your remediation plan based on the Tank 35 release.

I'll be discussing the soil sampling plan with Kristen soon and we'll get back with you soon. 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
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Sent: Thursday, November 10, 2011 12:37 PM
To: Chavez, Carl J, EMNRD; VanHorn, Kristen, NMENV
Cc: Larsen, Thurman; Morgan, Loretta; Dorsey, Alvin
Subject: Confirmation Soil Sampling Plan

Carl,
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Thanks,
Ed

Ed Riege
Environmental Manager

Western Refining
Gallup Refinery
Route 3 Box 7
Gallup, NM 87301
(505) 722-0217
ed.riege@wnr.com

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Sent: Thursday, October 27, 2011 7:31 AM
To: Morgan, Loretta
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

Good morning.

The C-141 Form is marked final report, but the corrective actions have not been completely implemented yet. Please resubmit the form as the initial report and when the corrective actions are completed, Western must submit the final report with all of the attached supporting documentation of the actions taken to correct the situation. Also, please notify the agencies when the work is scheduled to begin so we may be present to witness the corrective action(s).

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
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Sent: Wednesday, October 26, 2011 3:50 PM
To: Chavez, Carl J, EMNRD
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

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Loretta Morgan
Environmental Specialist

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Phone: (505) 722-0242
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loretta.morgan@wnr.com

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Sent: Tuesday, October 25, 2011 4:33 PM
To: Morgan, Loretta
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
Subject: RE: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

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Thank you.

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From: Morgan, Loretta [mailto:Loretta.Morgan@wnr.com]
Sent: Tuesday, October 25, 2011 3:27 PM
To: Chavez, Carl J, EMNRD
Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV; Riege, Ed; Larsen, Thurman
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Hi Carl

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Loretta Morgan
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Cc: VonGonten, Glenn, EMNRD; VanHorn, Kristen, NMENV
Subject: C-141 for Tank 35 Oily Waste Water Overflow Gallup Refinery (GW-032)

Loretta:

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OCD does not see this form in our files. Thank you.

Carl J. Chavez, CHMM
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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)

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, April 05, 2011 4:03 PM
To: 'Larsen, Thurman'
Cc: VanHorn, Kristen, NMENV; VonGonten, Glenn, EMNRD
Subject: Western Refining SW, Inc.- Gallup Refinery (GW-032) Tank 116 ULSD Release and Passive Venting Remediation Plan (3/11/2011)

Beck:

The tank farm is part of RCRA SWMU #6 and RCRA corrective action will be complete when the entire SWMU is cleaned up.

The OCD has the following observations and/or requirements:

Under the OCD Discharge Permit point at which Western feels the baseline or graphical representation of analytical monitoring data shows the effectiveness of the passive venting system. The proposed semi-annual progress reports that Western indicates it is prepared to submit in July and January of each year forms a good starting point for the first two years. The agencies will need to see charts with trend observations (max, min and average VOC readings) from each vent well with an associated schematic displaying each vent well. Any isocon representation of monitoring results may also be helpful in supporting when corrective action is complete or a consistent baseline is established to leave the passive system in place until the SWMU is addressed under RCRA. I think Western would agree it is better to leave the vent wells in place as long as possible. The operator should mound the borehole around the well to facilitate drainage away from the wellbore.

That's it. Please let the agencies know if you agree and/or any concerns or questions that you may have. 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)

Western Refining
GALLUP

WNR LISTED NYSE

RECEIVED OCD

2011 MAR 14 A 11:46

March 11, 2011

New Mexico Environmental Department
Hazardous Waste Bureau (HWB)
1301 Siler Road, Building B
Santa Fe, NM 87507
Attn: Kristen Van Horn

✓ New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division (OCD)
1220 South St. Francis Drive
Santa Fe, NM 87505
Attn: Mr. Carl Chavez

Re: **Passive Bioremediation (Bio-venting) Project Update for remediating Ultra Low Sulfur Diesel (ULSD) in accordance with (NSR Permit No. 0633-M8-R3, Part A.214)**

Dear Ms Van Horn and Mr. Chavez:

Western Refining (Gallup Refinery) was recently granted the new NSR Permit 0633-M8-R3 that was signed on October 6, 2010. Under Part A.214 of the new permit, Western Refining may elect to install a Passive Bioremediation (bio-ventilation) System for any Ultra Low Sulfur Diesel (ULSD) fuel spills.

Agency notification for the installation of the standpipes was made via e-mail **(Refer to Agency Correspondence via e-mail from November 24 and December 7, 2010)** that was based on the Sample Pipe Location Plan as identified in the enclosed attachment. A pipe grid system was devised prior to drilling in order to determine the exact location of each pipe to be installed. The pipe layout or grid system consists of a central pipe location (C1), west of tanks (T-116 and T-115) along the east side of the dike wall, which is used as a reference point for ventilation pipe placement. Concentric semi-circles radiating out from this central point (C1) were identified for pipe placement as shown in the enclosed Sample Pipe Location Plan. (**Refer to Sample Pipe Location Plan**) The standpipes are to have approximately six foot spacing intervals as shown on the drawing.

Preliminary Lay-out- A preliminary lay-out was constructed in order to identify the area and spacing required. A rough drawing was given to the Drafting Department in order to provide maintenance a formal drawing of pipe location before any fabrication could be performed. **(Refer to Sample Pipe Location Plan)**

Pipe Fabrication- A preliminary pipe construction drawing was also given to the Drafting Department to provide maintenance a formal drawing of the bio-ventilation pipe that will be installed. Once the Drafting Department formalized a detailed pipe construction drawing, maintenance was notified of its completion. A work order

was then written so that maintenance could begin pipe fabrication of the sixteen ventilation pipes based on the enclosed drawing. **(Refer to Sample Pipe Detail)** The drawing consists of a 2 inch ID by 5 foot length carbon steel pipe with ½ inch holes drilled at ninety degree apart with two inch spacing intervals between rows. Fabrication was completed by middle of November 2010.

Boring and Pipe Installation- Drilling operation began on November 30, 2010. Sixteen hole borings, six inches in diameter, were drilled to a depth of three feet using a two man motorized auger. Ventilation pipe were installed in each of the sixteen borings. Next, a gravel pack (i.e., gravel greater that ½ inch diameter) was put into each hole as per drawing up to four inches below the surface. Soil was placed at the top of the last four inches of each boring hole to act as a seal for the ventilation pipe and for pipe stabilization. All drilling and pipe installation was completed by December 2, 2010. Some pipe placement modifications that deviated from the six foot spacing were used in order to account for existing aboveground piping and obstructions. Rubber caps were put on each pipe in order to prevent obstructions such rain or snow from enter the pipe. Holes were drilled in each pipe in order to allow proper ventilation. **Refer to Sample Pipe Detail with Location of piping, GPS Coordinates, and enclosed pictures**)

VOC Monitoring and Qa/Qc Procedures- After completion of the installation of all sixteen pipes, LDAR (Leak-Detection and Repair) personnel identified each ventilation pipe with a unique LDAR tag. These tags will be used to correlate between the Monitoring Log and the Sampling Plan Location Map as enclosed. On December 7, 2010, LDAR personnel conducted an initial Volatile Organic Compounds (VOC) monitoring using a Flame Ionizing Detector (FID) (TVA-1000) in order to establish a monitoring baseline.

Method 21 uses a portable instrument to detect VOC leaks from sources. The regulations do not specify a model or type of VOC instrument. However, the type of instrument does have to adhere to certain guidelines and requirements as specified in the regulations. One of the requirements for the instrument is that the detector either should be a catalytic oxidation, flame ionization, infrared absorption, or photo-ionization type of detector. Specific instrument methodology is addressed under Method 21. LDAR personnel use the proper Qa/Qc procedures for Volatile Organic Compounds (VOC) monitoring as prescribed by EPA in accordance with Method 21. This document specifies all guidelines for Qa/Qc procedures and detection of VOC leaks from process equipment. Daily Qa/Qc must be performed prior to VOC monitoring.(**Refer to Method 21 attachment**)

Monitoring Schedule- Initially VOC monitoring was conducted on a bi-monthly basis from December through January in order to establish a VOC base line. As indicated in the enclosed chart, the concentration fluctuated substantially. In February 2011, VOC monitoring frequency was changed from a bi-monthly to a monthly basis. The objective of the bio-ventilation system will be to decrease the average VOC concentration over time to a satisfactory standard. Western will continue monthly voc monitoring through August 2011. At which time, Western will commence a quarterly voc monitoring schedule. **(Refer to Bioventing Monitoring Log for T-115/T-116 Tank Area)**

Report Submittals- Passive bioremediation (bio-ventilation) of ultra low sulfur diesel (ULSD) for spill material in order to augment reduction of VOC concentration is a time dependent process. Western Refining (Gallup Refinery) is prepared to provide the Agency with semi-annual progress report on or about July 31 and January 31 based on the prior semi-annual sampling results.

If you should require any additional information or assistance in this matter, please contact me at the number listed below or via e-mail.

Sincerely,

Beck Larsen, CHMM/REM/PG
Environmental Engineer
Western Refining Southwest

Direct Line: (505) 722-0258
e-mail: Thurman.larsen@wnr.com

Cc: File

enc: Bio-venting Monitoring Logs
Letter- Agency E-mail Correspondence
Drawing- "Sample Pipe Location Plan"
Drawing- "Sample Pipe Detail"
Drawing- "Sample Pipe Detail with Location of Piping"
GPS Coordinates
Method 21- Determination of Volatile Organic Compound Leaks" (LDAR Procedures)
EMS Qa/Qc Instrument Calibration Reports for Monitoring Periods
Bio-venting Monitoring Logs
Pictures

BIOVENTING Monitoring Log for T-115/T-116 Tank Area

		READING (PPM)												
		DATE												
Map Location	Date --->	12/7/2010	12/27/2010	1/14/2011	1/21/2011	2/17/2011						AVERAGE	MAXIMUM	MINIMUM
	Temp (deg F)	41	32	28	36	41								
Number	Tag #													
C(1)	22723	2190	6836	2466	4982	2203						4118.5	6836	2190
2	22724	10006	9963	5444	7731	9991						8286	10006	5444
3	22725	20031	51033	14990	12694	18993						24687	51033	12694
4	22726	20025	62111	100000	9916	25103						48013	100000	9916
5	22727	10064	12163	4290	4014	10223						7632.75	12163	4014
6	22728	2340	2750	324	108	2119						1380.5	2750	108
7	22729	4012	5006	1148	401	3954						2641.75	5006	401
8	22730	20093	67115	10066	6510	23145						25946	67115	6510
9	22731	19072	57336	1583	15	17663						19501.5	57336	15
10	22732	70093	89037	11998	10143	74873						45317.75	89037	10143
11	22733	30031	31144	7977	9991	37603						19785.75	31144	7977
12	22734	10056	16600	7079	15699	14002						12358.5	16600	7079
13	22735	160080	193826	44112	8652	153216						101667.5	193826	8652
14	22736	8252	3406	2392	199	9116						3562.25	8252	199
15	22737	50094	72116	38849	10341	49660						42850	72116	10341
16	22738	9112	986	579	123	9731						2700	9112	123
AVERAGE		27846.9	42589.3	15831.1	6344.9	28849.7								

Larsen, Thurman

From: Chavez, Carl J, EMNRD [CarlJ.Chavez@state.nm.us]
Sent: Tuesday, December 07, 2010 10:53 AM
To: Larsen, Thurman
Cc: Van Horn, Kristen, NMENV; Monzeglio, Hope, NMENV; Riege, Ed; beckl@q.com
Subject: RE: Gallup Refinery GW-032 - Tank 116 ULSD - Passive Bioremediation System

Beck:

Good morning. Ok, we'll see more of the system when the report is submitted in early February 2011.

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: Larsen, Thurman [mailto:Thurman.Larsen@wnr.com]
Sent: Friday, December 03, 2010 3:52 PM
To: Chavez, Carl J, EMNRD
Cc: Van Horn, Kristen, NMENV; Monzeglio, Hope, NMENV; Riege, Ed; beckl@q.com
Subject: FW: Gallup Refinery GW-032 - Tank 116 ULSD - Passive Bioremediation System

Dear Carl et all;
Fabrication was completed as scheduled Pipe installation for the bio-venting project was initiated on Tuesday, November 30. Fifteen 6 inch hole was drilled in a radial display from a common point. Fifteen (15) (2 inch) carbon steel pipes were installed at a three foot depth in each hole. A gravel pack was used to fill the annular capacity between the hole wall and the pipe. The installation project was completed on Thursday, December 2, 2010. As stated in the e-mail from the agency of October 28, 2010, a Final Report will be due 30 days from the date of installation or by December 23, 2010.
Sincerely,

Beck Larsen
Environmental Engineer

From: Morgan, Loretta
Sent: Wednesday, November 24, 2010 12:59 PM
To: CarlJ.Chavez@state.nm.us
Cc: Larsen, Thurman; Riege, Ed
Subject: Gallup Refinery GW-032 - Tank 116 ULSD - Passive Bioremediation System

Hi Carl

Just wanted to let you know what our work schedule is for installing the vents.

Our mechanics are currently fabricating the piping with estimated completion date of Tuesday (November 30, 2010). And we have scheduled Bonaguidi Construction in for Wednesday (December 1, 2010) to drill the holes and install the vents (pipes).

Beck is out on vacation until Monday and he will send you a report for follow-up on your comments.

Thanks

3/11/2011

Loretta Morgan
Environmental Specialist

Western Refining
Route 3 Box 7
Gallup, NM 87301
Phone: (505) 722-0242
Fax: (505) 722-0268
loretta.morgan@wnr.com

Larsen, Thurman

From: Morgan, Loretta
Sent: Wednesday, November 24, 2010 12:59 PM
To: CarlJ.Chavez@state.nm.us
Cc: Larsen, Thurman; Riege, Ed
Subject: Gallup Refinery GW-032 - Tank 116 ULSD - Passive Bioremediation System

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Beck is out on vacation until Monday and he will send you a report for follow-up on your comments.

Thanks
Loretta Morgan
Environmental Specialist

Western Refining
Route 3 Box 7
Gallup, NM 87301
Phone: (505) 722-0242
Fax: (505) 722-0268
loretta.morgan@wnr.com

From: Chavez, Carl J, EMNRD [CarlJ.Chavez@state.nm.us]
Sent: Thursday, October 28, 2010 4:05 PM
To: Larsen, Thurman
Cc: Van Horn, Kristen, NMENV; Riege, Ed; VonGonten, Glenn, EMNRD
Subject: RE: Gallup Refinery (GW-032)- Re: Tank 116 Ultra-Low sulfur Diesel; Release and Air Quality Approval for Corrective Action (Letter of October 14, 2010) using a Passive Bioremediation (Ventilation) System

Beck:

Good afternoon. I discussed the schedule for implementation of the above subject corrective action with the NMED. The corrective action is taken due to the infrastructure present in the area of the original release(s).

The agencies have the following comments and/or requirements:

1) The placement of pipe 2 ft. below ground seems to position the vent pipe in the former excavation backfill. A deeper depth into the contaminated soils to facilitate more efficient venting is needed. Based on this, the agencies request the most efficient depth from Western and will there be peastone backfilled around the pipe?
2) A diagram(s) to scale with the pipe design and construction layout is requested to assess the actual aerial extent of the passive vent system and orientation of piping. Will there be vertical and radial and horizontal orientation of pipes from vertical?
3) At least 72 hr. notification when construction work and/or FID monitoring is performed.
4) A report submitted within 30 days of construction and/or activation of the system which should contain a brief summary of work with photos of the installation and field analytical FID monitoring results should be included for the baseline and rationale for establishment of contamination levels with table of monitoring data and rationale for derivation. The agencies would expect concentrations to increase during the warmer summer months.
5) The agencies request a summary of how the FID monitoring will be conducted. I believe you provided the model, but we need to make sure there will be QA/QC with calibration documentation before monitoring, where exactly the sample will be taken and how? Will there also be ambient downwind monitoring close to ground level with a description of weather conditions (10 mph winds toward the SE and temperature during each sample events?
6) Once the contamination level is established from the initial installation report, monitoring will need to occur, especially in the warm season months to help document the success of the passive vent system. The agencies are not comfortable with the language provided in the e-mail about monitoring to some point. Western will need to describe in the report a proposed end of monitoring or verification of remediation, i.e., monthly monitoring during the summer months that confirm FID concentrations have diminished to an acceptable level. Perhaps Western at the appropriate time it feels remediation is complete, may submit the data with concentration charts supporting a request to stop monitoring. Also, the monitoring results should be submitted to the agencies with a chart within 30 days of monitoring. This can be done via e-mail. The agencies should be notified when monitoring will be performed in order to witness the monitoring with the FID, etc. and the agencies may upon site inspection or request for suspension of monitoring visit the corrective action area in the summer months to witness Western's determination.

The agencies will expect to receive notification of install the system within the next 30 days or by 11/25/2010. A report within 30 days of install or by 12/23/2010 with documentation as described above. 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 Guidance is under "Publications")

From: Larsen, Thurman [mailto:Thurman.Larsen@wnr.com]
Sent: Tuesday, October 26, 2010 4:08 PM
To: Chavez, Carl J, EMNRD
Cc: Van Horn, Kristen, NMENV; Riege, Ed
Subject: Gallup Refinery (GW-032)- Re: Tank 116 Ultra-Low sulfur Diesel; Release and Air Quality Approval for Corrective Action (Letter of October 14, 2010) using a Passive Bioremediation (Ventilation) System

Dear Mr. Chavez,

Installation:
As per your e-mail and the recently approved NSR Permit # (0633-M8-R3, A214 A.), Western Refining (Gallup) will proceed with installation of the Passive Bioremediation (Ventilation) System for Tank 116 area is estimated to be within the next thirty to forty-five days. This should allow enough time for the fabrication and installation of the ventilation network. There will be approximately 10 to 15 ventilation or perforated pipes that will be installed at 6 to 8 ft centers. The exact quantity of perforated pipe will vary depending on the extent of the contaminated area (1000 sq ft) as required. These pipes will be inserted to a depth of approximately one to two feet.

Fabrication:
The pipe will be as specified and manufactured as follows: Piping: ID: 2 inch X 2 ft long, Holes: 24 holes drilled at 90 °apart with 2 inch spacing between rows.

Monitoring and Recordkeeping Requirements:
The NSR Permit No (0633-M8-R3, Section A.214 A. 3) specifies the monitoring requirements for passive bioremediation system at any ULSD spill sites. An estimate of the quantity of VOC and HAP compounds will be reported on an annual basis. Records shall be maintained for each petroleum liquid spilled. Such records will include date, time, and quantity of any unrecovered liquids. Analysis will be performed initially to determine the presence of benzene. Records shall be maintained for each ULSD Passive Network installed. Vapor monitoring will be conducted by an outside contractor (EMS) that will be using a vapor detection instrument (TVA-1000B), a flame ionization detector (FID). It is expected that microbial activity will reduce the VOC concentration over time. Monitoring of these standpipes will initially be conducted upon installation of these ventilation pipes in order to establish a monitoring baseline. Upon establishing a baseline, VOC monitoring will first be conducted on a quarterly schedule for several quarters. Western will then modify the monitoring schedule in order to monitory VOC concentrations on a semi-annual timeframe.

If you should have any questions concerning this matter, please feel free to contact me at the number listed below or Mr. Ed Riege at (505) 722-0217.

Sincerely,

Beck Larsen; CHMM, REM, RPG
Environmental Engineer

Western Refining Company- Gallup Refinery
Route 3, Box 7
Gallup, NM 87301
Office:(505) 722-0258
Fax: (505) 722-0210
Cell: (505) 862-1749
Email: thurman.larsen@wnr.com

Safety starts with "S", but always begins with YOU"!

Larsen, Thurman

From: Larsen, Thurman

Sent: Tuesday, October 26, 2010 4:08 PM

To: 'Chavez, Carl J, EMNRD'

Cc: 'Van Horn, Kristen, NMENV'; Riege, Ed

Subject: Gallup Refinery (GW-032)- Re: Tank 116 Ultra-Low sulfur Diesel; Release and Air Quality Approval for Corrective Action (Letter of October 14, 2010) using a Passive Bioremediation (Ventilation) System

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Sincerely,

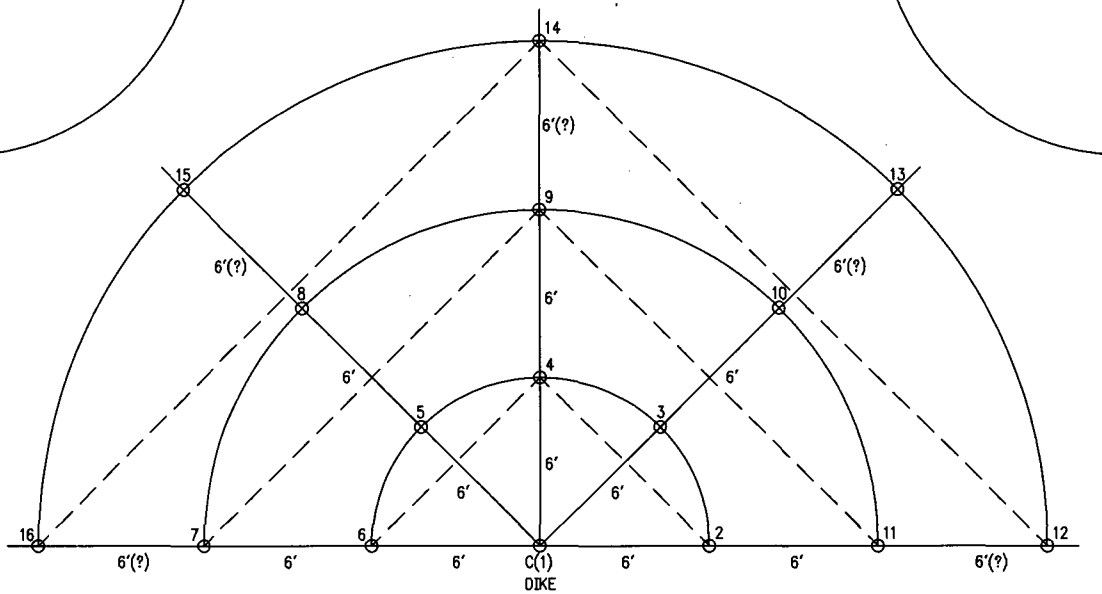
Beck Larsen; CHMM, REM, RPG
Environmental Engineer

Western Refining Company- Gallup Refinery
Route 3, Box 7
Gallup, NM 87301
Office:(505) 722-0258
Fax: (505) 722-0210
Cell: (505) 862-1749
Email: thurman.larsen@wnr.com

Safety starts with "S", but always begins with YOU"!

T-116

T-115



0	ISSUED FOR ENVIRONMENTAL REPORT	12/10	CJP	
NO.	REVISION	DATE	BY	APR

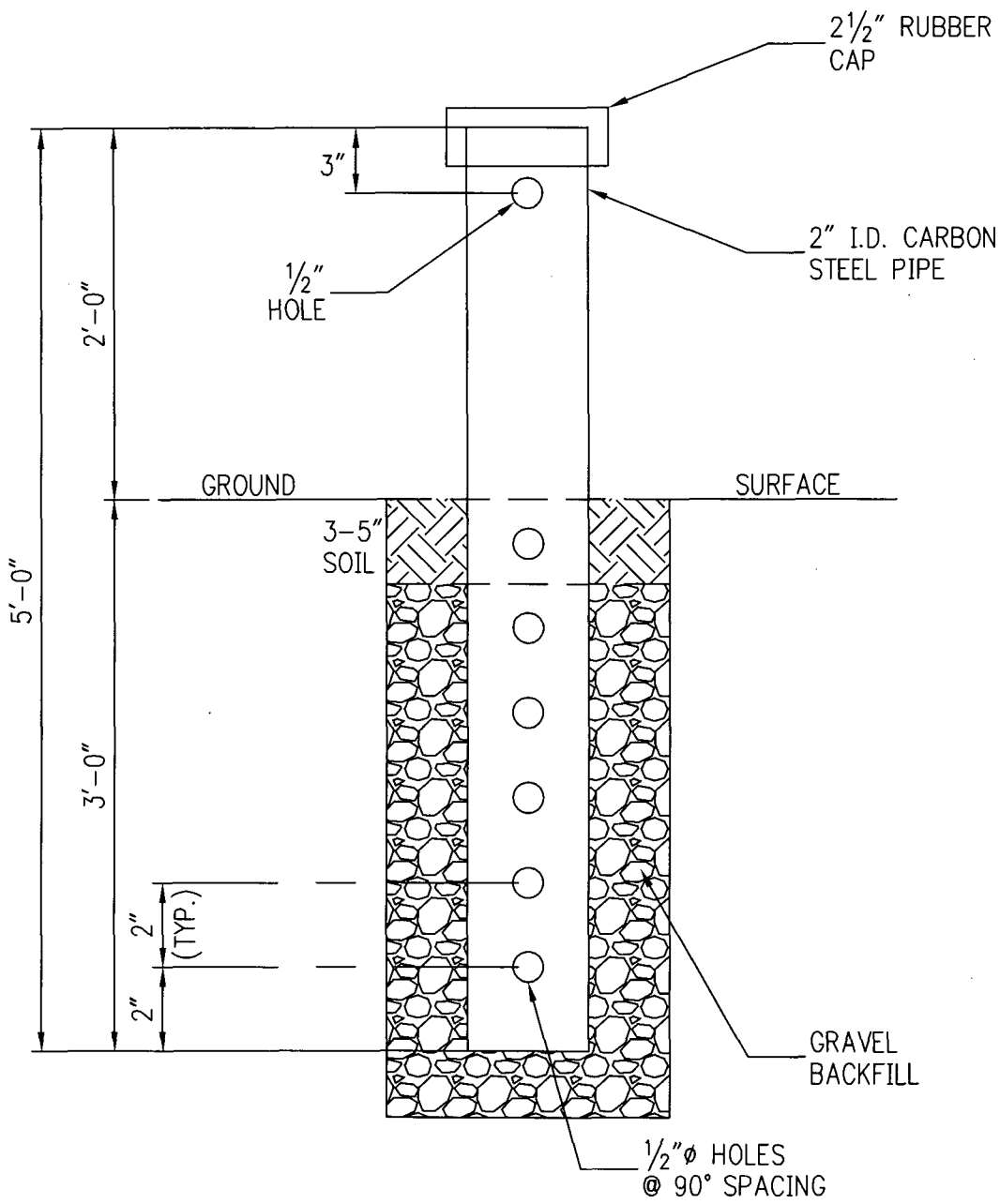
ENG. RECORD	DATE
DRAWN BY CJP	12/16/10
CHECKED	
APPROVED	
APPROVED	
SCALE NONE	

SAMPLE PIPE LOCATION PLAN

JOB NO.

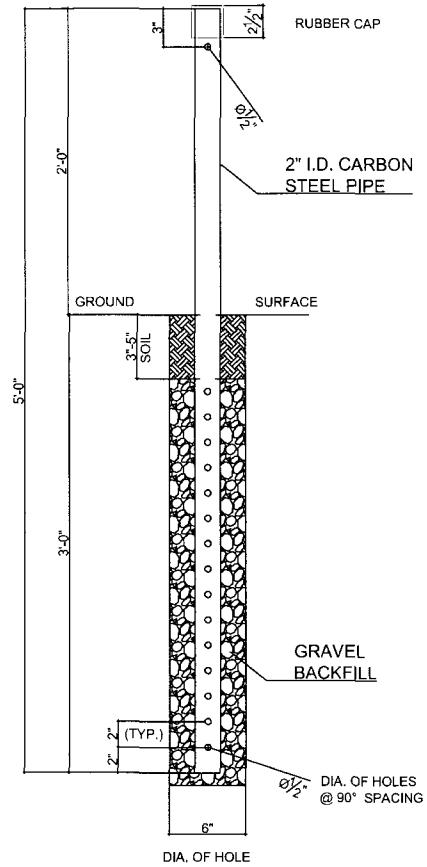
DRAWING NO.

REV. 0

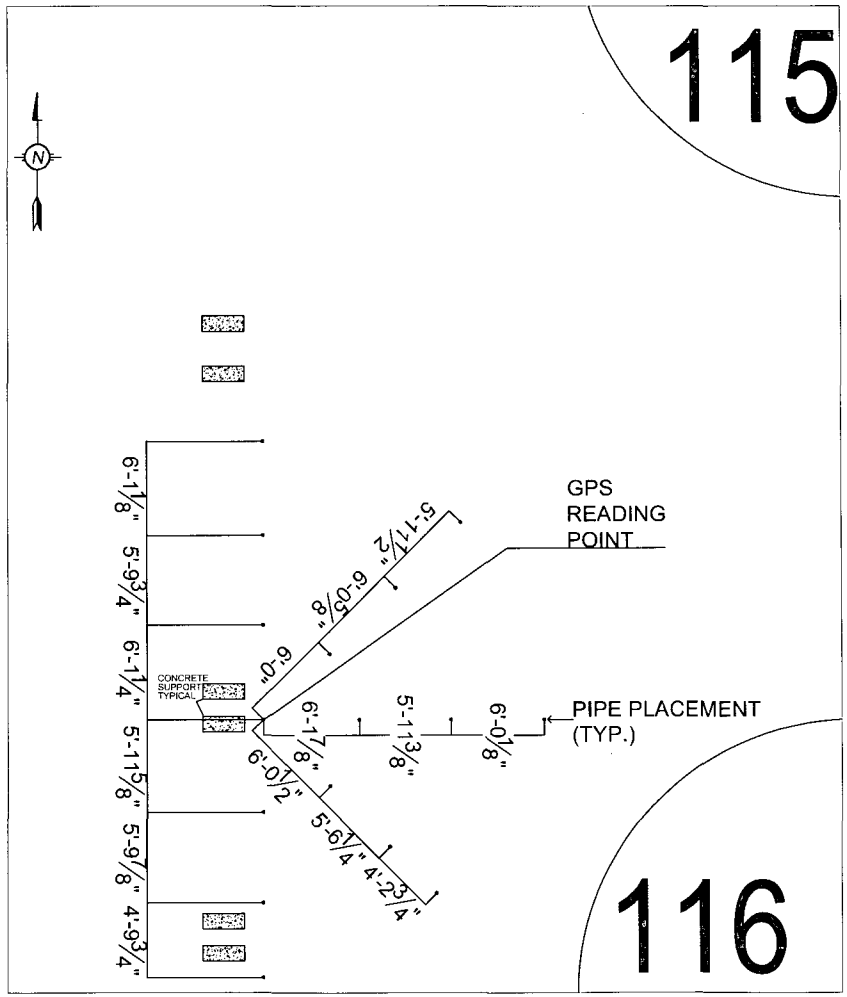


0	ISSUED FOR ENVIRONMENTAL REPORT	12/10	CJP	
NO.	REVISION	DATE	BY	APR

ENG. RECORD	DATE	SAMPLE PIPE DETAIL
DRAWN BY CJP	12/16/10	
CHECKED		
APPROVED		JOB NO.
APPROVED		DRAWING NO. REV. 0
SCALE NONE		



SAMPLE PIPE DETAIL

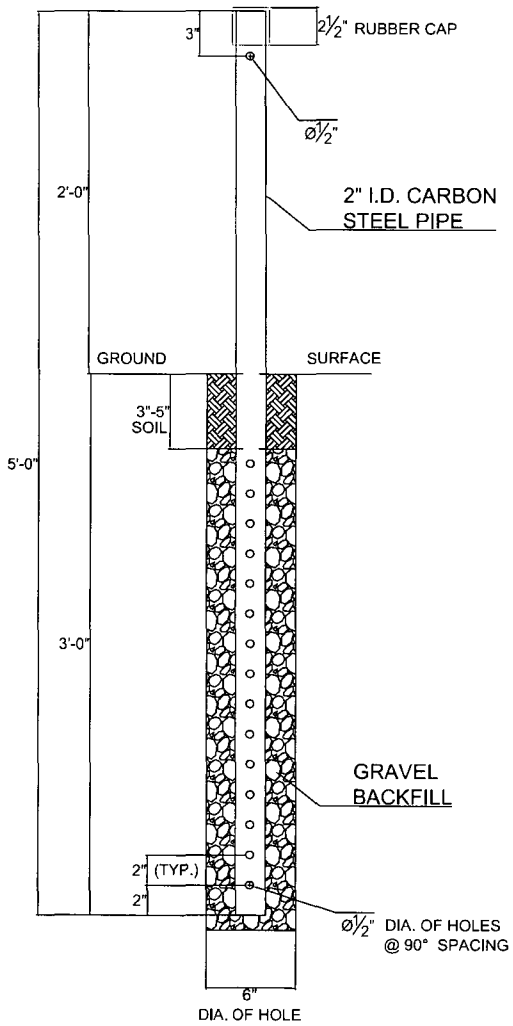


LOCATION OF PIPING

REV.	REVISION DESCRIPTION	DRN. BY	APP'D. BY	DATE
1	AS BUILT PER FIELD VERIFICATION	KLT		2/2/11

SAMPLE PIPE DETAIL WITH LOCATIONS OF PIPING

DRN. BY: KLT	DATE: 2FEB11	REF. No:
CHK'D. BY:	DATE:	CAD REF:
APP'D. BY:	DATE:	N:/P&ID/
DRAWING NO. XXX-XX-XXX		REV 1



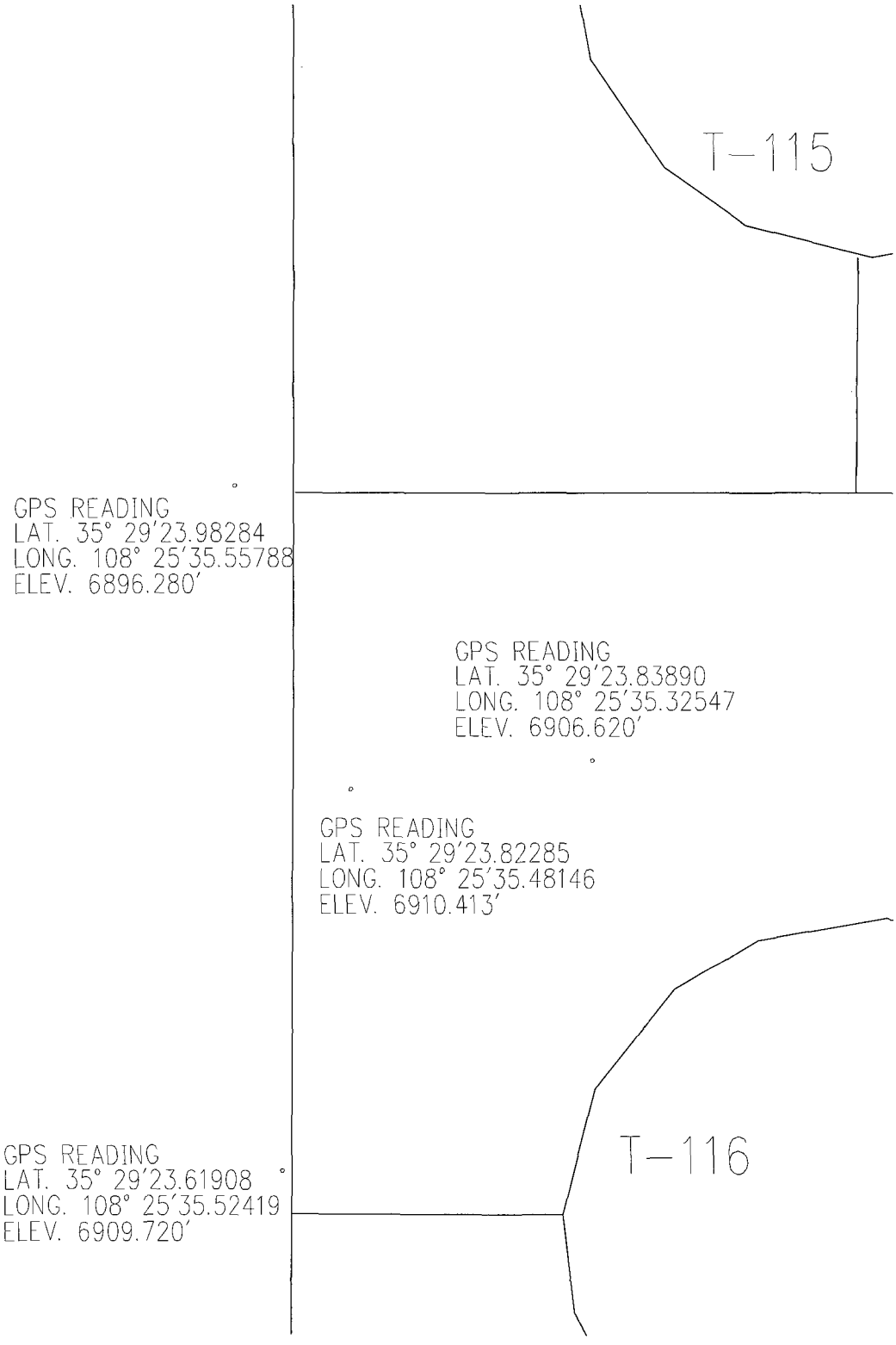
REV.	REVISION DESCRIPTION	DRN. BY	APP'D. BY	DATE
2				
1				
1	UPDATED DETAIL DRAWING	KLT		2/15/11
0	ISSUED FOR ENVIRONMENTAL REPORT	CJP		12/16/10

Western Refining
Gallup Refinery

PROCESS & INSTRUMENTATION DIAGRAM
SAMPLE PIPE DETAIL

DRN. BY: CJP	DATE: 12/16/10	RFE No:	
CHK'D. BY:	DATE:	CAD REF:	
APP'D. BY:	DATE:		
DRAWING NO.			REV 1

115
116
GPS
READING
POINT
6'-0 1/8"
5'-11 3/8"
6'-1 7/8"
5'-11 1/2"
6'-0 5/8"
6'-0"
6'-0 1/2"
5'-6 1/4"
4'-2 3/4"
CONCRETE
SUPPORT
TYPICAL
6'-1 1/8"
5'-9 3/4"
6'-1 1/4"
5'-11 5/8"
5'-9 7/8"
4'-9 3/4"


T-115
GPS READING
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LONG. 108° 25'35.55788
ELEV. 6896.280'
GPS READING
LAT. 35° 29'23.83890
LONG. 108° 25'35.32547
ELEV. 6906.620'
GPS READING
LAT. 35° 29'23.82285
LONG. 108° 25'35.48146
ELEV. 6910.413'
T-116
GPS READING
LAT. 35° 29'23.61908
LONG. 108° 25'35.52419
ELEV. 6909.720'

METHOD 21 - DETERMINATION OF VOLATILE ORGANIC COMPOUND LEAKS

1.0 Scope and Application.

1.1 Analytes.

Analyte	CAS No.
Volatile Organic Compounds (VOC)	No CAS number assigned

1.2 Scope. This method is applicable for the determination of VOC leaks from process equipment. These sources include, but are not limited to, valves, flanges and other connections, pumps and compressors, pressure relief devices, process drains, open-ended valves, pump and compressor seal system degassing vents, accumulator vessel vents, agitator seals, and access door seals.

1.3 Data Quality Objectives. Adherence to the requirements of this method will enhance the quality of the data obtained from air pollutant sampling methods.

2.0 Summary of Method.

2.1 A portable instrument is used to detect VOC leaks from individual sources. The instrument detector type is not specified, but it must meet the specifications and performance criteria contained in Section 6.0. A leak definition concentration based on a reference compound is specified in each applicable regulation. This method is intended to locate and classify leaks only, and is not to be

used as a direct measure of mass emission rate from individual sources.

3.0 Definitions.

3.1 *Calibration gas* means the VOC compound used to adjust the instrument meter reading to a known value. The calibration gas is usually the reference compound at a known concentration approximately equal to the leak definition concentration.

3.2 *Calibration precision* means the degree of agreement between measurements of the same known value, expressed as the relative percentage of the average difference between the meter readings and the known concentration to the known concentration.

3.3 *Leak definition concentration* means the local VOC concentration at the surface of a leak source that indicates that a VOC emission (leak) is present. The leak definition is an instrument meter reading based on a reference compound.

3.4 *No detectable emission* means a local VOC concentration at the surface of a leak source, adjusted for local VOC ambient concentration, that is less than 2.5 percent of the specified leak definition concentration. that indicates that a VOC emission (leak) is not present.

3.5 *Reference compound* means the VOC species selected as the instrument calibration basis for specification of the leak definition concentration. (For example, if a leak definition concentration is 10,000 ppm as methane, then any source emission that results in a local concentration that yields a meter reading of 10,000 on an instrument meter calibrated with methane would be classified as a leak. In this example, the leak definition concentration is 10,000 ppm and the reference compound is methane.)

3.6 *Response factor* means the ratio of the known concentration of a VOC compound to the observed meter reading when measured using an instrument calibrated with the reference compound specified in the applicable regulation.

3.7 *Response time* means the time interval from a step change in VOC concentration at the input of the sampling system to the time at which 90 percent of the corresponding final value is reached as displayed on the instrument readout meter.

4.0 Interferences. [Reserved]

5.0 Safety.

5.1 Disclaimer. This method may involve hazardous materials, operations, and equipment. This test method may not address all of the safety problems associated with its

use. It is the responsibility of the user of this test method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to performing this test method.

5.2 Hazardous Pollutants. Several of the compounds, leaks of which may be determined by this method, may be irritating or corrosive to tissues (*e.g.*, heptane) or may be toxic (*e.g.*, benzene, methyl alcohol). Nearly all are fire hazards. Compounds in emissions should be determined through familiarity with the source. Appropriate precautions can be found in reference documents, such as reference No. 4 in Section 16.0.

6.0 Equipment and Supplies.

A VOC monitoring instrument meeting the following specifications is required:

6.1 The VOC instrument detector shall respond to the compounds being processed. Detector types that may meet this requirement include, but are not limited to, catalytic oxidation, flame ionization, infrared absorption, and photoionization.

6.2 The instrument shall be capable of measuring the leak definition concentration specified in the regulation.

6.3 The scale of the instrument meter shall be readable to ±2.5 percent of the specified leak definition concentration.

6.4 The instrument shall be equipped with an electrically driven pump to ensure that a sample is provided to the detector at a constant flow rate. The nominal sample flow rate, as measured at the sample probe tip, shall be 0.10 to 3.0 l/min (0.004 to 0.1 ft^3/min) when the probe is fitted with a glass wool plug or filter that may be used to prevent plugging of the instrument.

6.5 The instrument shall be equipped with a probe or probe extension for sampling not to exceed 6.4 mm (1/4 in) in outside diameter, with a single end opening for admission of sample.

6.6 The instrument shall be intrinsically safe for operation in explosive atmospheres as defined by the National Electrical Code by the National Fire Prevention Association or other applicable regulatory code for operation in any explosive atmospheres that may be encountered in its use. The instrument shall, at a minimum, be intrinsically safe for Class 1, Division 1 conditions, and/or Class 2, Division 1 conditions, as appropriate, as defined by the example code. The instrument shall not be operated with any safety device, such as an exhaust flame arrestor, removed.

7.0 Reagents and Standards.

7.1 Two gas mixtures are required for instrument calibration and performance evaluation:

7.1.1 Zero Gas. Air, less than 10 parts per million by volume (ppmv) VOC.

7.1.2 Calibration Gas. For each organic species that is to be measured during individual source surveys, obtain or prepare a known standard in air at a concentration approximately equal to the applicable leak definition specified in the regulation.

7.2 Cylinder Gases. If cylinder calibration gas mixtures are used, they must be analyzed and certified by the manufacturer to be within 2 percent accuracy, and a shelf life must be specified. Cylinder standards must be either reanalyzed or replaced at the end of the specified shelf life.

7.3 Prepared Gases. Calibration gases may be prepared by the user according to any accepted gaseous preparation procedure that will yield a mixture accurate to within 2 percent. Prepared standards must be replaced each day of use unless it is demonstrated that degradation does not occur during storage.

7.4 Mixtures with non-Reference Compound Gases. Calibrations may be performed using a compound other than

the reference compound. In this case, a conversion factor must be determined for the alternative compound such that the resulting meter readings during source surveys can be converted to reference compound results.

8.0 Sample Collection, Preservation, Storage, and Transport.

8.1 Instrument Performance Evaluation. Assemble and start up the instrument according to the manufacturer's instructions for recommended warmup period and preliminary adjustments.

8.1.1 Response Factor. A response factor must be determined for each compound that is to be measured, either by testing or from reference sources. The response factor tests are required before placing the analyzer into service, but do not have to be repeated at subsequent intervals.

8.1.1.1 Calibrate the instrument with the reference compound as specified in the applicable regulation. Introduce the calibration gas mixture to the analyzer and record the observed meter reading. Introduce zero gas until a stable reading is obtained. Make a total of three measurements by alternating between the calibration gas and zero gas. Calculate the response factor for each repetition and the average response factor.

8.1.1.2 The instrument response factors for each of the individual VOC to be measured shall be less than 10 unless otherwise specified in the applicable regulation. When no instrument is available that meets this specification when calibrated with the reference VOC specified in the applicable regulation, the available instrument may be calibrated with one of the VOC to be measured, or any other VOC, so long as the instrument then has a response factor of less than 10 for each of the individual VOC to be measured.

8.1.1.3 Alternatively, if response factors have been published for the compounds of interest for the instrument or detector type, the response factor determination is not required, and existing results may be referenced. Examples of published response factors for flame ionization and catalytic oxidation detectors are included in References 1-3 of Section 17.0.

8.1.2 Calibration Precision. The calibration precision test must be completed prior to placing the analyzer into service and at subsequent 3-month intervals or at the next use, whichever is later.

8.1.2.1 Make a total of three measurements by alternately using zero gas and the specified calibration gas. Record the meter readings. Calculate the average algebraic difference between the meter readings and the

known value. Divide this average difference by the known calibration value and multiply by 100 to express the resulting calibration precision as a percentage.

8.1.2.2 The calibration precision shall be equal to or less than 10 percent of the calibration gas value.

8.1.3 Response Time. The response time test is required before placing the instrument into service. If a modification to the sample pumping system or flow configuration is made that would change the response time, a new test is required before further use.

8.1.3.1 Introduce zero gas into the instrument sample probe. When the meter reading has stabilized, switch quickly to the specified calibration gas. After switching, measure the time required to attain 90 percent of the final stable reading. Perform this test sequence three times and record the results. Calculate the average response time.

8.1.3.2 The instrument response time shall be equal to or less than 30 seconds. The instrument pump, dilution probe (if any), sample probe, and probe filter that will be used during testing shall all be in place during the response time determination.

8.2 Instrument Calibration. Calibrate the VOC monitoring instrument according to Section 10.0.

8.3 Individual Source Surveys.

8.3.1 Type I - Leak Definition Based on Concentration. Place the probe inlet at the surface of the component interface where leakage could occur. Move the probe along the interface periphery while observing the instrument readout. If an increased meter reading is observed, slowly sample the interface where leakage is indicated until the maximum meter reading is obtained. Leave the probe inlet at this maximum reading location for approximately two times the instrument response time. If the maximum observed meter reading is greater than the leak definition in the applicable regulation, record and report the results as specified in the regulation reporting requirements. Examples of the application of this general technique to specific equipment types are:

8.3.1.1 Valves. The most common source of leaks from valves is the seal between the stem and housing. Place the probe at the interface where the stem exits the packing gland and sample the stem circumference. Also, place the probe at the interface of the packing gland take-up flange seat and sample the periphery. In addition, survey valve housings of multipart assembly at the surface of all interfaces where a leak could occur.

8.3.1.2 Flanges and Other Connections. For welded flanges, place the probe at the outer edge of the flange-gasket interface and sample the circumference of the flange.

Sample other types of nonpermanent joints (such as threaded connections) with a similar traverse.

8.3.1.3 Pumps and Compressors. Conduct a circumferential traverse at the outer surface of the pump or compressor shaft and seal interface. If the source is a rotating shaft, position the probe inlet within 1 cm of the shaft-seal interface for the survey. If the housing configuration prevents a complete traverse of the shaft periphery, sample all accessible portions. Sample all other joints on the pump or compressor housing where leakage could occur.

8.3.1.4 Pressure Relief Devices. The configuration of most pressure relief devices prevents sampling at the sealing seat interface. For those devices equipped with an enclosed extension, or horn, place the probe inlet at approximately the center of the exhaust area to the atmosphere.

8.3.1.5 Process Drains. For open drains, place the probe inlet at approximately the center of the area open to the atmosphere. For covered drains, place the probe at the surface of the cover interface and conduct a peripheral traverse.

8.3.1.6 Open-ended Lines or Valves. Place the probe inlet at approximately the center of the opening to the atmosphere.

8.3.1.7 Seal System Degassing Vents and Accumulator Vents. Place the probe inlet at approximately the center of the opening to the atmosphere.

8.3.1.8 Access door seals. Place the probe inlet at the surface of the door seal interface and conduct a peripheral traverse.

8.3.2 Type II - "No Detectable Emission". Determine the local ambient VOC concentration around the source by moving the probe randomly upwind and downwind at a distance of one to two meters from the source. If an interference exists with this determination due to a nearby emission or leak, the local ambient concentration may be determined at distances closer to the source, but in no case shall the distance be less than 25 centimeters. Then move the probe inlet to the surface of the source and determine the concentration as outlined in Section 8.3.1. The difference between these concentrations determines whether there are no detectable emissions. Record and report the results as specified by the regulation. For those cases where the regulation requires a specific device installation, or that specified vents be ducted or piped to a control device, the existence of these conditions shall be visually confirmed. When the regulation also requires that no detectable emissions exist, visual observations and sampling surveys are required. Examples of this technique are:

8.3.2.1 Pump or Compressor Seals. If applicable, determine the type of shaft seal. Perform a survey of the local area ambient VOC concentration and determine if detectable emissions exist as described in Section 8.3.2.

8.3.2.2 Seal System Degassing Vents, Accumulator Vessel Vents, Pressure Relief Devices. If applicable, observe whether or not the applicable ducting or piping exists. Also, determine if any sources exist in the ducting or piping where emissions could occur upstream of the control device. If the required ducting or piping exists and there are no sources where the emissions could be vented to the atmosphere upstream of the control device, then it is presumed that no detectable emissions are present. If there are sources in the ducting or piping where emissions could be vented or sources where leaks could occur, the sampling surveys described in Section 8.3.2 shall be used to determine if detectable emissions exist.

8.3.3 Alternative Screening Procedure.

8.3.3.1 A screening procedure based on the formation of bubbles in a soap solution that is sprayed on a potential leak source may be used for those sources that do not have continuously moving parts, that do not have surface temperatures greater than the boiling point or less than the freezing point of the soap solution, that do not have open areas to the atmosphere that the soap solution cannot

bridge, or that do not exhibit evidence of liquid leakage. Sources that have these conditions present must be surveyed using the instrument technique of Section 8.3.1 or 8.3.2.

8.3.3.2 Spray a soap solution over all potential leak sources. The soap solution may be a commercially available leak detection solution or may be prepared using concentrated detergent and water. A pressure sprayer or squeeze bottle may be used to dispense the solution. Observe the potential leak sites to determine if any bubbles are formed. If no bubbles are observed, the source is presumed to have no detectable emissions or leaks as applicable. If any bubbles are observed, the instrument techniques of Section 8.3.1 or 8.3.2 shall be used to determine if a leak exists, or if the source has detectable emissions, as applicable.

9.0 Quality Control.

Section	Quality Control Measure	Effect
8.1.2	Instrument calibration precision check	Ensure precision and accuracy, respectively, of instrument response to standard
10.0	Instrument calibration	

10.0 Calibration and Standardization.

10.1 Calibrate the VOC monitoring instrument as follows. After the appropriate warmup period and zero

internal calibration procedure, introduce the calibration gas into the instrument sample probe. Adjust the instrument meter readout to correspond to the calibration gas value.

NOTE: If the meter readout cannot be adjusted to the proper value, a malfunction of the analyzer is indicated and corrective actions are necessary before use.

11.0 Analytical Procedures. [Reserved]

12.0 Data Analyses and Calculations. [Reserved]

13.0 Method Performance. [Reserved]

14.0 Pollution Prevention. [Reserved]

15.0 Waste Management. [Reserved]

16.0 References.

1. Dubose, D.A., and G.E. Harris. Response Factors of VOC Analyzers at a Meter Reading of 10,000 ppmv for Selected Organic Compounds. U.S. Environmental Protection Agency, Research Triangle Park, NC. Publication No. EPA 600/2-81051. September 1981.

2. Brown, G.E., *et al.* Response Factors of VOC Analyzers Calibrated with Methane for Selected Organic Compounds. U.S. Environmental Protection Agency, Research Triangle Park, NC. Publication No. EPA 600/2-81-022. May 1981.

3. DuBose, D.A. *et al.* Response of Portable VOC Analyzers to Chemical Mixtures. U.S. Environmental

Protection Agency, Research Triangle Park, NC. Publication No. EPA 600/2-81-110. September 1981.

4. Handbook of Hazardous Materials: Fire, Safety, Health. Alliance of American Insurers. Schaumberg, IL. 1983.

17.0 Tables, Diagrams, Flowcharts, and Validation Data.

[Reserved]

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 2/17/11 9:44

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.902	9.499
READING #2	1.908	9.495
READING #3	1.907	9.491
ERROR PRECISION	2.27	1.30
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	3	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 2/17/11 9:46

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	504	9.499
READING #2	508	9.495
READING #3	509	9.491
ERROR PRECISION	0.60	1.30
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	3	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 2/17/11 11:48

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.919	9.513
READING #2	1.919	9.513
READING #3	1.919	9.513
ERROR PRECISION	1.59	1.11
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 2/17/11 11:49

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	511	9.513
READING #2	511	9.513
READING #3	511	9.513
ERROR PRECISION	1.39	1.11
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 2/17/11 16:13

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.899	9.406
READING #2	1.899	9.406
READING #3	1.899	9.406
ERROR PRECISION	2.62	2.22
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 2/17/11 16:13

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	500	9.406
READING #2	500	9.406
READING #3	500	9.406
ERROR PRECISION	0.79	2.22
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 2/17/11 9:46

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.950	9.597
READING #2	1.949	9.591
READING #3	1.952	9.593
ERROR PRECISION	0.02	0.27
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	3	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 2/17/11 9:47

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	501	9.597
READING #2	499	9.591
READING #3	498	9.593
ERROR PRECISION	0.93	0.27
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	3	4	3	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 2/17/11 11:49

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	506	9.581
READING #2	506	9.581
READING #3	506	9.581
ERROR PRECISION	0.40	0.41
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 2/17/11 11:50

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.959	9.581
READING #2	1.959	9.581
READING #3	1.959	9.581
ERROR PRECISION	0.46	0.41
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 2/17/11 16:13

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.980	9.613
READING #2	1.980	9.613
READING #3	1.980	9.613
ERROR PRECISION	1.54	0.07
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 2/17/11 16:14

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	511	9.613
READING #2	511	9.613
READING #3	511	9.613
ERROR PRECISION	1.39	0.07
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 3/10/2011 AT 4:08:59PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/21/11 9:15

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	515	9.541
READING #2	511	9.530
READING #3	512	9.528
ERROR PRECISION	1.72	0.90
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	3	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/21/11 12:47

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.899	9.518
READING #2	1.899	9.518
READING #3	1.899	9.518
ERROR PRECISION	2.62	1.06
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/21/11 12:48

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	519	9.518
READING #2	519	9.518
READING #3	519	9.518
ERROR PRECISION	2.98	1.06
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/21/11 16:38

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.905	9.525
READING #2	1.905	9.525
READING #3	1.905	9.525
ERROR PRECISION	2.31	0.99
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/21/11 16:39

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	522	9.525
READING #2	522	9.525
READING #3	552	9.525
ERROR PRECISION	5.56	0.99
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 1/21/11 9:19

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.930	9.390
READING #2	1.934	9.392
READING #3	1.939	9.387
ERROR PRECISION	0.80	2.39
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 1/21/11 9:19

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	499	9.390
READING #2	498	9.392
READING #3	499	9.387
ERROR PRECISION	1.06	2.39
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	4	3	3	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 1/21/11 12:48

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.940	9.395
READING #2	1.940	9.395
READING #3	1.940	9.395
ERROR PRECISION	0.51	2.34
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
5	5	5	5	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 1/21/11 12:49

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	491	9.395
READING #2	491	9.395
READING #3	491	9.395
ERROR PRECISION	2.58	2.34
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
5	5	5	5	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 1/21/11 16:39

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.945	9.399
READING #2	1.945	9.399
READING #3	1.945	9.399
ERROR PRECISION	0.26	2.30
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
5	5	5	5	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 730425604 - TVA 1000

DATE CALIBRATED: 1/21/11 16:40

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	489	9.399
READING #2	489	9.399
READING #3	489	9.399
ERROR PRECISION	2.98	2.30
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
5	5	5	5	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/14/11 10:32

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.940	9.720
READING #2	1.943	9.716
READING #3	1.943	9.715
ERROR PRECISION	0.41	1.01
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	3	4	3	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/26/2011 AT 8:08:36AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/14/11 10:32

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	507	9.720
READING #2	506	9.716
READING #3	501	9.715
ERROR PRECISION	0.13	1.01
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	4	3	3	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/26/2011 AT 8:08:36AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/14/11 13:06

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.980	9.920
READING #2	1.980	9.920
READING #3	1.980	9.920
ERROR PRECISION	1.54	3.12
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/26/2011 AT 8:08:36AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/14/11 13:06

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	501	9.920
READING #2	501	9.920
READING #3	501	9.920
ERROR PRECISION	0.60	3.12
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/26/2011 AT 8:08:36AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/14/11 15:00

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.955	9.631
READING #2	1.955	9.631
READING #3	1.955	9.631
ERROR PRECISION	0.26	0.11
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/26/2011 AT 8:08:36AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/14/11 15:00

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	496	9.631
READING #2	496	9.631
READING #3	496	9.631
ERROR PRECISION	1.59	0.11
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/26/2011 AT 8:08:36AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 1/21/11 9:14

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.895	9.541
READING #2	1.896	9.530
READING #3	1.898	9.533
ERROR PRECISION	2.75	0.89
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	3	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/24/2011 AT 9:31:58AM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/27/10 9:26

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.957	9.699
READING #2	1.953	9.703
READING #3	1.959	9.709
ERROR PRECISION	0.32	0.87
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/27/10 9:27

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	511	9.699
READING #2	507	9.703
READING #3	508	9.709
ERROR PRECISION	0.93	0.87
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	3	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/27/10 12:30

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.968	9.711
READING #2	1.968	9.711
READING #3	1.968	9.711
ERROR PRECISION	0.92	0.95
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/27/10 12:30

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	517	9.711
READING #2	517	9.711
READING #3	517	9.711
ERROR PRECISION	2.58	0.95
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/27/10 15:48

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.974	9.718
READING #2	1.974	9.718
READING #3	1.974	9.718
ERROR PRECISION	1.23	1.02
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/27/10 15:49

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	523	9.718
READING #2	523	9.718
READING #3	523	9.718
ERROR PRECISION	3.77	1.02
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 1008240833 - TVA-1000

DATE CALIBRATED: 12/27/10 9:27

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.929	9.506
READING #2	1.923	9.521
READING #3	1.913	9.509
ERROR PRECISION	1.45	1.12
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 1008240833 - TVA-1000

DATE CALIBRATED: 12/27/10 9:28

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	499	9.506
READING #2	501	9.521
READING #3	503	9.509
ERROR PRECISION	0.60	1.12
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	3	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 1008240833 - TVA-1000

DATE CALIBRATED: 12/27/10 12:30

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.931	9.553
READING #2	1.931	9.553
READING #3	1.931	9.553
ERROR PRECISION	0.97	0.70
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 1008240833 - TVA-1000

DATE CALIBRATED: 12/27/10 12:30

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	508	9.553
READING #2	508	9.553
READING #3	508	9.553
ERROR PRECISION	0.79	0.70
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 1008240833 - TVA-1000

DATE CALIBRATED: 12/27/10 15:49

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.938	9.564
READING #2	1.938	9.564
READING #3	1.938	9.564
ERROR PRECISION	0.62	0.58
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 1008240833 - TVA-1000

DATE CALIBRATED: 12/27/10 15:49

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	523	9.718
READING #2	523	9.718
READING #3	523	9.718
ERROR PRECISION	3.77	1.02
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 1/13/2011 AT 4:09:23PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0712122196 - TVA1000

DATE CALIBRATED: 12/7/10 8:58

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.963	9.634
READING #2	1.967	9.631
READING #3	1.952	9.621
ERROR PRECISION	0.55	0.09
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	4	3	3	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0712122196 - TVA1000

DATE CALIBRATED: 12/7/10 8:58

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	509	9.634
READING #2	510	9.631
READING #3	515	9.621
ERROR PRECISION	1.46	0.09
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
3	3	3	3	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0712122196 - TVA1000

DATE CALIBRATED: 12/7/10 12:00

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	2.015	9.901
READING #2	2.015	9.901
READING #3	2.015	9.901
ERROR PRECISION	3.33	2.92
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0712122196 - TVA1000

DATE CALIBRATED: 12/7/10 12:00

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	520	9.901
READING #2	520	9.901
READING #3	520	9.901
ERROR PRECISION	3.17	2.92
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0712122196 - TVA1000

DATE CALIBRATED: 12/7/10 15:53

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.999	9.816
READING #2	1.999	9.816
READING #3	1.999	9.816
ERROR PRECISION	2.51	2.04
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{\text{(METER READING) - (KNOWN VALUE OF CALIBRATION GAS)}}{\text{(KNOWN VALUE OF THE CALIBRATION GAS)}} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0712122196 - TVA1000

DATE CALIBRATED: 12/7/10 15:53

TECHNICIAN: 1086 - BARBIE PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	518	9.816
READING #2	518	9.816
READING #3	518	9.816
ERROR PRECISION	2.78	2.04
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/7/10 9:03

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.977	9.668
READING #2	1.971	9.663
READING #3	1.973	9.661
ERROR PRECISION	1.21	0.46
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	3	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/7/10 9:04

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	516	9.668
READING #2	517	9.663
READING #3	516	9.661
ERROR PRECISION	2.45	0.46
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	3	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/7/10 12:00

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	1.996	9.769
READING #2	1.996	9.769
READING #3	1.996	9.769
ERROR PRECISION	2.36	1.55
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/7/10 12:00

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	527	9.769
READING #2	527	9.769
READING #3	527	9.769
ERROR PRECISION	4.56	1.55
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/7/10 15:54

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0004	L0004-EXP:12/5/2013 METHANE MIX/LOT#1204SE08 PO	12/05/2008	1.950
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	2.005	9.769
READING #2	2.005	9.769
READING #3	2.005	9.769
ERROR PRECISION	2.82	1.55
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

RESPONSE TIME

FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

WESTERN REFINING SOUTHWEST GALLUP REFINERY

CALIBRATION REPORT

INSTRUMENT: 0730425599 - TVA-1000

DATE CALIBRATED: 12/7/10 15:55

TECHNICIAN: 1323 - TRACEY PRIETO

CALIBRATION GASES

GAS TYPE	GAS CODE	DESCRIPTION	CERTIFICATION DATE	CONCENTRATION
LOW	L0005	EXP 12/5/13 METHANE MIX/ LOT# 1204SD08 PO # 0840	12/05/2008	504
HIGH	H0003	METHANE MIX / LOT# 1204SF08 PO# 46043	12/05/2008	9.620
ZERO	Z0001	AIR ULTRA ZERO PO # C14247 CYLINDER #44 DOCUME	08/01/2006	0

METER CERTIFICATION RESPONSE

	LOW	HIGH
READING #1	535	9.799
READING #2	535	9.799
READING #3	535	9.799
ERROR PRECISION	6.15	1.86
PASSED	Yes	Yes

PRECISION FOR THE INSTRUMENT IS ACCEPTED WHEN THE AVERAGE OF THE ABSOLUTE VALUE OF % ERROR IS EQUAL TO OR LESS THAN 10%

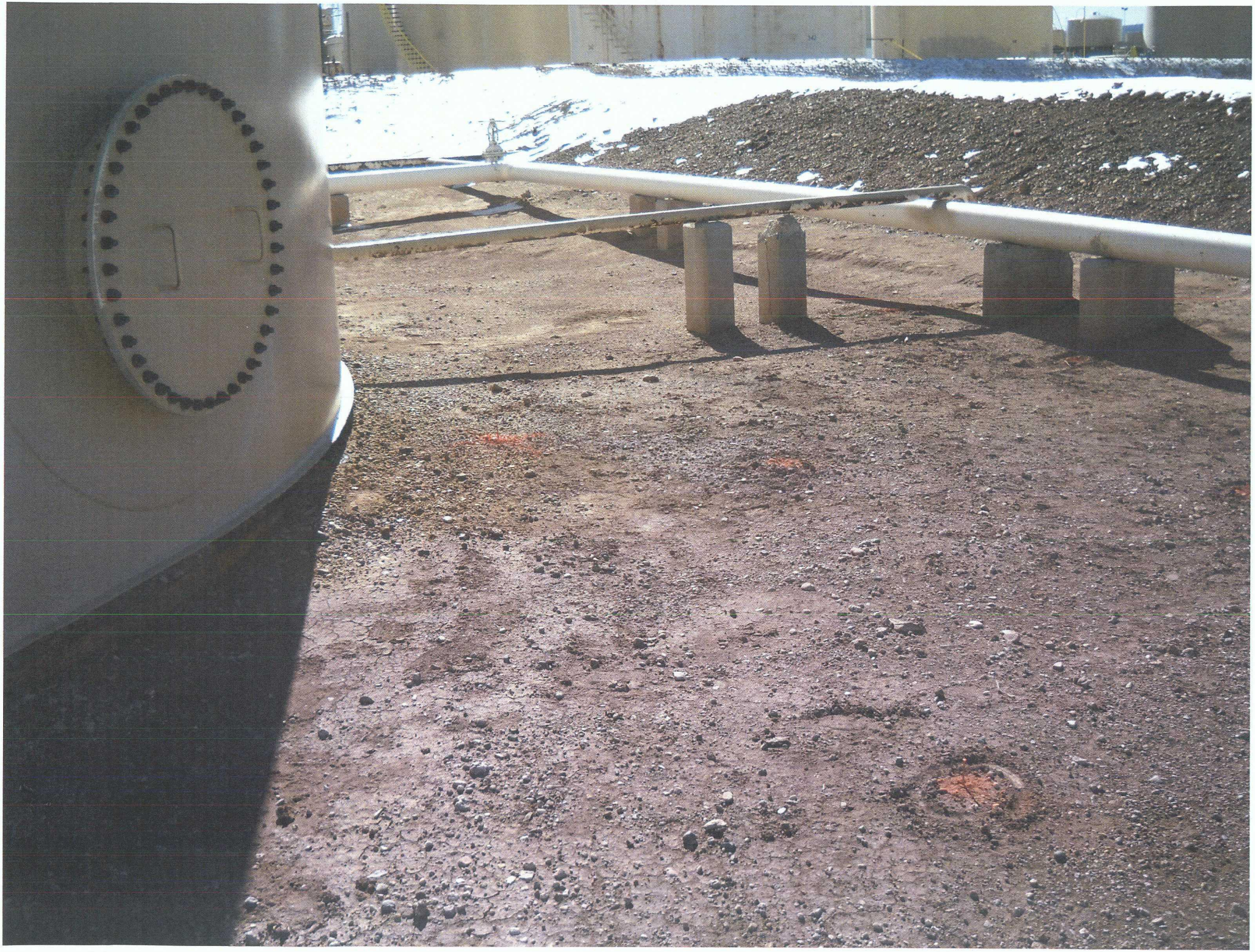
$$\%\text{ERROR PRECISION} = \left| \frac{(\text{METER READING}) - (\text{KNOWN VALUE OF CALIBRATION GAS})}{(\text{KNOWN VALUE OF THE CALIBRATION GAS})} \right| * 100$$

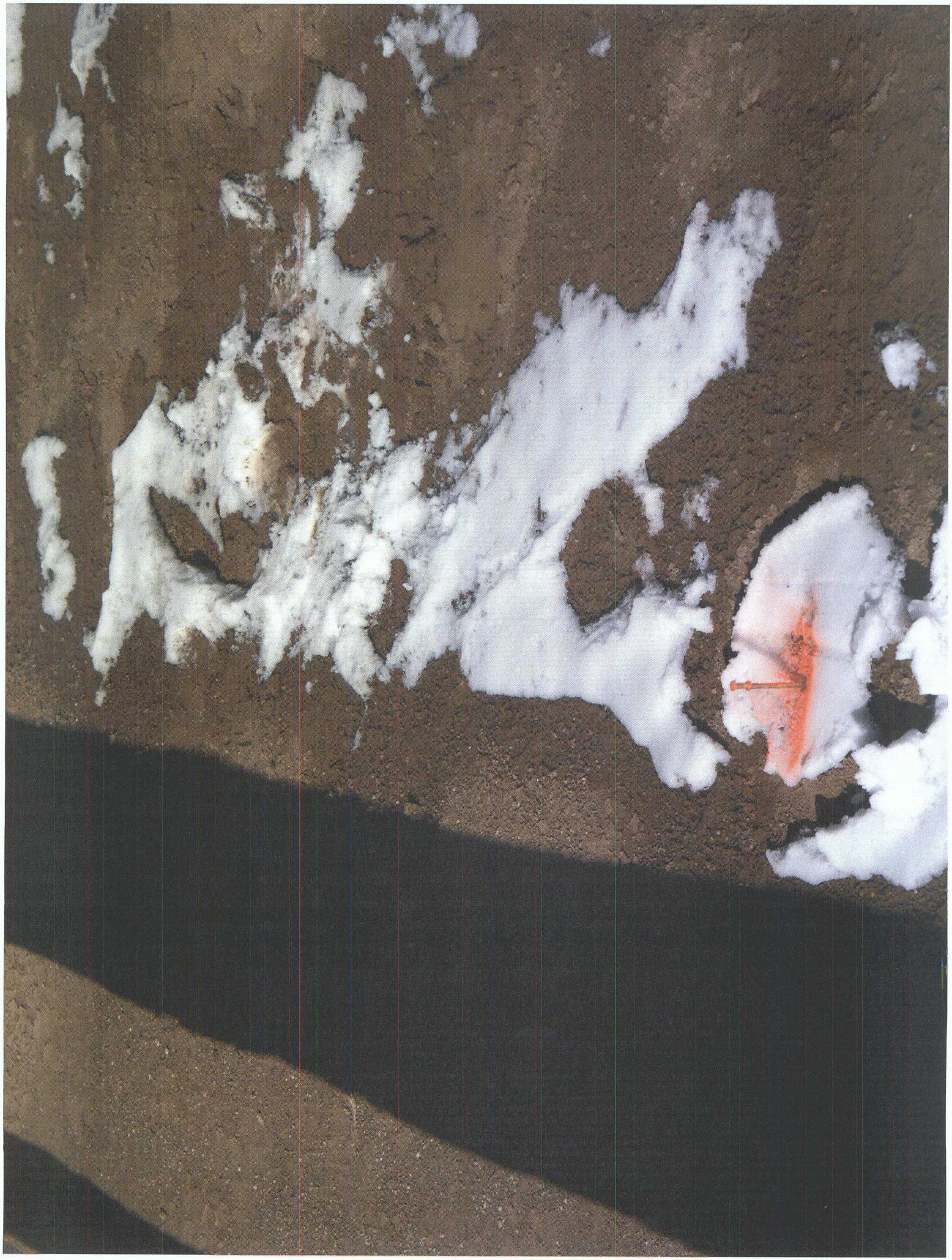
RESPONSE TIME

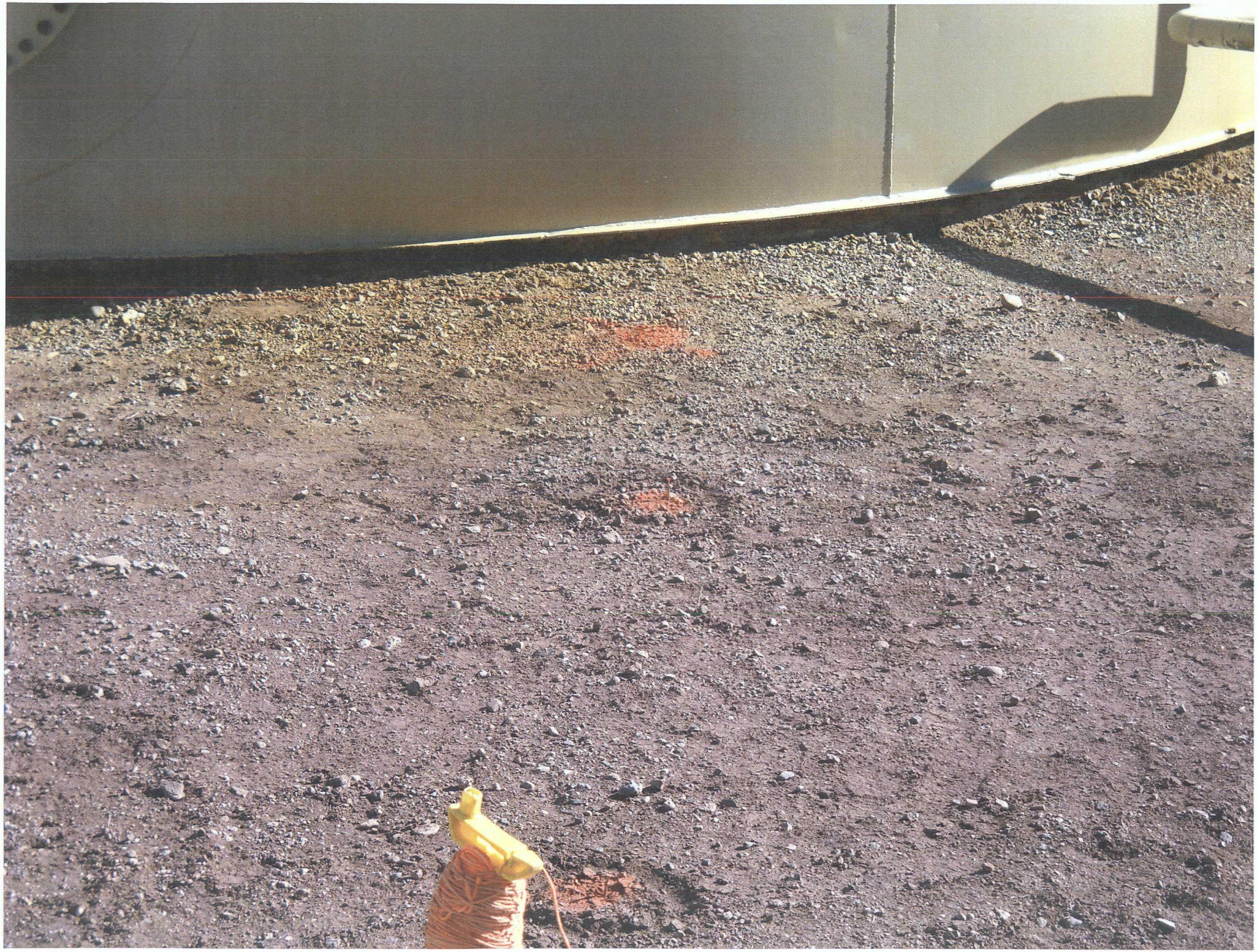
FIRST READING	SECOND READING	THIRD READING	AVERAGE	PASSED
4	4	4	4	Yes

ACCEPTABLE RESPONSE TIME SHOULD BE 30 SECONDS OR LESS FROM THE TIME THE CALIBRATION GAS IS INTRODUCED, TO THE TIME THE INSTRUMENT IS EQUAL TO OR LESS THAN +/- TEN PERCENT (<=10%)

PRINTED ON 12/16/2010 AT 1:39:58PM

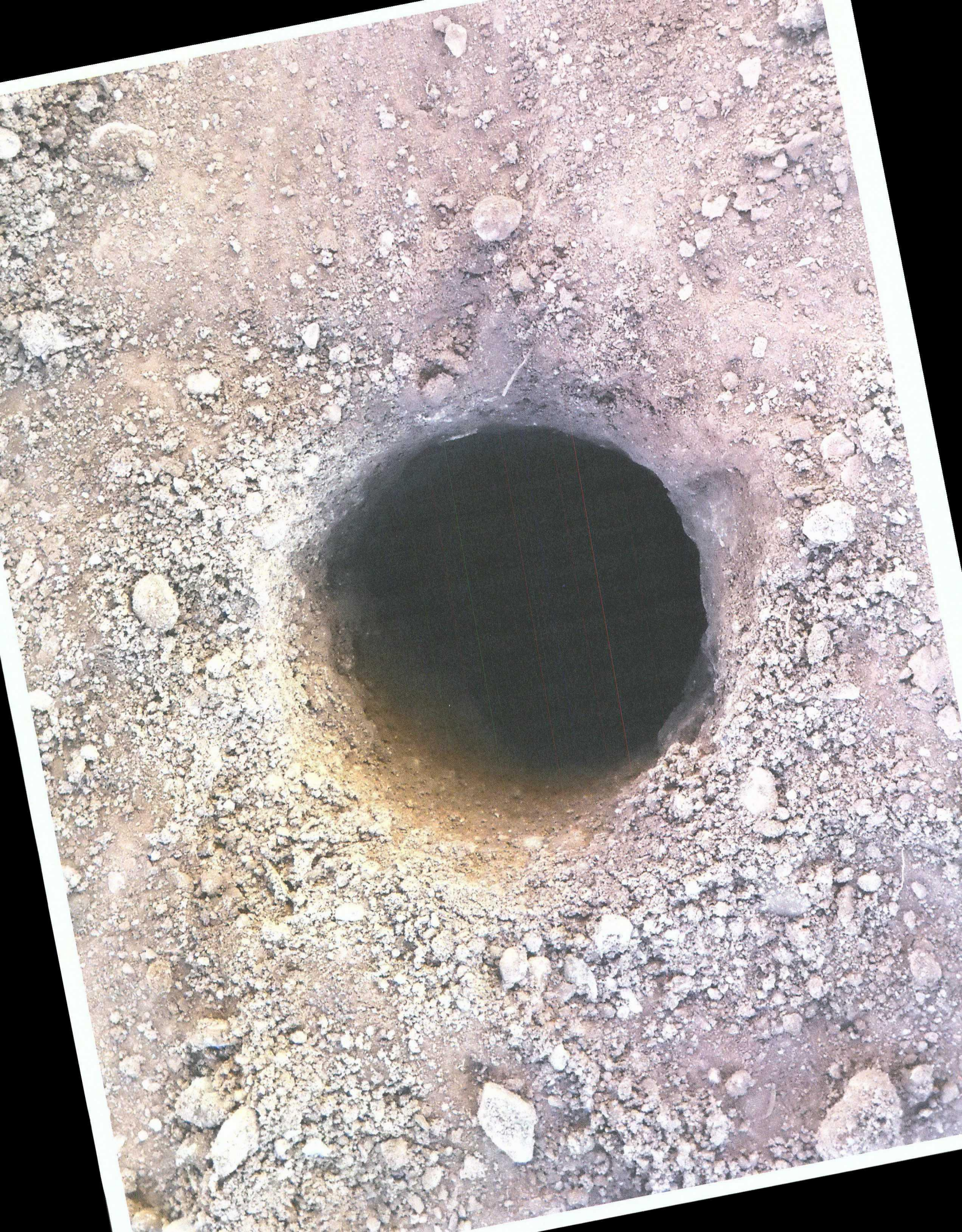






HONDA

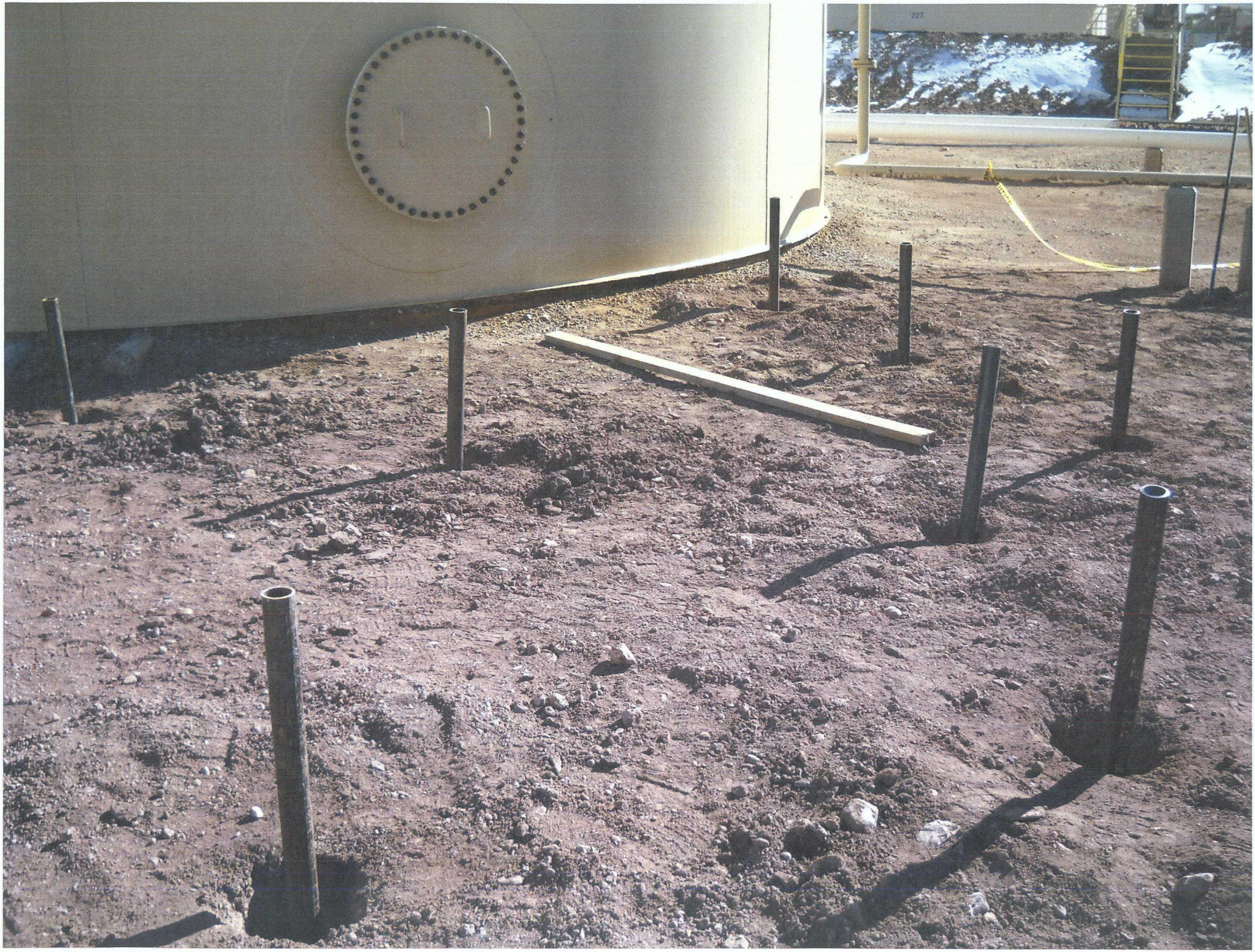

HONDA



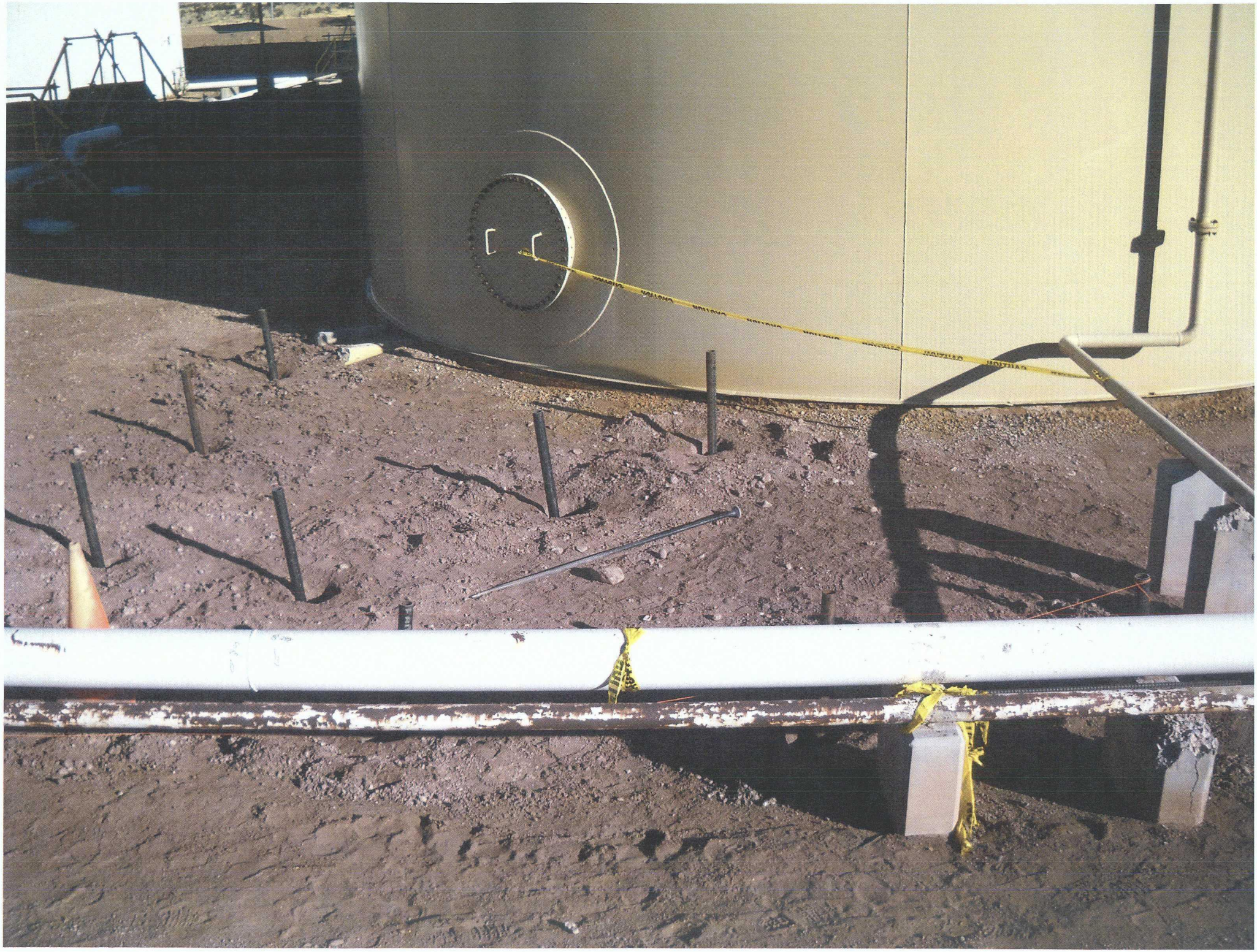

CAUTION

CAUTION


567




TK 115




B 3K3''


TK 115


TK 115