

GW-263

Corrective Action Work Plan for Soil Impacted by C. Station

Work Plan

YEAR(S):
2008

Lowe, Leonard, EMNRD

From: Lowe, Leonard, EMNRD
Sent: Tuesday, October 14, 2008 12:56 PM
To: 'Horn, Claudette'
Cc: Griswold, Jim, EMNRD
Subject: RE: Work Plan for Starlake compressor station

Claudette Horn,

Your work plan has been approved.

Hopefully you do not have any more contaminated findings in the future, but if so, please pay attention to staging your waste intermediately.

llowe

Leonard Lowe

Environmental Engineer
Oil Conservation Division/EMNRD
1220 S. St. Francis Drive
Santa Fe, N.M. 87505
Office: 505-476-3492
Fax: 505-476-3462
E-mail: leonard.lowe@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>

From: Horn, Claudette [<mailto:Claudette.Horn@pnmresources.com>]
Sent: Monday, October 13, 2008 9:57 AM
To: Horn, Claudette; Lowe, Leonard, EMNRD
Cc: Griswold, Jim, EMNRD
Subject: RE: Work Plan for Starlake compressor station

Hi Leonard,
We've addressed the two items of concern noted below.

1. The stockpiled soil has been covered with plastic.
2. Both Envirotech and Schmitz Construction/TNT Environmental have confirmed that they can accept the contaminated soil with the stated amount of metals. We have not yet determined which facility will receive the waste as we are soliciting cost estimates for the earth work, transport, and disposal.

Please let me know if we now have approval to proceed with our corrective actions. Thanks, Claudette

From: Horn, Claudette
Sent: Wednesday, October 08, 2008 9:08 AM
To: 'Lowe, Leonard, EMNRD'
Cc: Griswold, Jim, EMNRD
Subject: RE: Work Plan for Starlake compressor station

Hi Leonard,
I've followed up on item #1. The grandchildren of one employee are living in the house in the background of photo #4. We will have the stockpiled soil covered by the end of the week. We are still working on #2. Thanks, Claudette

10/14/2008

Claudette Horn
Environmental Manager
PNM Resources
Alvarado Square, Albuquerque, NM 87158-2104
505-241-2019
505-269-3862 (m)
claudette.horn@pnmresources.com

From: Lowe, Leonard, EMNRD [mailto:Leonard.Lowe@state.nm.us]
Sent: Tuesday, October 07, 2008 4:26 PM
To: Horn, Claudette
Cc: Griswold, Jim, EMNRD
Subject: Work Plan for Starlake compressor station
Importance: High

Ms. Claudette Horn,

As per our conversation this afternoon, October 7, 2008, Jim Griswold had discussed with you a few areas of concern in your submitted plan.

1. Immediately find out if there are any children in the adjacent home as indicated in photograph # 4, dated June 17. Or if there is anyone living there.
2. Verify with your proposed land fills that they can receive the contaminated soil with the stated amount of metals.

Also, I forgot to mention during the tele-call, when excavating contaminated soils, in this case, please allocate the "waste" on a non permeable padding/liner to prevent the spreading of the waste.

Jim and I will be waiting on your input.

Thank you for your attention.

llowe

Leonard Lowe
Environmental Engineer
Oil Conservation Division/EMNRD
1220 S. St. Francis Drive
Santa Fe, N.M. 87505
Office: 505-476-3492
Fax: 505-476-3462
E-mail: leonard.lowe@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient (s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

10/14/2008

PNM Resources
Alvarado Square
Albuquerque, NM 87158-2104
www.pnmresources.com
505.241.2031
Fax: 505.241.2384

RECEIVED
2008 AUG 19 PM 2 48



CERTIFIED MAIL

August 18, 2008

Leonard Lowe
Environmental Engineer
Oil Conservation Division, EMNRD
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Carl Chavez

RE: PNM Star Lake Natural Gas Compressor Station (GW-263) – Corrective Action Work Plan for Soil Impacted by Compressor Oil; McKinley County, NM;

Dear Mr. Lowe,

With this letter, PNM is submitting the Corrective Action Work Plan for the historic release of compressor oil at the Star Lake Compressor Station for OCD review and approval. PNM is proposing to excavate impacted soil and haul it to an OCD-permitted facility. The attached Work Plan describes the site assessment conducted, analytical results, and the proposed corrective action.

Initial notice of the release was provided via telephone on November 6, 2007. The initial C-141 report was submitted on November 9, 2007. With this submittal, an updated C-141 is attached. This update summarizes the site assessment and proposed corrective action.

PNM will begin remediation work upon receipt of OCD approval of the Work Plan. Please let me know if there are any questions. I may be contacted at 505-241-2019 or via e-mail at claudette.horn@pnmresources.com.

Sincerely,

A handwritten signature in cursive script that reads "Claudette Horn".

Claudette Horn
Environmental Manager

Enc.

Cc: Mark Sikelianos, Delphi, Inc. (w/o enc.)
Curtis Winner, PNM
Kevin Lawrence, PNM
DCC

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

RECEIVED
2008 AUG 19 PM 2 48

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company: PNM	Contact: Claudette Horn
Address: Alvarado Square, Albuquerque, NM 87158-2104	Telephone No.: 505-241-2019
Facility Name: Star Lake Compressor Station	Facility Type: Natural Gas Compressor Station

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

LOCATION OF RELEASE

Unit Letter	Section 34	Township 20N	Range 6W	Feet from the	North/South Line	Feet from the	East/West Line	County McKinley
-------------	---------------	-----------------	-------------	---------------	------------------	---------------	----------------	--------------------

Latitude: 35.924851 Longitude: -107.466736

NATURE OF RELEASE

Type of Release: Compressor Oil	Volume of Release: unknown	Volume Recovered: none
Source of Release: unknown	Date and Hour of Occurrence Historic release	Date and Hour of Discovery
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

11/27/07 C-141 Submittal (this revised initial 11/9/07 submittal)
During decommissioning activities for seven compressor engines and ancillary equipment installed in the 1940s, discolored soil was encountered. Two soil samples were collected and analyzed for: PCBs (non-detect), BTEX (non-detect), metals (none exceeded RCRA standards), chloride (12ppm and non-detect), and TPH (15,000 and 75,000 ppm). The OCD ranking score for the site is 20.

Most ancillary equipment has been removed; however, the compressor engines and concrete pad are still in-place. Given the extensive nature of the decommissioning activities, PNM will conduct site assessment and associated remediation activities in conjunction with the decommissioning schedule. At this time, PNM plans to conduct the site assessment to determine extent of contamination over the next several weeks.

Per phone discussion between L. Lowe (OCD) and C. Horn (PNM) on November 7, 2007, upon completion of the site assessment, PNM will submit a Corrective Action plan to the OCD. As discussed, PNM plans to initiate necessary remediation activities after removal of the compressor engines and concrete pad.

Current Submittal – Site Investigation

On March 18, 2008, a Phase II Investigation was performed utilizing a direct push geoprobe. A total of twenty-six (26) soil borings were performed with samples collected in four foot intervals. The investigation was conducted on the east and west sides of the former Clark Compressor building.

At the time of the investigation, the building shell had been removed with the concrete foundation and compressors still present. The borings were strategically placed to delineate the horizontal and vertical extent of petroleum contamination. The soils were screened in the field visually, and with a photo ionization detector (PID). Based upon these indications samples were submitted for laboratory analysis of the following: Total Petroleum Hydrocarbons (TPH) gas, diesel, and motor oil range modified Method 8015; ethylene glycol, modified Method 8015; PCBs, Method 8080; Total RCRA Metals, Method 6010.

Describe Area Affected and Cleanup Action Taken.*

Current Submittal – Area Affected and Proposed Corrective Action (see attached Corrective Action Work Plan)

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination is primarily TPH in the diesel and motor oil range. The highest concentrations reported were in the 1000 ppm range for diesel range organics (DRO), and in the 8300 ppm range for motor oil range organics (MRO). The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface in a few isolated areas. Results for soil samples submitted for PCBs, and ethylene glycol were non-detect. Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations.

During the week of June 9th through June 17, the Clark compressor foundation was demolished and excavated. The foundation measuring 15' x 140' x 6' was removed. It was estimated that approximately 467 cubic yards of concrete were removed. At this time, further assessment of the soils beneath the foundation was performed. There was some evidence of discolored soils along the length of the trench. A front end loader was used to remove a 1- foot horizon of soil across the entire length of the excavation. The soils were staged on the northwest corner of the property. One sample was collected approximately 100 feet north of the Saturn building as a worst case sample to determine if the discolored soils were highly contaminated. An additional sample was collected 120 feet north of the Saturn building in the area defined by the geoprobe investigation as having the highest concentration. The sample was collected at a vertical depth of 12 feet below ground surface in the center of the trench. Based upon results of laboratory analysis and visual observation the contamination was not continuous and not present directly beneath the former slab. There appeared to be isolated areas of contamination along the side trenches of the former slab.

PNM proposes to excavate all of the grossly contaminated soils within the former foundation trench and haul them to an OCD approved land farm. The horizon directly beneath the former foundation was over excavated at least one foot across the entire trench. There are a few isolated areas along the northern portion of the excavation that may require additional soil remediation. Soils will be excavated and removed in the horizontal and vertical extent based upon laboratory results obtained during the geoprobe investigation. Additional soil samples will likely be collected and submitted for laboratory analysis in the vertical extent once final clean up has been performed for confirmation purposes.

The horizontal extent of the soil contamination has been adequately defined with a geoprobe. The vertical extent of the soil contamination has also been defined with a geoprobe and subsequently with a back hoe. The extent of the vertical contamination is not continuous and was observed in isolated pockets. The total volume of contaminated soil to be removed is estimated to be approximately 600 cubic yards.

The contaminant of concern is primarily Total Petroleum Hydrocarbon (TPH) in the diesel and motor oil range. No gasoline range hydrocarbons i.e. BTEX have been detected, and soils monitored with a PID for VOCS have shown no volatile organic compounds. Based on the OCD ranking criteria, a target cleanup value of 100 ppm TPH has been established. A C-138 form requesting approval to accept solid waste shall be submitted to the land farm facility detailing the non-exempt waste.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Claudette Horn</i>		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Claudette Horn		Approved by District Supervisor:	
Title: Environmental Manager Facility Compliance		Approval Date:	Expiration Date:
E-mail Address: Claudette.horn@pnmresources.com		Conditions of Approval:	
Date: August 18, 2008 Phone: 505 241-2019		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

Prepared For

PNM

2008 AUG 19 PM 2 48

RECEIVED

**CORRECTIVE ACTION WORK PLAN
STAR LAKE COMPRESSOR STATION**

**NW ¼ of SEC. 34, T 20N, R6W
McKinley County, New Mexico**



Date Issued: August 12, 2008

Mark Sikelianos

**DELPHI, INC.
101 EDELWEISS
TIJERS, NEW MEXICO 87059**

TEL (505) 281-1885 FAX (505) 281-0573

Email: marksik@Delphiinc.net

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY.....	1
1.1	Summary of Data.....	1
1.2	Conclusions.....	1
1.3	Recommendations.....	2
2.0	BACKGROUND.....	3
2.1	Location.....	3
2.2	Site History.....	3
2.3	Chronology of Events.....	3
3.0	SITE SETTINGS.....	5
3.1	Soils/Geology.....	5
3.2	Hydrology.....	5
3.3	Potential Receptors.....	5
4.0	METHODS OF INVESTIGATION.....	6
4.1	GeoProbe Direct Push Investigation.....	6
4.2	Removal of Concrete Foundation.....	6
4.4	Follow-up Subsurface Investigation.....	6
4.0	SAMPLING AND ANALYSIS RESULTS.....	7
4.1	Soil.....	7
4.2	Groundwater.....	7
5.0	REMEDIATION.....	8
5.1	Dig and Haul.....	8
5.0	CONCLUSIONS AND RECOMENDATIONS.....	9
5.1	Conclusions.....	9
5.2	Recommendations.....	9
6.0	REFERENCES.....	10

FIGURES

Figure 1	Site Location Map
Figure 2	Site Topographic Map
Figure 3	Site Aerial Photo with Soil Borings/Analytical
Figure 4	Site Map With Soil Borings/Analytical

TABLES

Table 1	Analytical Results Summary
Table 2	Volume Approximations

APPENDICES

Appendix A	Photographs
Appendix B	Laboratory Analysis Soils
Appendix C	NRCS Soil Survey Data
Appendix D	Soil Boring Logs

1.0 EXECUTIVE SUMMARY

During decommissioning activities for seven compressor engines and ancillary equipment installed in the 1940s, discolored soil was encountered. Two soil samples were collected and analyzed for: PCBs (non-detect), BTEX (non-detect), metals (none exceeded RCRA standards), chloride (12ppm and non-detect), and TPH (15,000 and 75,000 ppm). The OCD ranking score for the site is 20.

Delphi, Inc ("DELPHI") was requested by Ms. Claudette Horn of PNM to conduct an Environmental Site Assessment ("ESA") in association with the retirement of seven (7) "Clark" Compressors at the Star Lake Compressor Station (Star Lake).

On March 18, 2008, a Phase II Investigation was performed utilizing a direct push geoprobe. A total of twenty-six (26) soil borings were performed with samples collected in four foot intervals. The investigation was conducted on the east and west sides of the former Clark Compressor building.

At the time of the investigation, the building shell had been removed with the concrete foundation and compressors still present. The borings were strategically placed to delineate the horizontal and vertical extent of petroleum contamination. The soils were screened in the field visually, and with a photo ionization detector (PID). Based upon these indications samples were submitted for laboratory analysis of the following: Total Petroleum Hydrocarbons (TPH) gas, diesel, and motor oil range modified Method 8015; ethylene glycol, modified Method 8015; PCBs, Method 8080; Total RCRA Metals, Method 6010.

1.1 Summary of Data

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination is primarily TPH in the diesel and motor oil range. The highest concentrations reported were in the 1000 ppm range for diesel range organics (DRO), and in the 8300 ppm range for motor oil range organics (MRO). The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface in a few isolated areas. Results for soil samples submitted for PCBs, and ethylene glycol were non-detect. Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations.

1.2 Conclusions

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination is primarily TPH in the diesel and motor oil range. The highest concentrations reported were in the 1000 ppm range for diesel range organics (DRO), and in the 8300 ppm range for motor oil range organics (MRO). The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface in a few isolated areas where Clark units five and six previously existed. The horizontal extent is well defined, with vertical extent also defined, with areas of isolated contamination. Results for soil samples submitted for PCBs, and ethylene glycol were non-detect. Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations. It is Delphi's opinion that petroleum contamination within the soils is limited primarily to the northern area of the former Clark compressor building.

1.3 Recommendations

Based on the conclusions of this assessment the limits of source contamination appear to be sufficiently defined in the horizontal extent. The vertical extent showed two isolated areas with relatively high concentrations of TPH at the 8-12 foot interval. With the data provided (Table 2 and Figure(s) 3 and 4) estimates can be made for contaminant removal and remediation. Delphi recommends gross source removal of the contamination within the defined areas to enhance natural attenuation of the petroleum contaminants. Viable options are to dig and haul to a nearby land farm. Confirmation samples should be collected in the vertical extent to verify that TPH contamination was sufficiently removed. The TPH concentrations revealed should be compared to applicable clean up standards for the New Mexico Oil Conservation Division (NMOCD).

2.0 BACKGROUND

On November 13, 2007, an initial site visit was performed at Star Lake to make a preliminary assessment. The building surrounding the Clark compressors had been removed with the foundation and engines still in place. The existing foundation was measured to be approximately 15-feet wide and 140-feet in length. There appeared to be soil contamination surrounding the perimeter of the foundation, with the most visible areas along the southeastern side of the foundation where prior sampling revealed high concentrations of TPH. The soils showed slight petroleum hydrocarbon staining. Based upon the site observations and the previous sampling performed, a more detailed assessment of the area was recommended.

2.1 Location

Star Lake is located at an elevation of 6,640 feet above mean sea level in Section 34, Township 20N, Range 6W. The facility is approximately 11 miles west/northwest of Torreon, NM in McKinley County. Figure 1 is a 1:100,000 topographic map showing the regional topography and general site location of the Star Lake Facility. Figure 2 is a USGS 7.5 minute topographic map showing the location of the facility and localized topographical features. Figure 3, is an aerial photo/map of Star Lake with the soil boring locations and analytical data posted. Figure 4 is a footprint map of the buildings, soil boring locations, and analytical data posted.

2.2 Site History

The Star Lake Compressor Station (Star Lake) is a natural gas compressor station. The facility is owned by the Public Service Company of New Mexico and has been operating since approximately 1945. The facility was originally constructed in 1945 and consisted of two Clark RA6 compressor engines. Three additional Clark RA6 engines were installed, two in 1946 and one in 1949. In 1952, two additional Clark HRA6 engines were installed. PNM is in the process of retiring the seven (7) "Clark" internal gas combustion compression engines.

2.3 Chronology of Events

During decommissioning activities for seven compressor engines and ancillary equipment installed in the 1940s, discolored soil was encountered. Two soil samples were collected and analyzed for: PCBs (non-detect), BTEX (non-detect), metals (none exceeded RCCRA standards), chloride (12ppm and non-detect), and TPH (15,000 and 75,000 ppm).

On November 7, 2007, a C-141 release form was submitted providing notification of the release by Ms. Claudette Horn, Environmental Manager with PNM, to Mr. Leonard Lowe, Environmental Engineer with the OCD.

On November 13, 2007, an initial site visit was performed at Star Lake to make a preliminary assessment. The building surrounding the Clark compressors had been removed with the foundation and engines still in place. The existing foundation was measured to be approximately 15-feet wide and 140-feet in length. There appeared to be soil contamination surrounding the perimeter of the foundation, with the most visible areas along the southeastern side of the foundation where prior sampling revealed high concentrations of TPH. The soils showed slight petroleum hydrocarbon staining.

On March 18, 2007, a Phase II Investigation was performed utilizing a direct push geoprobe. A total of twenty six (26) soil borings were performed with samples collected in four foot intervals.

The investigation was conducted on the east and west sides of the former Clark Compressor building.

During the week of June 9th through June 17, the Clark compressor foundation was demolished and excavated. The foundation measuring 15' x 140' x 6' was removed. It was estimated that approximately 467 cubic yards of concrete were removed. At this time, further assessment of the soils beneath the foundation was performed. There was some evidence of discolored soils along the length of the trench. A front end loader was used to remove a 1-foot horizon of soil across the entire length of the excavation. The soils were staged on the northwest corner of the property. One sample was collected approximately 100 feet north of the Saturn building as a worst case sample to determine if the discolored soils were highly contaminated. An additional sample was collected 120 feet north of the Saturn building in the area defined by the geoprobe investigation as having the highest concentration. The sample was collected at a vertical depth of 12 feet below ground surface in the center of the trench. Based upon results of laboratory analysis and visual observation the contamination was not continuous and not present directly beneath the former slab. There appeared to be isolated areas of contamination along the side trenches of the former slab.

3.0 SITE SETTINGS

3.1 Soils/Geology

The Facility is located within McKinley County, New Mexico. Soils data from the NRCS were acquired for McKinley County. The soils were identified as Calladito-Elias association (see Appendix C).

Description Category: SOI Map Unit: 12—Calladito-Elias association, 1 to 6 percent slopes

Calladito soils make up 55 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is excessively drained. The slowest soil permeability within a depth of 60 inches is rapid. Available water capacity to a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 1 percent. The assigned Kw erodibility factor is .20. It is nonirrigated land capability subclass 7e. This component is not a hydric soil. Typical Profile: A - 0 to 2 inches; loamy fine sand; slightly alkaline. C1 - 2 to 26 inches; loamy fine sand; moderately alkaline. C2 - 26 to 65 inches; loamy fine sand; moderately alkaline.

Elias soils make up 30 percent of the map unit. The runoff class is medium. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is slow. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 15 percent. The assigned Kw erodibility factor is .32. It is non irrigated land capability subclass 7s. This component is not a hydric soil. Typical Profile: E - 0 to 1 inches; fine sandy loam; strongly alkaline. Btn1 - 1 to 3 inches; sandy clay loam; very strongly alkaline. Btn2 - 3 to 10 inches; sandy clay loam; very strongly alkaline. Bkn1 - 10 to 18 inches; loamy fine sand; strongly alkaline. Bkn2 - 18 to 33 inches; sandy clay loam; moderately alkaline. Bkn3 - 33 to 65 inches; clay loam; very strongly alkaline.

3.2 Hydrology

The regional hydraulic gradient in the alluvial aquifer is believed to follow the topography to the south. The localized groundwater gradient in the vicinity of the Property is also believed to be to the south. This may be altered or influenced by localized pumping of local wells. Depth to groundwater in the vicinity of the facility is reported to range from 80 to 100 feet below the ground surface (depth to ground water – ranking score 10).

There are no washes or ephemeral streams located within 1000 feet of the compressor facility (distance to surface water body > 1000 horizontal feet – ranking score 0)

3.3 Potential Receptors

There are two water wells located on site along the north property boundary. Well #1 is a deeper well with depth to water reported at approximately 490 feet below ground surface (bgs), total depth at approximately 1080 feet bgs, and the pump set at approximately 830 feet bgs. The reported perforations or screened interval is believed to be from 775 to 785 feet bgs. Well # 2 is a shallow well with depth to water reported at approximately 70 feet bgs, total depth at approximately 180 feet bgs and the pump set at approximately 70 feet below ground surface. Both of these wells are believed to be located up gradient of the facility. Recent results of groundwater samples collected and submitted for laboratory analysis showed no petroleum hydrocarbon contamination (wellhead protection area <200 feet from private domestic water source – ranking score 20).

4.0 METHODS OF INVESTIGATION

4.1 GeoProbe Direct Push Investigation

In order to evaluate and delineate both the horizontal and vertical extent of the petroleum hydrocarbon contamination at the site, twenty-six (26) soil borings were performed utilizing a direct push hydraulic auger system. The borings (SB1 through SB26) were performed in and around the vicinity of the former Clark compressor building at shallow depths ranging from zero to sixteen feet below ground surface. The direct push geoprobe continuously advanced a clear polycarbonate core sampler into the undisturbed soil. Soil samples were collected in 4-foot intervals with field personnel providing screening and recording lithologic descriptions of the soils. In addition to these samples, two discrete samples were collected directly below the former "New" oil tank. The samples were submitted for laboratory analysis of TPH in the gasoline, diesel, and motor oil range (GRO, DRO, MRO) utilizing modified EPA Method 8015.

In all, thirty four (34) soil samples were collected and submitted for laboratory analysis. The soils were screened in the field visually, and with a photo ionization detector (PID). Based upon these indications samples were submitted for laboratory analysis of the following: Total Petroleum Hydrocarbons (TPH) gas, diesel, and motor oil range by modified Method 8015; ethylene glycol, modified Method 8015; PCBs, Method 8080; Total RCRA Metals, Method 6010.

After collecting the soil samples using the appropriate method, field personnel logged the lithology for all soil-sampling locations on a lithologic description form. The lithologic descriptions include soil type (according to the Unified Soil Classification System (USCS)). Copies of the soil borings are provided in Appendix D.

4.2 Removal of Concrete Foundation

During the week of June 9th thru June 17th, the Clark compressor foundation was demolished and excavated. The foundation measured approximately 15' x 140' x 6' and was estimated to contain approximately 467 cubic yards of concrete. The concrete was broken up and removed from the site for rip rap and storm water erosion use.

4.4 Folllow-up Subsurface Investigation

Once the concrete was removed further assessment of the soils beneath the foundation was performed. There was some evidence discolored soils along the length of the trench. A front end loader was used to excavate approximately 1' of soil across the entire length of the trench. The soils were staged on the northwest corner of the property. One sample was collected approximately 100 feet north of the Saturn building as a worst case sample to determine if the discolored soils were highly contaminated. An additional sample was collected 120 feet north of the Saturn building in the area previously defined by the geoprobe investigation as having the highest TPH concentrations. The sample was collected at a vertical depth of 12 feet below ground surface. Both visual and laboratory analysis were non-detect for the presence of TPH. It was apparent that the contamination was not continuous and not present directly beneath the former slab. There appeared to be isolated areas of contamination along the side trenches of the former foundation.

4.0 SAMPLING AND ANALYSIS RESULTS

4.1 Soil

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination is primarily TPH in the diesel range and motor oil range. The highest concentrations reported were in the 1000 ppm range for diesel range organics (DRO), and in the 8300 ppm range for motor oil range organics (MRO). The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface. Results for soil samples submitted for PCBs, and ethylene glycol were non detect. Results for soil samples submitted for metals analysis did not reveal any high concentrations, with the exception of barium which is still below maximum allowed TCLP concentrations. Soils field screened with a PID did not reveal any Volatile Organic compounds. The highest reading encountered was seven (7) ppm. The soils with visual hydrocarbon contamination observed were degraded petroleum hydrocarbons with low hydrocarbon odors. A request to Hall Environmental was made to review the GRO analysis of the four hottest samples submitted for analysis to determine if any benzene, toluene, ethyl benzene, or xylenes (BTEX) compounds existed in the GRO range gas chromatograph. No BTEX components were detected. Figure(s) 3, 4, and Table 1 provide an accurate representation of the soil borings and analytical data collected.

Additional assessment and follow-up sampling was performed after the removal of the concrete foundation. The excavation did not reveal any grossly contaminated soil. Soils that had a black or gray discoloration were excavated and stockpiled on the northwest corner of the property.

4.2 Groundwater

Impacts or impairment to groundwater are not believed to have occurred. The on site wells to the north (believed to be upgradient) were recently sampled. Results of the analysis did not reveal any hydrocarbon contamination.

5.0 REMEDIATION

5.1 Dig and Haul

PNM proposes to excavate all of the grossly contaminated soils within the former foundation trench and haul them to an OCD approved land farm. The horizon directly beneath the former foundation was over excavated at least one foot across the entire trench. There are a few isolated areas along the northern portion of the excavation that may require additional soil remediation. Soils will be excavated and removed in the horizontal and vertical extent based upon laboratory results obtained during the geoprobe investigation. Additional soil samples will likely be collected and submitted for laboratory analysis in the vertical extent once final clean up has been performed for confirmation purposes.

The horizontal extent of the soil contamination has been adequately defined with a geoprobe. The vertical extent of the soil contamination has also been defined with a geoprobe and subsequently with a back hoe. The extent of the vertical contamination is not continuous and was observed in isolated pockets. The total volume of contaminated soil to be removed is estimated to be approximately 600 cubic yards.

The contaminant of concern is primarily Total Petroleum Hydrocarbon (TPH) in the diesel and motor oil range. No gasoline range hydrocarbons i.e. BTEX have been detected, and soils monitored with a PID for VOCS have shown no volatile organic compounds. Based on the OCD ranking criteria, a target cleanup value of 100 ppm TPH has been established. A C-138 form requesting approval to accept solid waste shall be submitted to the land farm facility detailing the non-exempt waste.

5.0 CONCLUSIONS AND RECOMENDATIONS

5.1 Conclusions

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination is primarily TPH in the diesel and motor oil range. The highest concentrations reported were in the 1000 ppm range for diesel range organics (DRO), and in the 8300 ppm range for motor oil range organics (MRO). The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface in a few isolated areas where Clark units five and six previously existed. The horizontal extent is well defined, with vertical extent also defined, with areas of isolated contamination. Results for soil samples submitted for PCBs, and ethylene glycol were non-detect Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations. It is Delphi's opinion that petroleum contamination within the soils is limited primarily to the northern area of the former Clark compressor building.

5.2 Recommendations

Based on the conclusions of this assessment the limits of source contamination appear to be sufficiently defined in the horizontal extent. The vertical extent showed two isolated areas with relatively high concentrations of TPH at the 8-12 foot interval. With the data provided (Table 2 and Figure(s) 3 and 4) estimates can be made for contaminant removal and remediation. Delphi recommends gross source removal of the contamination within the defined areas to enhance natural attenuation of the petroleum contaminants. Viable options are to dig and haul to a nearby land farm, or onsite land farming. Confirmation samples should be collected in the vertical extent to verify that TPH contamination was sufficiently removed. The TPH concentrations revealed should be compared to applicable clean up standards for the New Mexico Oil Conservation Division (NMOCD).

6.0 REFERENCES

USGS - 7.5 Minute Topographic Quadrangle of Star Lake, NM, 1989

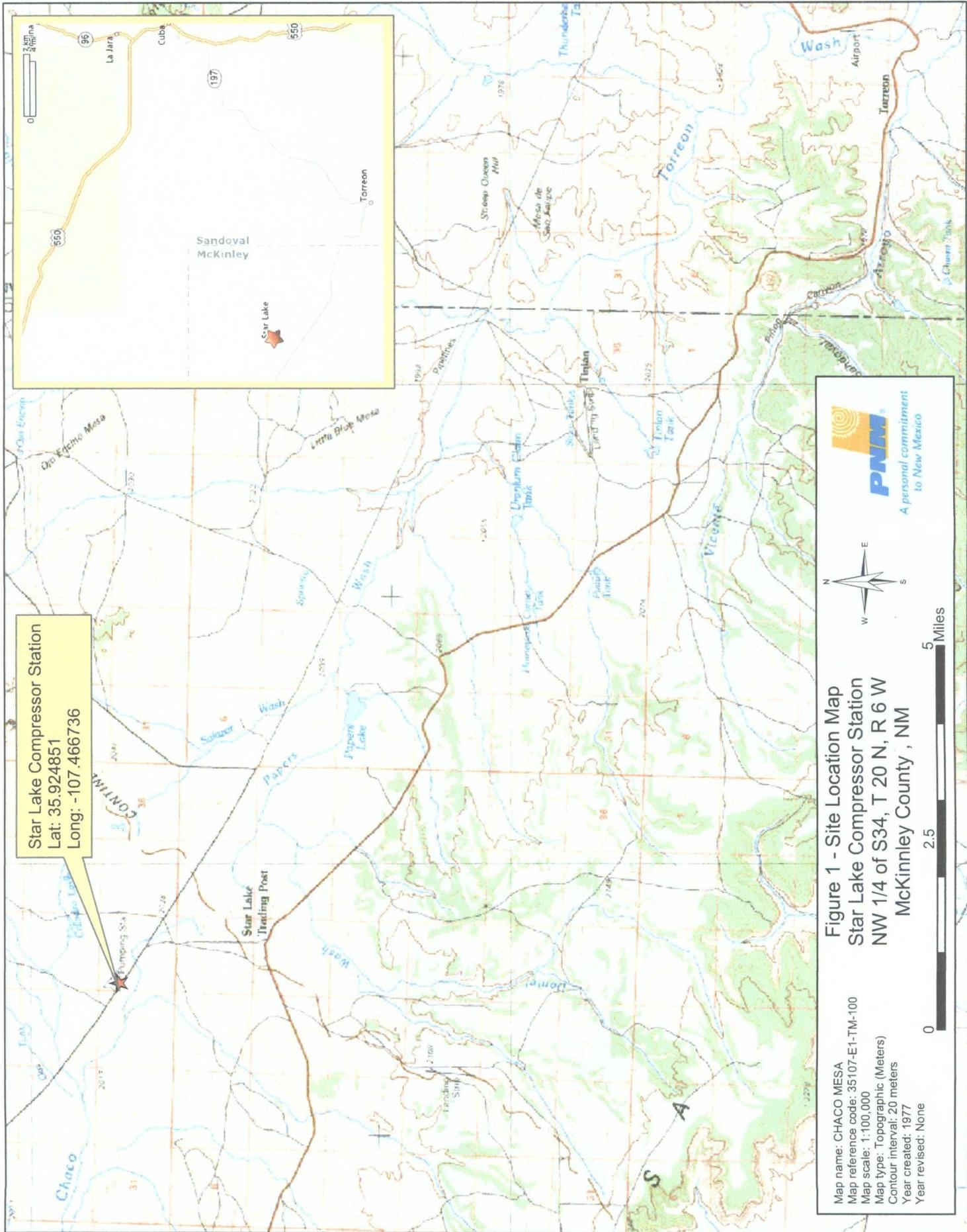
DOQQ aerial photographs Star Lake, NM, 2005

USDA - Soil Conservation Service and Forest Service, Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties
Survey Area Data: Version 7, Jan 13, 2007

Office of State Engineers – WATERS Database.

FIGURES

**SITE LOCATION MAP
SITE TOPOGRAPHIC MAP
SITE AERIAL PHOTO WITH SOIL BORINGS/ANALYTICAL
SITE MAP WITH SOIL BORINGS/ANALYTICAL**



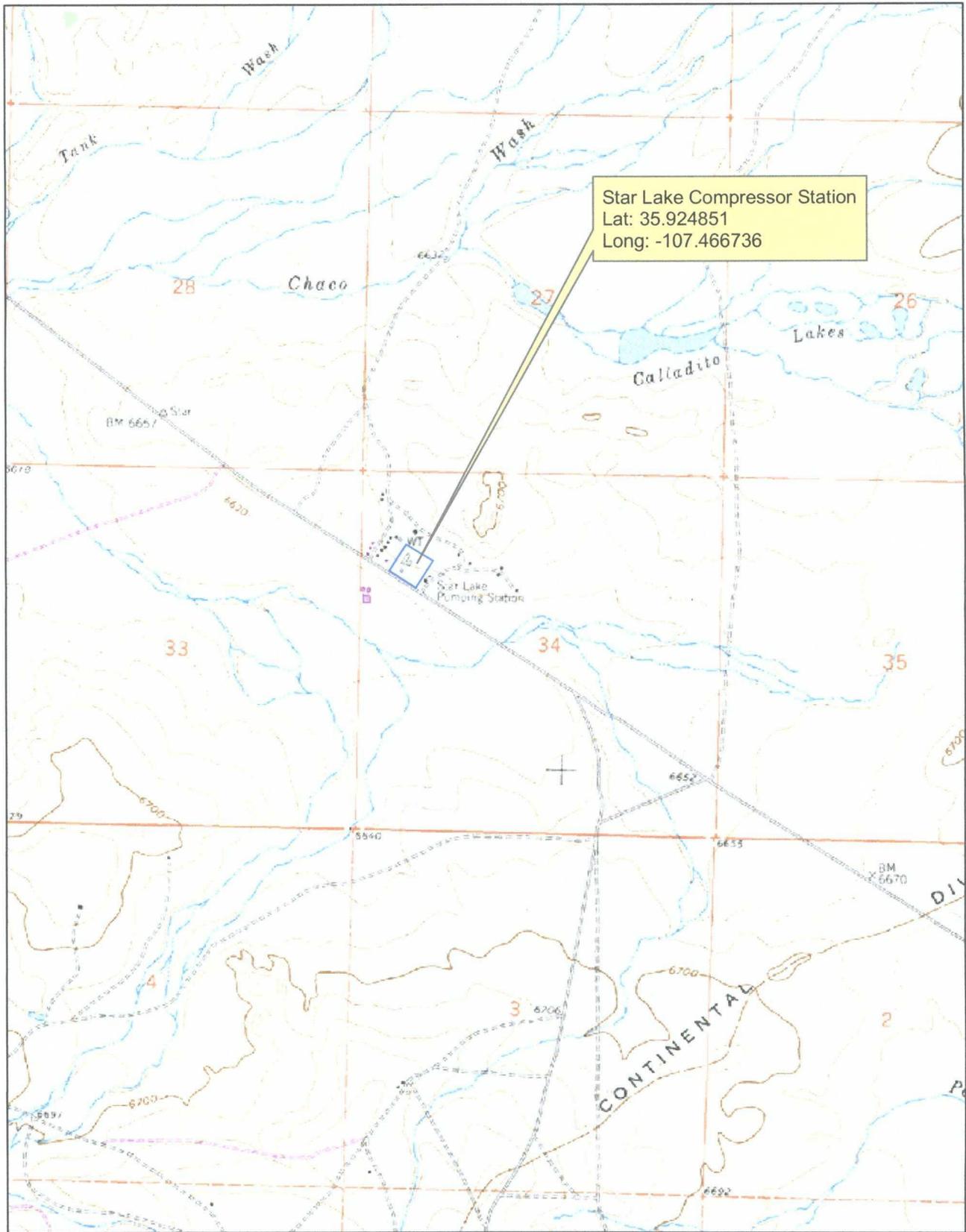
Star Lake Compressor Station
 Lat: 35.924851
 Long: -107.466736

Map name: CHACO MESA
 Map reference code: 35107-E1-TM-100
 Map scale: 1:100,000
 Map type: Topographic (Meters)
 Contour interval: 20 meters
 Year created: 1977
 Year revised: None

PNM
 A personal commitment
 to New Mexico

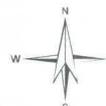
North arrow and scale bar (0 to 5 Miles)

Figure 1 - Site Location Map
 Star Lake Compressor Station
 NW 1/4 of S34, T 20 N, R 6 W
 McKinley County, NM



Map name: STAR LAKE
 Map reference code: 35107-H4-TF-024
 Map scale: 1:24,000
 Map type: Topographic (Feet)
 Contour interval: 20 feet
 Year created: 1961
 Year revised: 1989

Figure 2 - Site Topographic Map
 Star Lake Compressor Station
 NW 1/4 of S34, T 20 N, R 6 W
 McKinley County, NM



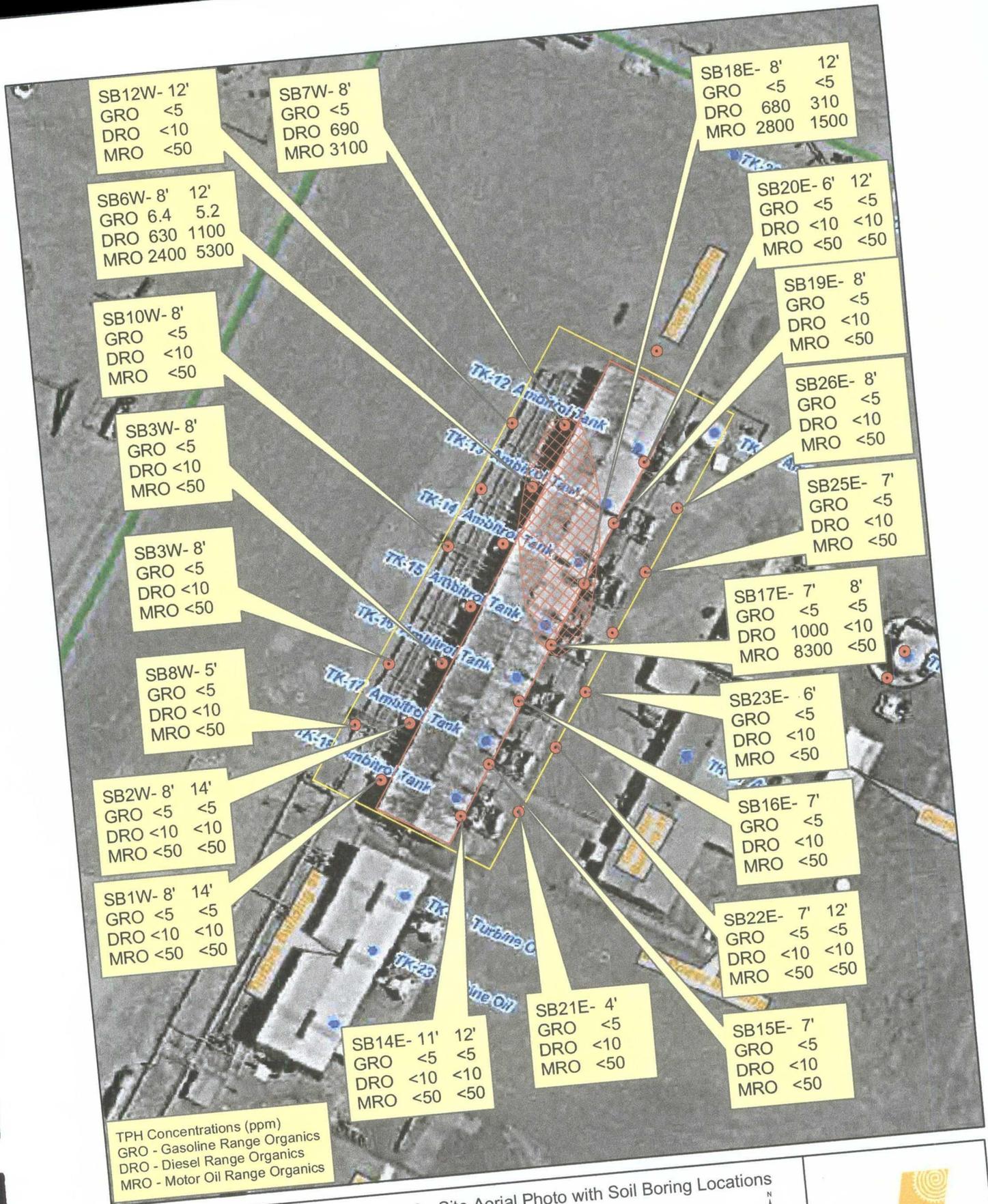
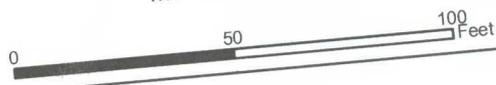


Figure 3 - Site Aerial Photo with Soil Boring Locations
 Star Lake Compressor Station
 NW 1/4 of S34, T 20 N, R 6 W
 McKinley County, NM

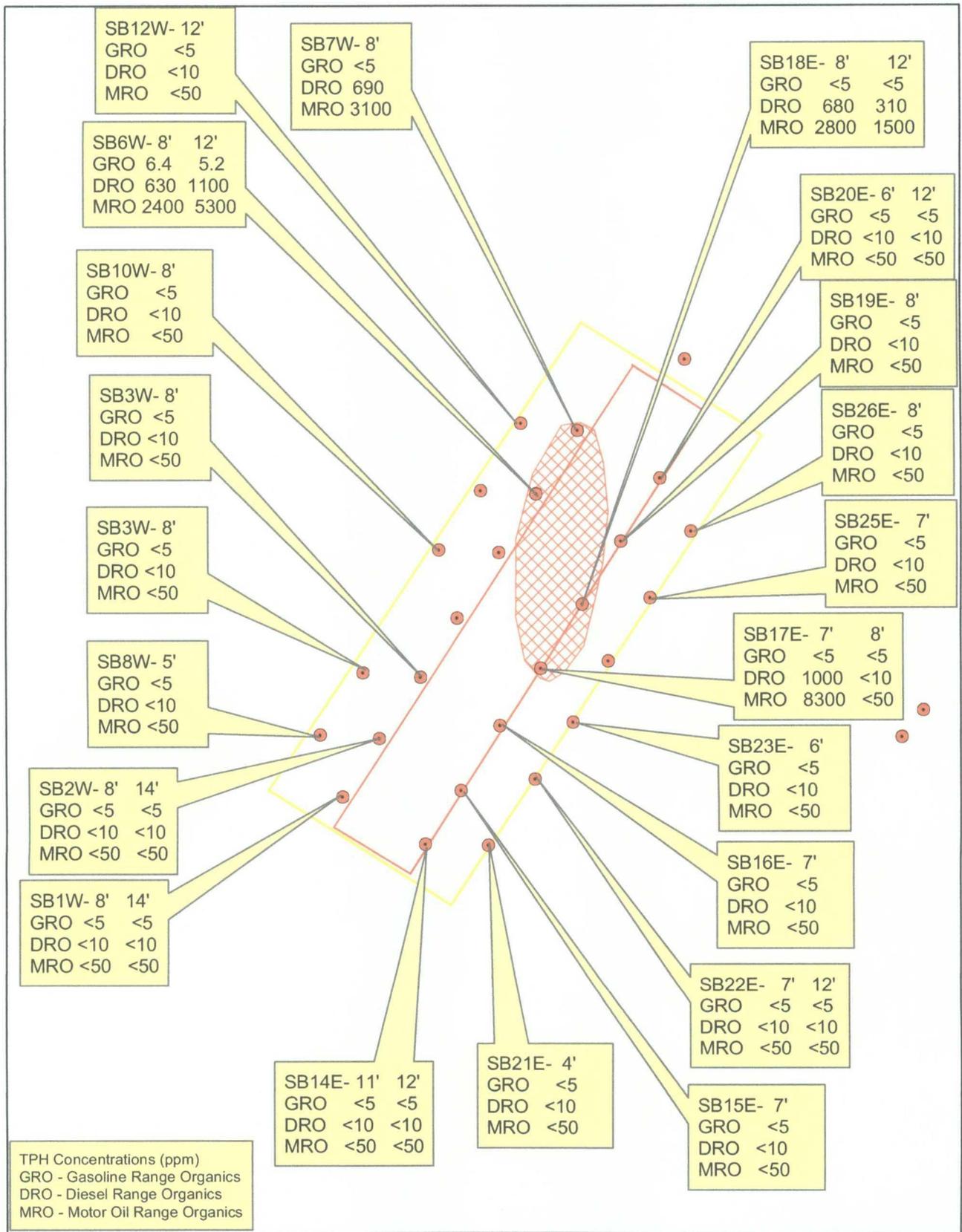
Legend

- Soil Boring
- Compressor Bldg
- Area of Investigation
- Contamination



1 inch equals 42 feet





Legend

- Soil Boring
- Compressor Bldg
- Area of Investigation
- ▨ Contamination

Figure 4 - Site Map with Soil Boring Locations
 Star Lake Compressor Station
 NW 1/4 of S34, T 20 N, R 6 W
 McKinley County, NM

0 50 100 Feet 1 inch equals 42 feet

TABLES

TABLE 1
STAR LAKE COMPRESSOR STATION
GEOPROBE INVESTIGATION
ANALYTICAL RESULTS SUMMARY
CONCENTRATIONS (ppm)

SAMPLE	Time	Depth	TPH GRO	TPH DRO	TPH MRO	PCB	RCRA Metals	Glycol	Comment
New Oil Tank	1100	6	<5.0	200	850	<0.02	NA		appeared clean?Center
New Oil Tank	1105	6	<5.0	<10.0	<50.0	NA	NA		S Wall
SB1W	1113	8	<5.0	<10.0	<50.0	<0.02	Ba 84		No HC? Sample was black
SB1W	1115	14	<5.0	<10.0	<50.0	NA	NA		
SB2W	1133	8	<5.0	<10.0	<50.0	NA	NA		
SB2W	113	10	NA	NA	NA	NA	NA	<5.0	
SB2W	1140	12	<5.0	<10.0	<50.0	NA	NA		
SB3W	1152	8	<5.0	<10.0	<50.0	NA	NA		
SB6W	1240	8	6.4	630	2400	<0.02	Ba 46		
SB6W	1245	12	5.2	1100	5300	NA	NA		
SB7W	1250	8	<5.0	690	3100	<0.02	Ba 43		
SB8W	1257	5	<5.0	<10.0	<50.0	NA	NA		
SB10W	1318	8	<5.0	<10.0	<50.0	NA	NA		
SB12W	1350	12	<5.0	<10.0	<50.0	NA	NA		
SB14E	1430	7	NA	NA	NA	NA	NA	<5.0	
SB14E	1431	11	<5.0	<10.0	<50.0	NA	NA		
SB14E	1435	12	<5.0	<10.0	<50.0	NA	NA		
SB15E	1438	7	<5.0	<10.0	<50.0	NA	NA		No HC? Sample was black
SB16E	1446	7	<5.0	<10.0	<50.0	NA	NA		
SB17E	1453	7	<5.0	1000	8300	NA	NA		
SB17E	1458	8	<5.0	<10.0	<50.0	NA	NA		
SB18E	1504	8	<5.0	680	2800	NA	NA	<5.0	
SB18E	1508	12	<5.0	310	1500	NA	NA		
SB19E	1515	8	<5.0	<10.0	<50.0	NA	NA		
SB20E	1530	6	<5.0	<10.0	<50.0	NA	NA	<5.0	
SB20E	1535	12	<5.0	<10.0	<50.0	NA	NA		
SB21E	1539	4	<5.0	<10.0	<50.0	NA	NA		
SB22E	1545	7	<5.0	<10.0	<50.0	NA	NA	<5.0	
SB22E	1550	12	<5.0	<10.0	<50.0	NA	NA		
SB23E	1547	6	<5.0	<10.0	<50.0	NA	NA		
SB25E	1614	7	<5.0	<10.0	<50.0	NA	NA		
SB25E	1620	12	NA	NA	NA	NA	NA	<5.0	
SB26E	1624	4	NA	NA	NA	NA	NA	<5.0	
SB26E	1628	8	<5.0	<10.0	<50.0	NA	NA		

Table 2
Star Lake
Clark Compressor Building
Soil Remediation
Volume Approximations

Site	Length (ft)	Width (ft)	Area (SF)	Depth (ft)	Volume (cubic feet)	Volume (cubic yds)
Area of Investigation	170	65	11050	12	132600	4911.11
Area of Excavation	150	25	3750	8	30000	1111.11
Area of Concrete Foundation	140	15	2100	6	12600	466.67
Area of Contamination					17400	644.44

**APPENDIX A
PHOTOGRAPHS**



Photograph Number 1: View of the geoprobe direct push unit performing borings at the southwest corner of the former Clark compressor building in the (vicinity of SB2W).



Photograph Number 2: View of the geoprobe direct push unit performing borings on the west side of the former Clark compressor building.



Photograph Number 3: View of soils collected in a polycarbonate liner in the process of field screening.



Photograph Number 4: View of the geoprobe looking north, west of the Clark compressors.



Photograph Number 5: View to south on the west side of the Clark compressors.



Photograph Number 6: View of black hydrocarbon contaminated soils encountered at soil boring SB7W at a depth of eight (8) feet below ground surface.



Photograph Number 7: View of the geprobe performing soil borings on the east side of the Clark Compressors.



Photograph Number 8: View of the soils encountered at soil boring SB18E.



Photograph Number 9: View of the work in progress on the east side of the Clark compressors.



Photograph Number 10: View to the south of the soil borings performed along the eastern side of the Clark compressors.



Photograph Number 11: View to the south of the soil borings performed around the Clark compressors.



Photograph Number 12: View to the south of the soil boring performed along the western side of the Clark compressors.



Photograph Number 1: View of the Clark foundation excavation looking to the south.



Photograph Number 2: View of the former Clark concrete foundation stockpiled.



Photograph Number 3: View of the Clark foundation excavation, looking to the northwest.



Photograph Number 4: View of the excavation of the Clark foundation trench.



Photograph Number 5: View to the south of the Clark soils excavation.



Photograph Number 6: View to the south of the Clark excavation and Saturn Building.



Photograph Number 7: View of the stockpiled soils removed from the Clark foundation trench.



Photograph Number 8: View of backhoe performing vertical extent in the center of the foundation trench.



Photograph Number 9: View of backhoe performing vertical extent in the center of the trench 120' north of the Saturn Building



Photograph Number 10: View of backhoe performing vertical extent in the center of the trench 120' north of the Saturn Building

**APPENDIX B
LABORATORY ANALYSIS SOILS**

COVER LETTER

Wednesday, March 26, 2008

Claudette Horn
PNM
Alvarado Square MS 2104
Albuquerque, NM 87158

TEL: (505) 241-2019
FAX (505) 241-4306

RE: Star Lake

Order No.: 0803193

Dear Claudette Horn:

Hall Environmental Analysis Laboratory, Inc. received 34 sample(s) on 3/20/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001



CLIENT: PNM
Project: Star Lake
Lab Order: 0803193

CASE NARRATIVE

"S" flags denote that the surrogate recovery was poor due to sample dilution or matrix interferences.

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-01

Client Sample ID: "New" Oil Tank Center 6
 Collection Date: 3/18/2008 11:00:00 AM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: JMP
Aroclor 1016	ND	0.020		mg/Kg	1	3/24/2008 5:16:15 PM
Aroclor 1221	ND	0.020		mg/Kg	1	3/24/2008 5:16:15 PM
Aroclor 1232	ND	0.020		mg/Kg	1	3/24/2008 5:16:15 PM
Aroclor 1242	ND	0.020		mg/Kg	1	3/24/2008 5:16:15 PM
Aroclor 1248	ND	0.020		mg/Kg	1	3/24/2008 5:16:15 PM
Aroclor 1254	ND	0.020		mg/Kg	1	3/24/2008 5:16:15 PM
Aroclor 1260	ND	0.020		mg/Kg	1	3/24/2008 5:16:15 PM
Surr: Decachlorobiphenyl	48.0	15.8-133		%REC	1	3/24/2008 5:16:15 PM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	200	50		mg/Kg	5	3/24/2008 6:08:45 AM
Motor Oil Range Organics (MRO)	850	250		mg/Kg	5	3/24/2008 6:08:45 AM
Surr: DNOP	115	61.7-135		%REC	5	3/24/2008 6:08:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2008 6:40:38 PM
Surr: BFB	100	84-138		%REC	1	3/21/2008 6:40:38 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM	Client Sample ID: "New" Oil Tank South Wall 6'
Lab Order: 0803193	Collection Date: 3/18/2008 11:05:00 AM
Project: Star Lake	Date Received: 3/20/2008
Lab ID: 0803193-02	Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 6:43:25 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 6:43:25 AM
Surr: DNOP	90.3	61.7-135		%REC	1	3/24/2008 6:43:25 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2008 7:10:51 PM
Surr: BFB	101	84-138		%REC	1	3/21/2008 7:10:51 PM

Qualifiers:	* 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	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-03

Client Sample ID: SB1W-8'
 Collection Date: 3/18/2008 11:13:00 AM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: JMP
Aroclor 1016	ND	0.020		mg/Kg	1	3/24/2008 6:04:48 PM
Aroclor 1221	ND	0.020		mg/Kg	1	3/24/2008 6:04:48 PM
Aroclor 1232	ND	0.020		mg/Kg	1	3/24/2008 6:04:48 PM
Aroclor 1242	ND	0.020		mg/Kg	1	3/24/2008 6:04:48 PM
Aroclor 1248	ND	0.020		mg/Kg	1	3/24/2008 6:04:48 PM
Aroclor 1254	ND	0.020		mg/Kg	1	3/24/2008 6:04:48 PM
Aroclor 1260	ND	0.020		mg/Kg	1	3/24/2008 6:04:48 PM
Surr: Decachlorobiphenyl	47.2	15.8-133		%REC	1	3/24/2008 6:04:48 PM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 7:18:05 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 7:18:05 AM
Surr: DNOP	89.0	61.7-135		%REC	1	3/24/2008 7:18:05 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2008 7:40:57 PM
Surr: BFB	100	84-138		%REC	1	3/21/2008 7:40:57 PM
EPA METHOD 7471: MERCURY						Analyst: SNV
Mercury	ND	0.033		mg/Kg	1	3/25/2008 4:30:22 PM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	2.5		mg/Kg	1	3/26/2008 8:54:30 AM
Barium	84	1.0		mg/Kg	10	3/26/2008 9:56:22 AM
Cadmium	ND	0.10		mg/Kg	1	3/26/2008 8:54:30 AM
Chromium	4.5	0.30		mg/Kg	1	3/26/2008 8:54:30 AM
Lead	7.2	0.25		mg/Kg	1	3/26/2008 8:54:30 AM
Selenium	ND	2.5		mg/Kg	1	3/26/2008 8:54:30 AM
Silver	ND	0.25		mg/Kg	1	3/26/2008 8:54:30 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-04

Client Sample ID: SB1W-14'
 Collection Date: 3/18/2008 11:15:00 AM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 7:52:45 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 7:52:45 AM
Surr: DNOP	88.3	61.7-135		%REC	1	3/24/2008 7:52:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2008 8:11:12 PM
Surr: BFB	104	84-138		%REC	1	3/21/2008 8:11:12 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-05

Client Sample ID: SB2W-8'
 Collection Date: 3/18/2008 11:33:00 AM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 8:27:25 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 8:27:25 AM
Surr: DNOP	86.4	61.7-135		%REC	1	3/24/2008 8:27:25 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2008 8:41:29 PM
Surr: BFB	102	84-138		%REC	1	3/21/2008 8:41:29 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-07

Client Sample ID: SB2W-12
 Collection Date: 3/18/2008 11:40:00 AM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 9:02:10 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 9:02:10 AM
Surr: DNOP	89.6	61.7-135		%REC	1	3/24/2008 9:02:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2008 9:11:46 PM
Surr: BFB	102	84-138		%REC	1	3/21/2008 9:11:46 PM

Qualifiers:
 * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-08

Client Sample ID: SB3W-8'
 Collection Date: 3/18/2008 11:52:00 AM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 9:31:01 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 9:31:01 AM
Surr: DNOP	92.6	61.7-135		%REC	1	3/24/2008 9:31:01 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/21/2008 9:41:47 PM
Surr: BFB	98.2	84-138		%REC	1	3/21/2008 9:41:47 PM

Qualifiers:
 * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-09

Client Sample ID: SB6W-8'
 Collection Date: 3/18/2008 12:40:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: JMP
Aroclor 1016	ND	0.020		mg/Kg	1	3/24/2008 6:53:32 PM
Aroclor 1221	ND	0.020		mg/Kg	1	3/24/2008 6:53:32 PM
Aroclor 1232	ND	0.020		mg/Kg	1	3/24/2008 6:53:32 PM
Aroclor 1242	ND	0.020		mg/Kg	1	3/24/2008 6:53:32 PM
Aroclor 1248	ND	0.020		mg/Kg	1	3/24/2008 6:53:32 PM
Aroclor 1254	ND	0.020		mg/Kg	1	3/24/2008 6:53:32 PM
Aroclor 1260	ND	0.020		mg/Kg	1	3/24/2008 6:53:32 PM
Surr: Decachlorobiphenyl	29.2	15.8-133		%REC	1	3/24/2008 6:53:32 PM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	630	100		mg/Kg	10	3/23/2008 6:26:21 AM
Motor Oil Range Organics (MRO)	2400	500		mg/Kg	10	3/23/2008 6:26:21 AM
Surr: DNOP	0	61.7-135	S	%REC	10	3/23/2008 6:26:21 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	6.4	5.0		mg/Kg	1	3/24/2008 2:59:51 PM
Surr: BFB	116	84-138		%REC	1	3/24/2008 2:59:51 PM
EPA METHOD 7471: MERCURY						Analyst: SNV
Mercury	ND	0.033		mg/Kg	1	3/25/2008 4:31:56 PM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	5.0		mg/Kg	2	3/26/2008 9:59:40 AM
Barium	46	0.20		mg/Kg	2	3/26/2008 9:59:40 AM
Cadmium	ND	0.20		mg/Kg	2	3/26/2008 9:59:40 AM
Chromium	3.1	0.60		mg/Kg	2	3/26/2008 9:59:40 AM
Lead	6.5	0.50		mg/Kg	2	3/26/2008 9:59:40 AM
Selenium	ND	5.0		mg/Kg	2	3/26/2008 9:59:40 AM
Silver	ND	0.50		mg/Kg	2	3/26/2008 9:59:40 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM Client Sample ID: SB6W-12'
 Lab Order: 0803193 Collection Date: 3/18/2008 12:45:00 PM
 Project: Star Lake Date Received: 3/20/2008
 Lab ID: 0803193-10 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1100	100		mg/Kg	10	3/23/2008 7:00:30 AM
Motor Oil Range Organics (MRO)	5300	500		mg/Kg	10	3/23/2008 7:00:30 AM
Surr: DNOP	0	61.7-135	S	%REC	10	3/23/2008 7:00:30 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	5.2	5.0		mg/Kg	1	3/24/2008 4:00:12 PM
Surr: BFB	120	84-138		%REC	1	3/24/2008 4:00:12 PM

Qualifiers: * 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 MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-11

Client Sample ID: SB7W-8'
 Collection Date: 3/18/2008 12:50:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8082: PCB'S						Analyst: JMP
Aroclor 1016	ND	0.020		mg/Kg	1	3/24/2008 7:42:04 PM
Aroclor 1221	ND	0.020		mg/Kg	1	3/24/2008 7:42:04 PM
Aroclor 1232	ND	0.020		mg/Kg	1	3/24/2008 7:42:04 PM
Aroclor 1242	ND	0.020		mg/Kg	1	3/24/2008 7:42:04 PM
Aroclor 1248	ND	0.020		mg/Kg	1	3/24/2008 7:42:04 PM
Aroclor 1254	ND	0.020		mg/Kg	1	3/24/2008 7:42:04 PM
Aroclor 1260	ND	0.020		mg/Kg	1	3/24/2008 7:42:04 PM
Surr: Decachlorobiphenyl	26.4	15.8-133		%REC	1	3/24/2008 7:42:04 PM
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	690	100		mg/Kg	10	3/23/2008 7:34:34 AM
Motor Oil Range Organics (MRO)	3100	500		mg/Kg	10	3/23/2008 7:34:34 AM
Surr: DNOP	0	61.7-135	S	%REC	10	3/23/2008 7:34:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 4:30:25 PM
Surr: BFB	126	84-138		%REC	1	3/24/2008 4:30:25 PM
EPA METHOD 7471: MERCURY						Analyst: SNV
Mercury	ND	0.033		mg/Kg	1	3/25/2008 4:33:31 PM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	2.5		mg/Kg	1	3/26/2008 9:06:40 AM
Barium	43	0.10		mg/Kg	1	3/26/2008 9:06:40 AM
Cadmium	ND	0.10		mg/Kg	1	3/26/2008 9:06:40 AM
Chromium	3.1	0.30		mg/Kg	1	3/26/2008 9:06:40 AM
Lead	4.9	0.25		mg/Kg	1	3/26/2008 9:06:40 AM
Selenium	ND	2.5		mg/Kg	1	3/26/2008 9:06:40 AM
Silver	ND	0.25		mg/Kg	1	3/26/2008 9:06:40 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-12

Client Sample ID: SB8W-5'
 Collection Date: 3/18/2008 12:57:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 10:05:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 10:05:22 AM
Surr: DNOP	90.5	61.7-135		%REC	1	3/24/2008 10:05:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 5:02:54 PM
Surr: BFB	116	84-138		%REC	1	3/24/2008 5:02:54 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-13

Client Sample ID: SB10W-8'
 Collection Date: 3/18/2008 1:18:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 10:34:29 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 10:34:29 AM
Surr: DNOP	92.7	61.7-135		%REC	1	3/24/2008 10:34:29 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 5:33:02 PM
Surr: BFB	114	84-138		%REC	1	3/24/2008 5:33:02 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-14

Client Sample ID: SB12W-12'
 Collection Date: 3/18/2008 1:50:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 11:03:18 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 11:03:18 AM
Surr: DNOP	94.2	61.7-135		%REC	1	3/24/2008 11:03:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 6:03:14 PM
Surr: BFB	114	84-138		%REC	1	3/24/2008 6:03:14 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-16

Client Sample ID: SB14E-11'
 Collection Date: 3/18/2008 2:31:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 12:13:17 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 12:13:17 PM
Surr: DNOP	91.7	61.7-135		%REC	1	3/24/2008 12:13:17 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 6:33:22 PM
Surr: BFB	116	84-138		%REC	1	3/24/2008 6:33:22 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-17

Client Sample ID: SB14E-12'
 Collection Date: 3/18/2008 2:35:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 12:36:31 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 12:36:31 PM
Surr: DNOP	92.1	61.7-135		%REC	1	3/24/2008 12:36:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 7:03:33 PM
Surr: BFB	114	84-138		%REC	1	3/24/2008 7:03:33 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-18

Client Sample ID: SB15E-7'
 Collection Date: 3/18/2008 2:38:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 1:17:25 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 1:17:25 PM
Surr: DNOP	101	61.7-135		%REC	1	3/24/2008 1:17:25 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 7:33:44 PM
Surr: BFB	110	84-138		%REC	1	3/24/2008 7:33:44 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-19

Client Sample ID: SB16E-7
 Collection Date: 3/18/2008 2:46:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 1:45:39 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 1:45:39 PM
Surr: DNOP	91.1	61.7-135		%REC	1	3/24/2008 1:45:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 8:04:03 PM
Surr: BFB	116	84-138		%REC	1	3/24/2008 8:04:03 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

CLIENT:	PNM	Client Sample ID:	SB17E-4'
Lab Order:	0803193	Collection Date:	3/18/2008 2:53:00 PM
Project:	Star Lake	Date Received:	3/20/2008
Lab ID:	0803193-20	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1000	100		mg/Kg	10	3/23/2008 12:42:21 PM
Motor Oil Range Organics (MRO)	8300	500		mg/Kg	10	3/23/2008 12:42:21 PM
Surr: DNOP	0	61.7-135	S	%REC	10	3/23/2008 12:42:21 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 8:34:20 PM
Surr: BFB	118	84-138		%REC	1	3/24/2008 8:34:20 PM

Qualifiers:	* 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	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM Client Sample ID: SB17E-8'
 Lab Order: 0803193 Collection Date: 3/18/2008 2:58:00 PM
 Project: Star Lake Date Received: 3/20/2008
 Lab ID: 0803193-21 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 2:20:39 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 2:20:39 PM
Surr: DNOP	95.9	61.7-135		%REC	1	3/24/2008 2:20:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 9:04:36 PM
Surr: BFB	114	84-138		%REC	1	3/24/2008 9:04:36 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM Client Sample ID: SB18E-8'
 Lab Order: 0803193 Collection Date: 3/18/2008 3:04:00 PM
 Project: Star Lake Date Received: 3/20/2008
 Lab ID: 0803193-22 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	680	100		mg/Kg	10	3/23/2008 1:51:01 PM
Motor Oil Range Organics (MRO)	2800	500		mg/Kg	10	3/23/2008 1:51:01 PM
Surr: DNOP	0	61.7-135	S	%REC	10	3/23/2008 1:51:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 9:36:13 PM
Surr: BFB	69.0	84-138	S	%REC	1	3/24/2008 9:36:13 PM

Qualifiers: * 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 MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
Lab Order: 0803193
Project: Star Lake
Lab ID: 0803193-23

Client Sample ID: SB18E-12'
Collection Date: 3/18/2008 3:08:00 PM
Date Received: 3/20/2008
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	310	100		mg/Kg	10	3/23/2008 2:25:27 PM
Motor Oil Range Organics (MRO)	1500	500		mg/Kg	10	3/23/2008 2:25:27 PM
Surr: DNOP	120	61.7-135		%REC	10	3/23/2008 2:25:27 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 10:06:28 PM
Surr: BFB	116	84-138		%REC	1	3/24/2008 10:06:28 PM

- Qualifiers:**
- * 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
 - MCL Maximum Contaminant Level
 - ND Not Detected at the Reporting Limit
 - RL Reporting Limit
 - S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-24

Client Sample ID: SB19E-8'
 Collection Date: 3/18/2008 3:15:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 2:46:49 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 2:46:49 PM
Surr: DNOP	89.1	61.7-135		%REC	1	3/24/2008 2:46:49 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 10:36:36 PM
Surr: BFB	115	84-138		%REC	1	3/24/2008 10:36:36 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
Lab Order: 0803193
Project: Star Lake
Lab ID: 0803193-25

Client Sample ID: SB20E-6'
Collection Date: 3/18/2008 3:30:00 PM
Date Received: 3/20/2008
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 3:21:50 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 3:21:50 PM
Surr: DNOP	91.4	61.7-135		%REC	1	3/24/2008 3:21:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/24/2008 11:06:53 PM
Surr: BFB	118	84-138		%REC	1	3/24/2008 11:06:53 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM Client Sample ID: SB20E-12'
 Lab Order: 0803193 Collection Date: 3/18/2008 3:35:00 PM
 Project: Star Lake Date Received: 3/20/2008
 Lab ID: 0803193-26 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 3:56:51 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 3:56:51 PM
Surr: DNOP	98.0	61.7-135		%REC	1	3/24/2008 3:56:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/25/2008 1:07:21 AM
Surr: BFB	117	84-138		%REC	1	3/25/2008 1:07:21 AM

Qualifiers: * 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 MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-27

Client Sample ID: SB21E-4'
 Collection Date: 3/18/2008 3:39:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 4:32:05 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 4:32:05 PM
Surr: DNOP	100	61.7-135		%REC	1	3/24/2008 4:32:05 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/25/2008 1:37:33 AM
Surr: BFB	114	84-138		%REC	1	3/25/2008 1:37:33 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM Client Sample ID: SB22E-7
 Lab Order: 0803193 Collection Date: 3/18/2008 3:45:00 PM
 Project: Star Lake Date Received: 3/20/2008
 Lab ID: 0803193-28 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 5:07:24 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 5:07:24 PM
Surr: DNOP	105	61.7-135		%REC	1	3/24/2008 5:07:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/25/2008 2:07:48 AM
Surr: BFB	117	84-138		%REC	1	3/25/2008 2:07:48 AM

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

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM Client Sample ID: SB22E-12'
 Lab Order: 0803193 Collection Date: 3/18/2008 3:50:00 PM
 Project: Star Lake Date Received: 3/20/2008
 Lab ID: 0803193-29 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 6:17:53 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 6:17:53 PM
Surr: DNOP	112	61.7-135		%REC	1	3/24/2008 6:17:53 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/25/2008 2:37:50 AM
Surr: BFB	116	84-138		%REC	1	3/25/2008 2:37:50 AM

Qualifiers: * 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 MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-30

Client Sample ID: SB23E-6'
 Collection Date: 3/18/2008 3:57:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 6:52:05 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 6:52:05 PM
Surr: DNOP	109	61.7-135		%REC	1	3/24/2008 6:52:05 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/25/2008 3:08:04 AM
Surr: BFB	117	84-138		%REC	1	3/25/2008 3:08:04 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT: PNM
 Lab Order: 0803193
 Project: Star Lake
 Lab ID: 0803193-31

Client Sample ID: SB25E-7'
 Collection Date: 3/18/2008 4:14:00 PM
 Date Received: 3/20/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 7:27:20 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 7:27:20 PM
Surr: DNOP	99.5	61.7-135		%REC	1	3/24/2008 7:27:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/25/2008 3:38:12 AM
Surr: BFB	117	84-138		%REC	1	3/25/2008 3:38:12 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 26-Mar-08

CLIENT:	PNM	Client Sample ID:	SB26E-8'
Lab Order:	0803193	Collection Date:	3/18/2008 4:28:00 PM
Project:	Star Lake	Date Received:	3/20/2008
Lab ID:	0803193-34	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/24/2008 8:02:34 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/24/2008 8:02:34 PM
Surr: DNOP	112	61.7-135		%REC	1	3/24/2008 8:02:34 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: BDH
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/25/2008 4:08:13 AM
Surr: BFB	116	84-138		%REC	1	3/25/2008 4:08:13 AM

Qualifiers:	* 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	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
 Project: 0803193
 Lab ID: C08030903-001
 Client Sample ID: SB2W-10'

Report Date: 03/26/08
 Collection Date: 03/18/08 11:38
 Date Received: 03/21/08
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Ethylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 12:41 / eli-b
Propylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 12:41 / eli-b
Surr: 2-Butoxyethanol	82.0	%REC		70-130		SW8015B	03/24/08 12:41 / eli-b

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
 Project: 0803193
 Lab ID: C08030903-002
 Client Sample ID: SB14E-7'

Report Date: 03/26/08
 Collection Date: 03/18/08 14:30
 Date Received: 03/21/08
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Ethylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 12:59 / ell-b
Propylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 12:59 / ell-b
Surr: 2-Butoxyethanol	82.0	%REC		70-130		SW8015B	03/24/08 12:59 / ell-b

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0803193
Lab ID: C08030903-003
Client Sample ID: SB18E-8'

Report Date: 03/26/08
Collection Date: 03/18/08 15:04
Date Received: 03/21/08
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Ethylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 13:17 / ell-b
Propylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 13:17 / ell-b
Surr: 2-Butoxyethanol	83.0	%REC		70-130		SW8015B	03/24/08 13:17 / ell-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
 Project: 0803193
 Lab ID: C08030903-004
 Client Sample ID: SB20E-6'

Report Date: 03/26/08
 Collection Date: 03/18/08 15:30
 Date Received: 03/21/08
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Ethylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 13:35 / eli-b
Propylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 13:35 / eli-b
Surr: 2-Butoxyethanol	86.0	%REC		70-130		SW8015B	03/24/08 13:35 / eli-b

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0803193
Lab ID: C08030903-005
Client Sample ID: SB22E-7'

Report Date: 03/26/08
Collection Date: 03/18/08 15:45
Date Received: 03/21/08
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Ethylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 13:52 / eli-b
Propylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 13:52 / eli-b
Surr: 2-Butoxyethanol	81.0	%REC		70-130		SW8015B	03/24/08 13:52 / eli-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0803193
Lab ID: C08030903-006
Client Sample ID: SB25E-12'

Report Date: 03/26/08
Collection Date: 03/18/08 16:20
Date Received: 03/21/08
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Ethylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 14:10 / ell-b
Propylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 14:10 / ell-b
Surr: 2-Butoxyethanol	85.0	%REC		70-130		SW8015B	03/24/08 14:10 / ell-b

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
 Project: 0803193
 Lab ID: C08030903-007
 Client Sample ID: SB26E-4'

Report Date: 03/26/08
 Collection Date: 03/18/08 16:24
 Date Received: 03/21/08
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Ethylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 14:28 / eli-b
Propylene Glycol	ND	mg/kg		5.0		SW8015B	03/24/08 14:28 / eli-b
Surr: 2-Butoxyethanol	87.0	%REC		70-130		SW8015B	03/24/08 14:28 / eli-b

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
 Project: 0803193

Report Date: 03/26/08
 Work Order: C08030903

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015B							Batch: B_31556		
Sample ID: LCS-31556	Laboratory Control Sample			Run: SUB-B108081			03/24/08 12:05		
Ethylene Glycol	108	mg/kg	5.0	108	70	130			
Propylene Glycol	96.8	mg/kg	5.0	97	70	130			
Surr: 2-Butoxyethanol			1.0	94	70	130			
Sample ID: MB-31556	Method Blank			Run: SUB-B108081			03/24/08 12:23		
Ethylene Glycol	ND	mg/kg	5.0						
Propylene Glycol	ND	mg/kg	5.0						
Surr: 2-Butoxyethanol			1.0	92	70	130			
Sample ID: C08030903-007A	Sample Matrix Spike			Run: SUB-B108081			03/24/08 14:46		
Ethylene Glycol	92.2	mg/kg	5.0	92	70	130			
Propylene Glycol	95.8	mg/kg	5.0	96	70	130			
Surr: 2-Butoxyethanol			1.0	87	70	130			
Sample ID: C08030903-007A	Sample Matrix Spike Duplicate			Run: SUB-B108081			03/24/08 15:04		
Ethylene Glycol	93.7	mg/kg	5.0	94	70	130	1.6	20	
Propylene Glycol	98.6	mg/kg	5.0	99	70	130	2.9	20	
Surr: 2-Butoxyethanol			1.0	85	70	130			
Method: SW8015B							Analytical Run: SUB-B108081		
Sample ID: CCV_0324HG105r-W	Continuing Calibration Verification Standard						03/24/08 11:47		
Ethylene Glycol	113	mg/kg	5.0	113	85	115			
Propylene Glycol	113	mg/kg	5.0	113	85	115			
Surr: 2-Butoxyethanol			1.0	102	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC SUMMARY REPORT

Client: PNM
Project: Star Lake

Work Order: 0803193

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics									
Sample ID: MB-15437		MBLK							
Batch ID: 15437									Analysis Date: 3/22/2008 8:41:19 PM
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: MB-15438		MBLK							
Batch ID: 15438									Analysis Date: 3/22/2008 10:24:46 PM
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-15437		LCS							
Batch ID: 15437									Analysis Date: 3/22/2008 9:15:59 PM
Diesel Range Organics (DRO)	43.71	mg/Kg	10	87.4	64.6	116			
Sample ID: LCS-15438		LCS							
Batch ID: 15438									Analysis Date: 3/22/2008 10:59:11 PM
Diesel Range Organics (DRO)	42.73	mg/Kg	10	85.5	64.6	116			
Sample ID: LCSD-15437		LCSD							
Batch ID: 15437									Analysis Date: 3/22/2008 9:50:20 PM
Diesel Range Organics (DRO)	43.50	mg/Kg	10	87.0	64.6	116	0.484	17.4	
Sample ID: LCSD-15438		LCSD							
Batch ID: 15438									Analysis Date: 3/22/2008 11:33:32 PM
Diesel Range Organics (DRO)	44.42	mg/Kg	10	88.8	64.6	116	3.88	17.4	

Method: EPA Method 8015B: Gasoline Range									
Sample ID: 0803193-04A MSD		MSD							
Batch ID: 15430									Analysis Date: 3/21/2008 11:11:58 PM
Gasoline Range Organics (GRO)	24.02	mg/Kg	5.0	96.1	69.5	120	2.53	11.6	
Sample ID: 0803193-24A MSD		MSD							
Batch ID: 15431									Analysis Date: 3/24/2008 2:29:44 PM
Gasoline Range Organics (GRO)	22.46	mg/Kg	5.0	89.8	69.5	120	3.53	11.6	
Sample ID: MB-15430		MBLK							
Batch ID: 15430									Analysis Date: 3/21/2008 6:10:33 PM
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: MB-15431		MBLK							
Batch ID: 15431									Analysis Date: 3/24/2008 12:59:17 PM
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-15430		LCS							
Batch ID: 15430									Analysis Date: 3/21/2008 11:42:04 PM
Gasoline Range Organics (GRO)	23.25	mg/Kg	5.0	93.0	69.5	120			
Sample ID: LCS-15431		LCS							
Batch ID: 15431									Analysis Date: 3/24/2008 1:29:27 PM
Gasoline Range Organics (GRO)	21.58	mg/Kg	5.0	86.3	69.5	120			
Sample ID: 0803193-04A MS		MS							
Batch ID: 15430									Analysis Date: 3/21/2008 10:42:03 PM
Gasoline Range Organics (GRO)	23.42	mg/Kg	5.0	93.7	69.5	120			
Sample ID: 0803193-24A MS		MS							
Batch ID: 15431									Analysis Date: 3/24/2008 1:59:37 PM
Gasoline Range Organics (GRO)	21.68	mg/Kg	5.0	86.7	69.5	120			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: PNM
Project: Star Lake

Work Order: 0803193

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8082: PCB's									
Sample ID: MB-15444		MBLK							
					Batch ID: 15444	Analysis Date: 3/24/2008 2:50:33 PM			
Aroclor 1016	ND	mg/Kg	0.020						
Aroclor 1221	ND	mg/Kg	0.020						
Aroclor 1232	ND	mg/Kg	0.020						
Aroclor 1242	ND	mg/Kg	0.020						
Aroclor 1248	ND	mg/Kg	0.020						
Aroclor 1254	ND	mg/Kg	0.020						
Aroclor 1260	ND	mg/Kg	0.020						
Sample ID: LCS-15444		LCS							
					Batch ID: 15444	Analysis Date: 3/24/2008 3:39:04 PM			
Aroclor 1260	0.06805	mg/Kg	0.020	54.4	51.4	120			
Sample ID: LCSD-15444		LCSD							
					Batch ID: 15444	Analysis Date: 3/24/2008 4:27:40 PM			
Aroclor 1260	0.06855	mg/Kg	0.020	54.8	51.4	120	0.732	20	
Method: EPA Method 7471: Mercury									
Sample ID: MB-15469		MBLK							
					Batch ID: 15469	Analysis Date: 3/25/2008 4:27:14 PM			
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-15469		LCS							
					Batch ID: 15469	Analysis Date: 3/25/2008 4:28:48 PM			
Mercury	0.1827	mg/Kg	0.033	110	80	120			
Method: EPA Method 6010B: Soil Metals									
Sample ID: MB-15456		MBLK							
					Batch ID: 15456	Analysis Date: 3/26/2008 7:57:57 AM			
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-15456		LCS							
					Batch ID: 15456	Analysis Date: 3/26/2008 8:02:20 AM			
Arsenic	23.91	mg/Kg	2.5	94.8	80	120			
Barium	24.74	mg/Kg	0.10	98.1	80	120			
Cadmium	24.53	mg/Kg	0.10	97.2	80	120			
Chromium	24.71	mg/Kg	0.30	98.0	80	120			
Lead	24.07	mg/Kg	0.25	95.4	80	120			
Selenium	24.92	mg/Kg	2.5	98.8	80	120			
Silver	25.10	mg/Kg	0.25	99.3	80	120			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name PNM

Date Received:

3/20/2008

Work Order Number 0803193

Received by: AT

Checklist completed by:

Signature

[Handwritten Signature]

3/20/08
Date

Sample ID labels checked by:

Initials

AT 3/20/08

Matrix:

Carrier name Client drop-off

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present Not Shipped
- Custody seals intact on sample bottles? Yes No N/A
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - Preservation labels on bottle and cap match? Yes No N/A
- Water - pH acceptable upon receipt? Yes No N/A

Container/Temp Blank temperature?

11°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: *Date discrepancies on samples 0803193-3, 4, 33. Correct date is 3/18/08 as per MS. As 3/20*

Corrective Action _____

Chain-of-Custody Record

Client: PNM
 Address: Alvarado Square
 Phone #: 241 2019
 email or Fax#: Mark@delphininc.net
 QA/QC Package: Clarette, home@pnmresources.com
 Standard Level 4 (Full Validation)
 Other
 EDD (Type) _____

Turn-Around Time:
 Standard Rush 4 Day
 Project Name: Star Lake
 Project #: Clark Compressors
 Project Manager: Clarette Horn
 Sampler: Mark Sikelianos



HALL ENVIRONMENTAL ANALYSIS LABORATORY
 www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + TMBs (6021)	<input checked="" type="checkbox"/>
BTEX + MTBE + TPH (Gas only)	<input checked="" type="checkbox"/>
TPH Method 8015B (Gas/Diesel)	<input checked="" type="checkbox"/>
TPH (Method 418.1)	<input checked="" type="checkbox"/>
EDB (Method 504.1)	<input checked="" type="checkbox"/>
EDC (Method 8260)	<input checked="" type="checkbox"/>
8310 (PNA or PAH)	<input checked="" type="checkbox"/>
Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	<input checked="" type="checkbox"/>
8081 Pesticides / (8082 PCBs)	<input checked="" type="checkbox"/>
8260B (VOA)	<input checked="" type="checkbox"/>
8270 (Semi-VOA)	<input checked="" type="checkbox"/>
Air Bubbles (Y or N)	<input type="checkbox"/>

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3/18/08	1100	"New Oil TANK" Capter	1-4 oz	COOL	0803193
3/18/08	1105	"New Oil TANK" South	"	COOL	
3/18/08	1113	SB1W-8'	"	"	
	1115	SB1W-14'	"	"	
	1133	SB2W-8'	"	"	
	1138	SB2W-10'	"	"	
	1140	SB2W-12'	"	"	
	1152	SB3W-8'	"	"	
	1240	SB6W-8'	"	"	
	1245	SB6W-12'	"	"	
	1250	SB7W-8'	"	"	
	1257	SB8W-5'	"	"	

Date: 3/20/08 Time: 1000
 Relinquished by: [Signature]
 Date: _____ Time: _____
 Relinquished by: _____
 Received by: [Signature] 3/20/08
 Received by: [Signature] 3/20/08

Remarks: Please Save Sample 5. Once results are reviewed, we may request additional analysis email Mark & Clarette with results

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.

Chain-of-Custody Record

Client: PNM
 Address: Alvarado Square
 Phone #: 241 2019
 email or Fax#: Mark @ delphinus.net
 QA/QC Package: Claude the horn @ pmresources.com
 Standard Level 4 (Full Validation)
 Other _____
 EDD (Type) _____

Turn-Around Time: Standard Rush 4 DAY
 Project Name: Star LAKE
 Project #: Clark Compressors
 Project Manager: Claude the Horn
 Sampler: Mark Sikelianos
 Sample Location: Star Lake
 Sample Reference: 1

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3/8/08	1338	SB10W - 8'	1-402	(201)	0803193
	1350	SB12W - 10'			13
	1420	SB14E - 7'			14
	1431	SB14E - 11'			15
	1435	SB14E - 12'			16
	1438	SB15E - 7'			17
	1446	SB16E - 7'			18
	1453	SB17E - 4'			19
	1458	SB17E - 8'			20
	1504	SB18E - 8'	2-402		21
	1508	SB18E - 12'	1-402		22
	1515	SB19E - 8'	1-402		23
					24

Date: 3/20/08 Time: 1000
 Relinquished by: [Signature]
 Date: _____ Time: _____
 Relinquished by: _____
 Received by: [Signature]
 Received by: 3/20/08 1000

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Analysis Request	
BTEX + MTBE + TMBs (8021)	<input type="checkbox"/>
BTEX + MTBE + TPH (Gas only)	<input checked="" type="checkbox"/>
TPH Method 8015B (Gas/Diesel)	<input checked="" type="checkbox"/>
TPH (Method 418.1)	<input type="checkbox"/>
EDB (Method 504.1)	<input type="checkbox"/>
EDC (Method 8260)	<input type="checkbox"/>
8310 (PNA or PAH)	<input type="checkbox"/>
Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	<input type="checkbox"/>
8081 Pesticides / (8082 PCBs)	<input type="checkbox"/>
8260B (VOA)	<input type="checkbox"/>
8270 (Semi-VOA)	<input checked="" type="checkbox"/>
Air Bubbles (Y or N)	<input type="checkbox"/>

Remarks:
8015 (Vial)
Metal 8

Chain-of-Custody Record

Client: PNM
 Address: Alvarado Square
 Phone #: 241-2019
 email or Fax#: Mark@delphininc.net
 QA/QC Package: Claudette.Horn@pnmresources.com
 Standard Level 4 (Full Validation)
 Other _____
 EDD (Type) _____

Turn-Around Time: _____
 Standard Rush 4 Day
 Project Name: Star Lake
 Project #: Clark Compressors
 Project Manager: Claudette Horn
 Sampler: Mark Sikelianos



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

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TPH (Gas only) (8021)	BTEX + MTBE + TPH (Gas only) (8021)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides (8082 PCBs)	8260B (VOA)	8270 (Semi-VOA)	Mutagens RCRA-8 Total	8015 Glycol	Air Bubbles (Y or N)
3/18/08	1530	SB20E - 6'	2-402	Cool	0803193	X	X	X										X	
	1535	SB20E - 12'	1-407		26	X	X	X											
	1539	SB21E - 4'	1-402		27	X	X	X											
	1545	SB22E - 7'	2-402		28	X	X	X											
	1550	SB22E - 12'	1-402		29	X	X	X											
	1557	SB23E - 6'			30	X	X	X											
	1614	SB25E - 7'			31	X	X	X											
	1620	SB25E - 12'			32													X	
	1624	SB26E - 4'			33													X	
	1628	SB26E - 8'			34													X	
Date: 3/20/08	Time: 1500	Relinquished by: <u>[Signature]</u>	Received by: <u>[Signature]</u>	Remarks:															
Date:	Time:	Relinquished by:	Received by:	3/20/08															

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.

COVER LETTER

Wednesday, June 25, 2008

Claudette Horn
PNM
Alvarado Square MS 2104
Albuquerque, NM 87158

TEL: (505) 241-2019

FAX (505) 241-4306

RE: Star Lake

Order No.: 0806269

Dear Claudette Horn:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 6/18/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001



CLIENT: PNM
Project: Star Lake
Lab Order: 0806269

CASE NARRATIVE

Analytical Comments for METHOD 8015DRO_S, SAMPLE 0806269-01A: DNOP not recovered due to dilution

Hall Environmental Analysis Laboratory, Inc.

Date: 25-Jun-08

CLIENT: PNM
 Lab Order: 0806269
 Project: Star Lake
 Lab ID: 0806269-01

Client Sample ID: Clark Excav CL 100' North of Bldg
 Collection Date: 6/17/2008 5:00:00 PM
 Date Received: 6/18/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1500	200		mg/Kg	20	6/22/2008 8:22:57 AM
Motor Oil Range Organics (MRO)	12000	1000		mg/Kg	20	6/22/2008 8:22:57 AM
Surr: DNOP	0	61.7-135	S	%REC	20	6/22/2008 8:22:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	6/24/2008 11:16:24 PM
Surr: BFB	90.2	84-138		%REC	10	6/24/2008 11:16:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		mg/Kg	10	6/24/2008 11:16:24 PM
Toluene	ND	0.50		mg/Kg	10	6/24/2008 11:16:24 PM
Ethylbenzene	ND	0.50		mg/Kg	10	6/24/2008 11:16:24 PM
Xylenes, Total	ND	1.0		mg/Kg	10	6/24/2008 11:16:24 PM
Surr: 4-Bromofluorobenzene	87.9	81.4-117		%REC	10	6/24/2008 11:16:24 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 25-Jun-08

CLIENT: PNM
 Lab Order: 0806269
 Project: Star Lake
 Lab ID: 0806269-02

Client Sample ID: Clark Excav CL 120' North of Bldg
 Collection Date: 6/17/2008 5:45:00 PM
 Date Received: 6/18/2008
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/20/2008 1:21:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/20/2008 1:21:10 PM
Surr: DNOP	88.8	61.7-135		%REC	1	6/20/2008 1:21:10 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/24/2008 11:46:33 PM
Surr: BFB	100	84-138		%REC	1	6/24/2008 11:46:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	6/24/2008 11:46:33 PM
Toluene	ND	0.050		mg/Kg	1	6/24/2008 11:46:33 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/24/2008 11:46:33 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/24/2008 11:46:33 PM
Surr: 4-Bromofluorobenzene	100	81.4-117		%REC	1	6/24/2008 11:46:33 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit
 S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 MCL Maximum Contaminant Level
 RL Reporting Limit

QA/QC SUMMARY REPORT

Client: PNM
Project: Star Lake

Work Order: 0806269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: EPA Method 8015B: Diesel Range Organics

Sample ID: MB-16245		MBLK							
					Batch ID: 16245		Analysis Date: 6/19/2008 9:45:55 AM		
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-16245		LCS							
					Batch ID: 16245		Analysis Date: 6/19/2008 10:20:02 AM		
Diesel Range Organics (DRO)	35.55	mg/Kg	10	71.1	64.6	116			
Sample ID: LCSD-16245		LCSD							
					Batch ID: 16245		Analysis Date: 6/19/2008 10:54:22 AM		
Diesel Range Organics (DRO)	35.29	mg/Kg	10	70.6	64.6	116	0.728	17.4	

Method: EPA Method 8015B: Gasoline Range

Sample ID: MB-16271		MBLK							
					Batch ID: 16271		Analysis Date: 6/25/2008 2:48:53 AM		
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-16271		LCS							
					Batch ID: 16271		Analysis Date: 6/25/2008 1:18:42 AM		
Gasoline Range Organics (GRO)	24.56	mg/Kg	5.0	87.4	69.5	120			
Sample ID: LCSD-16271		LCSD							
					Batch ID: 16271		Analysis Date: 6/25/2008 1:48:48 AM		
Gasoline Range Organics (GRO)	25.01	mg/Kg	5.0	89.2	69.5	120	1.82	11.6	

Method: EPA Method 8021B: Volatiles

Sample ID: MB-16271		MBLK							
					Batch ID: 16271		Analysis Date: 6/25/2008 2:48:53 AM		
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
Sample ID: LCS-16271		LCS							
					Batch ID: 16271		Analysis Date: 6/25/2008 1:18:42 AM		
Benzene	0.2928	mg/Kg	0.050	105	78.8	132			
Toluene	2.030	mg/Kg	0.050	101	78.9	112			
Ethylbenzene	0.4135	mg/Kg	0.050	103	69.3	125			
Xylenes, Total	2.465	mg/Kg	0.10	107	73	128			
Sample ID: LCSD-16271		LCSD							
					Batch ID: 16271		Analysis Date: 6/25/2008 1:48:48 AM		
Benzene	0.2963	mg/Kg	0.050	106	78.8	132	1.19	27	
Toluene	2.037	mg/Kg	0.050	101	78.9	112	0.354	19	
Ethylbenzene	0.4119	mg/Kg	0.050	103	69.3	125	0.388	10	
Xylenes, Total	2.470	mg/Kg	0.10	107	73	128	0.190	13	

Qualifiers:

- | | | | |
|---|--|----|--|
| 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 | S | Spike recovery outside accepted recovery limits |

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name PNM

Date Received:

6/18/2008

Work Order Number 0806269

Received by: ARS

Checklist completed by:

Tommy Shomin
Signature

6/18/08
Date

Sample ID labels checked by:

ARS
Initials

Matrix:

Carrier name Client drop-off

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present Not Shipped
- Custody seals intact on sample bottles? Yes No N/A
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - Preservation labels on bottle and cap match? Yes No N/A
- Water - pH acceptable upon receipt? Yes No N/A

Container/Temp Blank temperature?

14°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

**APPENDIX C
NRCS SOIL SURVEY DATA**

Soil Map—McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties
(Star Lake Compressor Station)



Natural Resources
Conservation Service

Web Soil Survey 2.0
National Cooperative Soil Survey

12/11/2007
Page 1 of 3

MAP LEGEND

 Area of Interest (AOI)	 Very Stony Spot
 Soils	 Wet Spot
 Soil Map Units	 Other
Special Point Features	Special Line Features
 Blowout	 Gully
 Borrow Pit	 Short Steep Slope
 Clay Spot	 Other
 Closed Depression	Political Features
 Gravel Pit	Municipalities
 Gravelly Spot	 Cities
 Landfill	 Urban Areas
 Lava Flow	Water Features
 Marsh	 Oceans
 Mine or Quarry	 Streams and Canals
 Miscellaneous Water	Transportation
 Perennial Water	 Rails
 Rock Outcrop	Roads
 Saline Spot	 Interstate Highways
 Severely Eroded Spot	 US Routes
 Sinkhole	 State Highways
 Slide or Slip	 Local Roads
 Sodic Spot	 Other Roads
 Spoil Area	
 Stony Spot	

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 13N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties
Survey Area Date: Version 7, Jan 13, 2007

Date(s) aerial images were photographed: 10/9/1997

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties (NM692)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
12	Calladito-Elias association, 1 to 6 percent slopes	5.5	100.0%
Totals for Area of Interest (AOI)		5.5	100.0%

Map Unit Description

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Lucy loamy sand, 0 to 5 percent slopes, is a phase of the Lucy series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Springhill-Nankin complex, 15 to 25 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Mantachie, Kinston, and luka soils, 0 to 1 percent slopes, frequently flooded, is an undifferentiated group in this survey area.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Pits is an example.

Table 2 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

Report—Map Unit Description

McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties

12—Calladito-Elias association, 1 to 6 percent slopes

Map Unit Setting

Elevation: 6,300 to 6,800 feet

Mean annual precipitation: 9 to 10 inches

Mean annual air temperature: 46 to 49 degrees F

Frost-free period: 100 to 135 days

Map Unit Composition

Calladito and similar soils: 55 percent

Elias and similar soils: 30 percent

Description of Calladito

Setting

Landform: Dunes on valley sides

Landform position (three-dimensional): Side slope

Down-slope shape: Concave, convex

Across-slope shape: Concave, convex

Parent material: Eolian deposits derived from sandstone

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.3 inches)

Interpretive groups

Land capability (nonirrigated): 7e
Ecological site: Deep Sand (R037XA007NM)

Typical profile

0 to 2 inches: Loamy fine sand
2 to 26 inches: Loamy fine sand
26 to 65 inches: Loamy fine sand

Description of Elias

Setting

Landform: Fan remnants on valley sides
Landform position (three-dimensional): Side slope, tread
Down-slope shape: Convex, concave
Across-slope shape: Convex, concave
Parent material: Fan alluvium derived from sandstone and shale

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 30.0
Available water capacity: Moderate (about 6.0 inches)

Interpretive groups

Land capability (nonirrigated): 7s
Ecological site: Sodic Slopes (R037XA008NM)

Typical profile

0 to 1 inches: Fine sandy loam
1 to 3 inches: Sandy clay loam
3 to 10 inches: Sandy clay loam

10 to 18 inches: Loamy fine sand
18 to 33 inches: Sandy clay loam
33 to 65 inches: Clay loam

Data Source Information

Soil Survey Area: McKinley County Area, New Mexico, McKinley County and
Parts of Cibola and San Juan Counties
Survey Area Data: Version 7, Jan 13, 2007

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (*K_{sat}*), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (K_{sat}) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (*K_{sat}*) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (K_w and K_f) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and K_{sat} . Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor K_w indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor K_f indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service.
National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

Report—Physical Soil Properties

Physical Soil Properties—McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
12—Calladito-Elias association, 1 to 6 percent slopes	In	Pct	Pct	Pct	g/cc	micro m/sec	In/in	Pct	Pct					
Calladito	0-2	—	—	2-10	1.45-1.55	42.34-141.14	0.09-0.10	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	2-26	—	—	2-10	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	0.0-0.5	.17	.17			
	26-65	—	—	2-10	1.45-1.55	42.34-141.14	0.09-0.10	0.0-2.9	0.0-0.5	.20	.20			
Elias	0-1	—	—	10-20	1.50-1.60	14.11-42.34	0.13-0.15	0.0-2.9	0.3-0.7	.28	.28	5	3	86
	1-3	—	—	20-35	1.45-1.55	1.41-4.23	0.11-0.12	0.0-2.9	0.3-0.7	.32	.32			
	3-10	—	—	20-35	1.45-1.55	1.41-4.23	0.11-0.12	0.0-2.9	0.3-0.7	.32	.32			
	10-18	—	—	2-10	1.60-1.70	14.11-42.34	0.07-0.08	0.0-2.9	0.2-0.5	.20	.20			
	18-33	—	—	20-35	1.55-1.65	1.41-4.23	0.07-0.08	0.0-2.9	0.2-0.5	.32	.32			
	33-65	—	—	30-40	1.55-1.65	0.42-1.41	0.10-0.11	3.0-5.9	0.2-0.5	.32	.32			

Data Source Information

Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties
 Survey Area Data: Version 7, Jan 13, 2007

Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

References:

American Association of State Highway and Transportation Officials (AASHTO).
2004. Standard specifications for transportation materials and methods of sampling
and testing. 24th edition.
American Society for Testing and Materials (ASTM). 2005. Standard classification
of soils for engineering purposes. ASTM Standard D2487-00.

Report—Engineering Properties

Engineering Properties—McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties													
Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve, number—				Liquid limit	Plasticity index	
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200			
	In					Pct						Pct	
12—Calladito-Elias association, 1 to 6 percent slopes													
Calladito	0-2	Loamy fine sand	SM	A-2-4	0	0	100	100	70-90	20-35	10-15	1-4	
	2-26	Loamy fine sand	SM	A-2-4	0	0	100	100	65-85	15-35	10-15	1-4	
	26-65	Loamy fine sand	SM	A-2-4	0	0	100	100	70-90	20-35	10-15	1-4	
Elias	0-1	Fine sandy loam	SC-SM	A-4	0	0	90-100	85-100	60-80	45-65	20-30	4-7	
	1-3	Sandy clay loam	CL	A-6	0	0	95-100	90-100	60-80	50-70	30-40	10-15	
	3-10	Sandy clay loam	CL	A-6	0	0	95-100	90-100	60-80	50-70	30-40	10-15	
	10-18	Loamy fine sand	SM	A-2-4 A-4	0	0	95-100	90-100	70-90	30-50	10-20	NP-4	
	18-33	Sandy clay loam	CL	A-6	0	0	95-100	90-100	60-80	50-70	30-40	10-15	
	33-65	Clay loam	CL	A-6 A-7-6	0	0	95-100	90-100	80-100	70-90	35-45	15-20	

Data Source Information

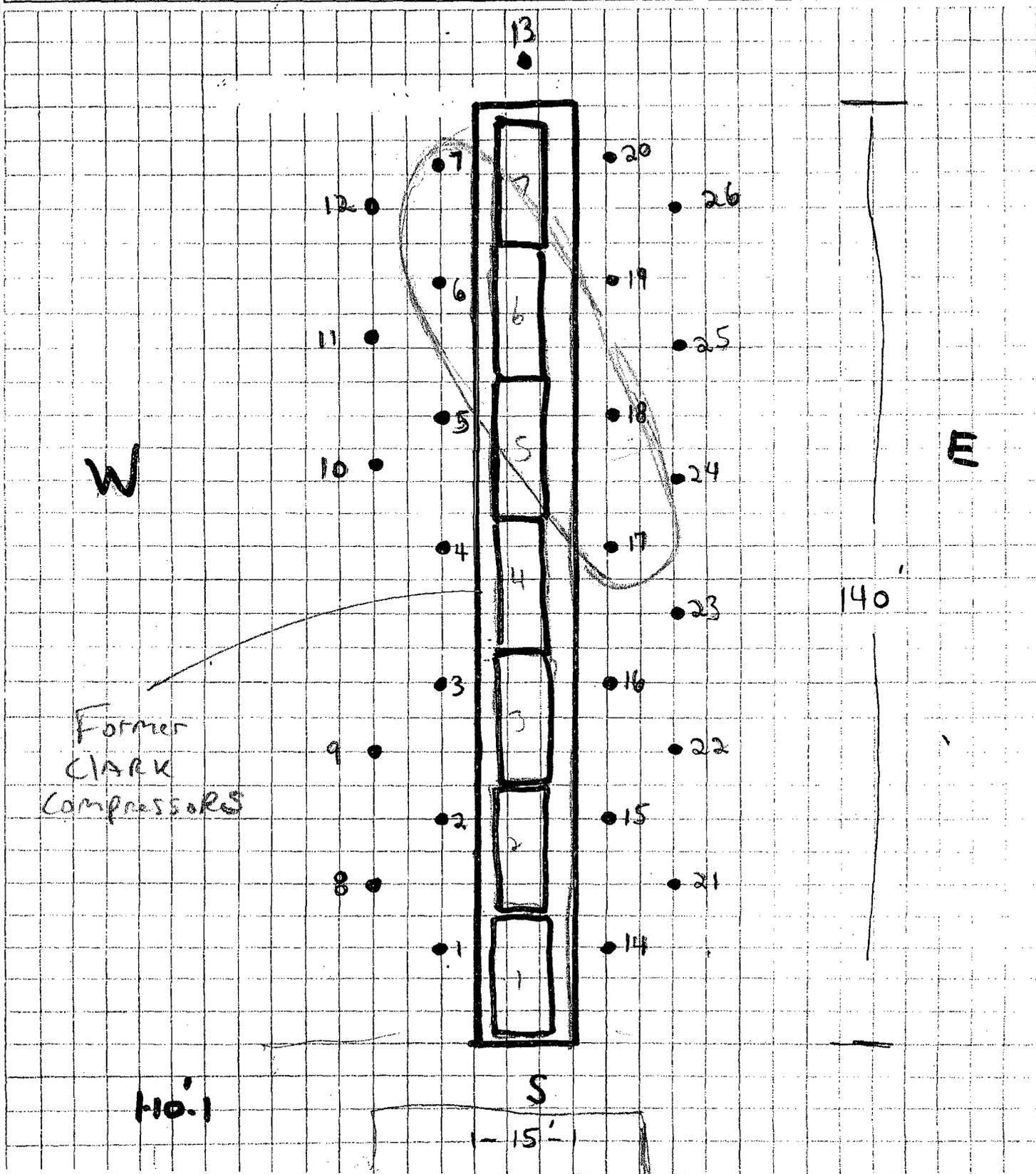
Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties
 Survey Area Data: Version 7, Jan 13, 2007

**APPENDIX D
SOIL BORING LOGS**

STAR LAKE

PROJECT: Approximate
 COMPONENT: Soil Boring Location N

DEPARTMENT	
FILE	SHEET OF
BY	DATE
CHECKED	DATE



Field list
 Samples Submitted
 For Laboratory Analyses

SB-9 "clean"
 SB-4 "clean" No Sample 2 8'
 SB-5 "clean" No Sample 2 8'
 SB-11 clean
 SB-13 clean

	Sample	Time	Depth	GDM 8015	Glycol 8015	PCB	TCLP	Total	Comment
1	NoT	1100	6'	X					Center
2	NoT	1105	6'	X					South West
3	SB1W	1113	8'	X		X	(X)		Black
4	SB1W	1115	14'	X					clean
5	SB2W	1133	8'	X					lt odor + gray
6	SB2W	1138	10'		X				light gray
7	SB2W	1140	12'	X					clean
8	SB3W	1152	8'	X					slight discolor
9	SB6W	1244	8'	X		X	(X)		Black
10	SB6W	1245	12'	X					light gray
11	SB7W	1250	8'	X		X	(X)		Black
12	SB8W	1257	5'	X					lt gray
13	SB10W	1318	8'	X					clean
14	SB12W	1350	12'	X					clean
15	SB14E	1430	7'		X				lt gray mild degraded
16	SB14E	1431	11'	X					lt gray mild
17	SB14E	1435	12'	X					light gray
18	SB15E	1438	7'	X					light gray
19	SB16E	1446	7'	X					cleaning up lt gray
20	SB17E	1453	4'	X					slight discolor
21	SB17E	1458	8'	X					clean
22	SB18E	1504	8'	X	X				lt gray
23	SB18E	1508	12'	X					clean
24	SB19E	1515	8'	X					clean
25	SB20E	1530	6'	X	X				light gray
26	SB20E	1535	12'	X					clean
27	SB21E	1539	4'	X					lt gray
28	SB22E	1545	7'	X	X				lt gray
29	SB22E	1550	12'	X					clean
30	SB22E	1557	6'	X					light gray
31	SB25E	1614	7'	X					lt gray
32	SB25E	1620	12'		X				clean visually
33	SB26E	1624	4'		X				lt gray
34	SB26E	1628	8'	X					clean
35									
36									

SB-24 No Sample

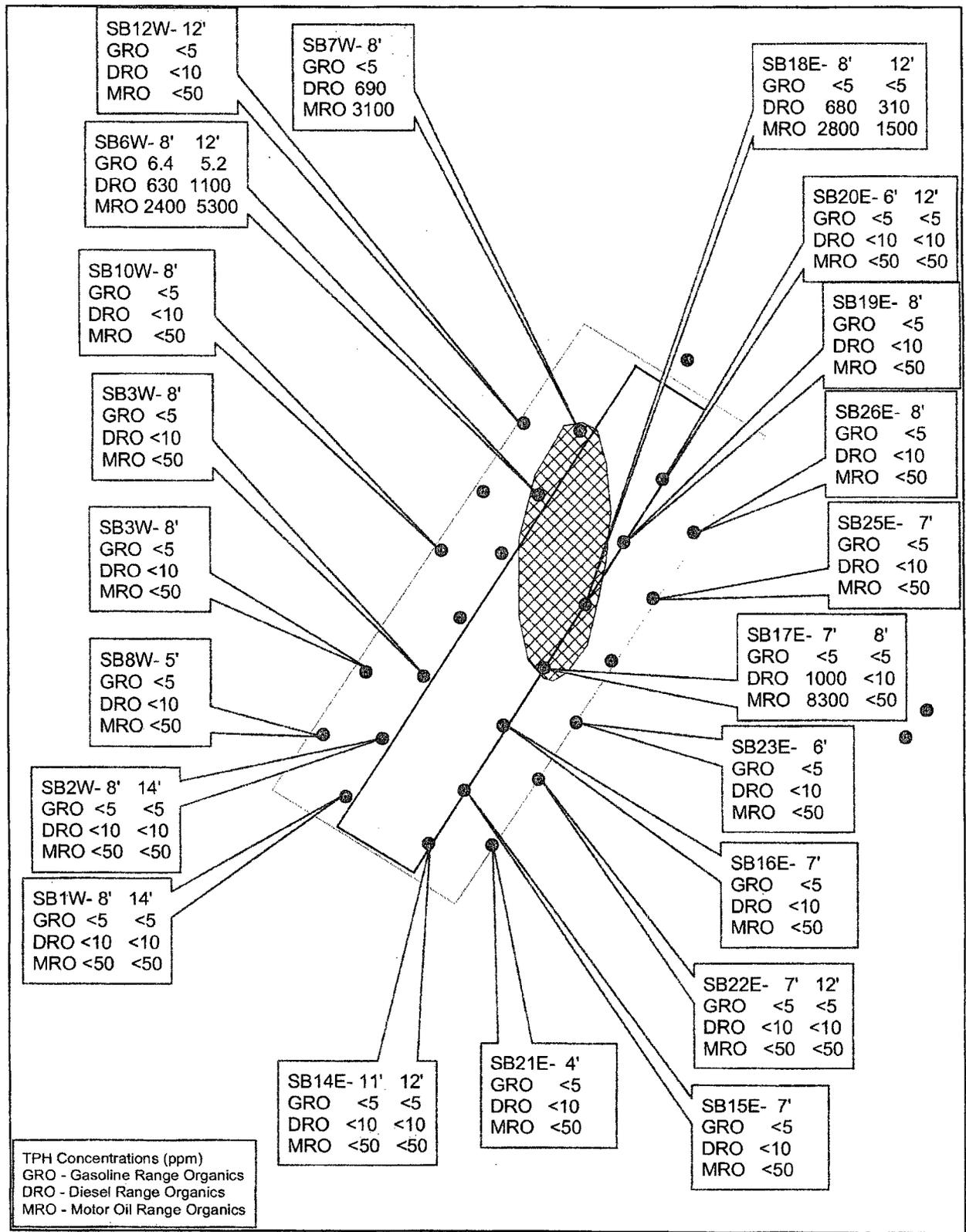
X
X
X

degraded

lt gray

29 7 3 3

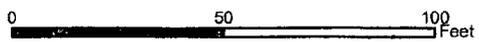
1



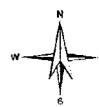
Legend

- Soil Boring
- ▭ Compressor Bldg
- ▭ Area of Investigation
- ▨ Contamination

Figure 3 - Site Aerial Photo/Site Map
 Star Lake Compressor Station
 NW 1/4 of S34, T 20 N, R 6 W
 McKinley County, NM



1 inch equals 42 feet



A personal commitment
 to New Mexico