GW-071

Ballard Ponds
REPORT

DATE:
09.25.12

Enterprise Products

ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

September 25, 2012

Return Receipt Requested
7010 1870 0001 2945 2654

Mr. Jim Griswold,
Senior Hydrologist
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Closure Report – Ballard Ponds
Chaco Gas Plant
Enterprise Field Services, LLC
San Juan County, NM
NE ¼ of SW ¼, S16 T26N R12W
OCD Discharge Permit GW-071

Attn: Mr. Leonard Lowe

Dear Mr. Griswold:

Enterprise Field Services, LLC (Enterprise) is submitting two (2) copies of the enclosed report entitled: *Closure Report – Ballard Ponds,* dated September 17, 2012. This report documents closure of the Ballard Ponds in accordance with the proposed closure plan submitted to the New Mexico Oil Conservation Division (OCD) on September 26, 2011.

The Ballard Ponds (West and East Pond) were constructed during 1994, and were formerly used to manage contact waste water at the facility. These ponds were replaced by tanks and permanently removed from service last year. Following OCD verbal approval to proceed with closure, the OCD was notified on January 24, 2012 that closure activities were to begin during February 2012. Closure activities for the West Pond were completed during March 2012, and closure activities for the East Pond were completed during May 2012. Following OCD site inspections and approvals, the completed impoundment excavations were backfilled. All site restoration activities were completed during June 2012.

Enterprise believes that closure of the Ballard Ponds has been completed in accordance with the proposed closure plan, and that no further actions are required. Enterprise requests that the OCD grant closure approval for closure of the Ballard Ponds. If you have any questions, or need additional information, please feel free to contact me at (713) 381-2286, or via email at: drsmith@eprod.com .

Sincerely,

David Smith, P.G.
Sr. Environmental Scientist

Rodney M. Sartor, REM
Manager, Remediation

/dep
w/enclosures

cc: Mr. Brandon Powell, New Mexico Oil Conservation Division, 1000 Rio Brazos Road, Aztec, NM 87410
ec: Chris Mitchell, Southwest Geoscience, 8829 Tradeway Street, San Antonio, Texas 78217
Kyle Summers, Southwest Geoscience, 549 Zia Street, Aztec, New Mexico 87410

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Lowe, Leonard, EMNRD

From: Parker, DeeDee <DParker@eprod.com>
Sent: Tuesday, September 25, 2012 12:28 PM
To: 'chris.mitchell@southwestgeoscience.com'; 'kyle.summers@southwestgeoscience.com'; Lowe, Leonard, EMNRD; Griswold, Jim, EMNRD; Morrow, Derrell; Seitzinger, Mike; Armstrong, Blair; Alley, Steve; Morris, Ralph; Benson, Rick; Farley, Edward; Anderson, Don; McDowell, Jack; Waszut, Michael; Dailey, Aaron; Seale, Runell
Cc: Sartor, Rodney; Smith, David
Subject: Chaco Gas Plant - Closure Report - Ballard Ponds
Attachments: Chaco Gas Plant - Closure Rpt.-Ballard Ponds-Ltr Sept. 2012.pdf

The attached documents were sent out today to the New Mexico Energy, Minerals & Natural Resources Dept. Please contact David Smith at (713) 381-2286, if you have any questions.

A copy has been saved on the Enterprise Y-drive at:
Y:\Remediation\~Projects\P09016 Chaco and Bisti Receiver\Ballard Ponds\Final Closure Report 9_24_12.

Thanks!

DeeDee Parker

DeeDee Parker
Enterprise Products
EHS&T Technical Services
1100 Louisiana, #1338
Houston, Texas 77002
office: (713) 381-6640
Fax: (713) 381-6811

09.25.12 E-MAIL ATTACHMENT

Enterprise Products

ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

made in Adobe editor

September 25, 2012

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3 print to pdf, if not already in pdf.

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CLOSURE REPORT - BALLARD PONDS
OCD Discharge Plan (GW-071)

Property:

CHACO GAS PLANT
895 County Road 7100
Section 16, Township 26N, Range 12W
San Juan County, New Mexico

September 17, 2012
SWG Project No. 0410001A

Prepared for:

Enterprise Field Services, LLC
P.O. Box 4324
Houston, Texas 772110-4324
Attn: Mr. David R. Smith, P.G.

Prepared by:

Kyle Summers, C.P.G.
Senior Geologist/
Manager, Four Corners Office

B. Chris Mitchell, P.G.
Principal Geoscientist

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CLOSURE REPORT - BALLARD PONDS
OCD Discharge Permit (GW-071)

CHACO GAS PLANT
895 County Road 7100
Section 16, Township 26N, Range 12W
San Juan County, New Mexico

SWG Project No. 0410001A

1.0 EXECUTIVE SUMMARY

The Enterprise Field Services, LLC (Enterprise) Chaco Gas Plant consists of approximately 190-acres of land developed with a cryogenic gas plant, amine treatment unit and natural gas compression facilities, referred to hereinafter as the "Site" or "subject Site". The Site is located at 895 County Road (CR) 7100 in Section 16, Township 26N, Range 12W in San Juan County, New Mexico, approximately 17.5 miles south of Farmington.

The Site is subject to regulatory oversight by the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD). To address activities related to crude oil/condensate related releases, the New Mexico EMNRD OCD utilizes the *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the EMNRD/OCD rules, specifically New Mexico Administrative Code (NMAC) 19.15.30 Remediation. These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

The Ballard Ponds consisted of two (2) lined contact water ponds (East and West) originally designed as part of a hydrocarbon recovery system for liquids recovered from the Ballard operational area. Design specifications indicated that each sub-grade pond is 120 feet long on each side, with sloping sidewalls measuring 4 feet vertically from the bottom of the pond. Actual measurements indicate the ponds are approximately 140 feet long on each side. These ponds were predominantly sub-grade, excavated into the native silty sand soils, and possessed shallow berms which assisted in anchoring the primary and secondary HDPE liners. A leak detection system was present in each of the ponds between the primary and secondary liners. Two (2) tanks and a separator were identified in the original Ballard discharge permit, and existed at the Site at one time. However, these tanks and the separator were never utilized, and were subsequently removed and placed in storage at the southwest corner of the Chaco Gas Plant. One (1) unused concrete containment structure remained at the Site, located between the two ponds, and was removed during closure activities.

Southwest Geoscience (SWG) performed a Limited Site Investigation (LSI) during December 2010 to evaluate the presence of petroleum hydrocarbons in the on-Site soil and groundwater as a result of historic and current operational use of the Ballard Ponds. Analytical results from the LSI did not indicate adversely affected soil or groundwater at the perimeter of the ponds.

Prior to the initiation of liner removal activities, approximately 348 cubic yards of residual sediment and blow sand were removed from the West Pond and disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico. In addition to residual sediment and blow sand, the East Pond exhibited considerable fluid and

the contents required stabilization prior to removal from the pond. Blow sand was utilized to stabilize the contents, and the resulting solid material (approximately 1,778 cubic yards) was delivered to Industrial Ecosystems, Inc.'s Crouch Mesa facility for treatment/disposal.

During the completion of the pond closure activities, the liners and associated infrastructure (concrete anchors, etc.) were removed, cleaned of debris and residuals, and disposed off-site in accordance with applicable local, state and federal regulations. In addition, piping, valves and related appurtenances associated with the leak detection system, which was located between the HDPE liners, were removed and disposed off-site.

Subsequent to the removal of the liners from the East Pond, petroleum hydrocarbon impacted native soils were identified underlying the northern and northeastern portion of the East Pond. Based on the visual, olfactory, laboratory analyses, and/or photoionization detector (PID) evidence of impairment, SWG excavated an estimated 700 cubic yards of material from the soils underlying the East Pond, which were disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico, in accordance with applicable local, state and federal regulations. The excavation ranged in depth from approximately 4.5 feet below grade surface (bgs) to approximately 13 feet bgs.

Based on the analytical results from the confirmation samples and verbal approval from the OCD, the Ballard Ponds were backfilled with unaffected fill material and returned to approximate grade.

Based on the laboratory analytical results from confirmation sampling, the soils which remain in-place underlying the former Ballard Ponds do not exhibit petroleum hydrocarbon constituent of concern (COC) concentrations above the New Mexico OCD *Remediation Action Levels*.

2.0 INTRODUCTION

2.1 Site Description & Background

The Enterprise Chaco Gas Plant consists of approximately 190-acres of land developed with a cryogenic[1] gas plant, amine treatment unit and natural gas compression facilities. The Site is located at 895 CR 7100 in Section 16, Township 26N, Range 12W in San Juan County, New Mexico, approximately 17.5 miles south of Farmington.

A topographic map of the Site vicinity is included as Figure 1, an aerial photograph depicting the location of the Ballard Ponds is included as Figure 2, and a Site map depicting improvements within the Site vicinity and the location of the confirmation samples and previous LSI field activities is included in of Appendix A. Photographs of the Site closure activities are provided in Appendix B.

The Ballard Ponds consisted of two (2) lined contact water ponds originally designed as part of a hydrocarbon recovery system for liquids recovered from the Ballard operational area. Design specifications, included in Appendix D, indicated that each sub-grade pond is 120 feet long on each side, with sloping sidewalls measuring 4 feet vertically from the bottom of the pond. Actual measurements indicate the ponds are approximately 140 feet long on each side. These ponds were predominantly sub-grade, excavated into the native silty sand soils, and possessed shallow berms which assisted in anchoring the primary and secondary HDPE liners. A leak detection system was present in each of the ponds between the primary and secondary liners. Two (2) tanks and a separator were identified in the original Ballard discharge permit, and existed at the Site at one time (Appendix D). However, these tanks and the separator were never utilized, and were subsequently removed and placed in storage at the southwest corner of the Chaco Gas Plant. One unused concrete containment structure remained at the Site, located between the two ponds, and was removed during closure activities.

2.2 Chronology of Events

Below is a list of significant milestones or events associated with the Site.

November 17, 1995 – EPNG notified the OCD that the "Ballard Pond" and the two (2) lined contact water evaporation/disposal ponds located at the Chaco Gas Plant had failed an integrity test. Eight (8) leaks were identified within the liner seams of the "Ballard Pond". The Ballard Pond leaks were subsequently repaired and the ponds placed back into service.

May 9, 1996 – The OCD approves the Groundwater Discharge Plan (GW-71-1) for the Ballard Hydrocarbon Recovery Facility (Supporting documentation provided in Appendix D).

[1] Cryogenic processes include dropping the temperature of the natural gas stream to around -120 degrees Fahrenheit to extract NGLs from natural gas.

July 2, 2001 – The OCD approves the transition of the Ballard Ponds into the Groundwater Discharge Plan for the Chaco Gas Plant (GW-71), terminating the discharge plan for the Ballard Hydrocarbon Recovery Facility (GW-71-1) (Supporting documentation provided in Appendix D).

July 14, 2009 – The OCD renews discharge permit GW-071 for the Chaco Plant, contingent on addressing conditions noted by the agency during their September 11, 2009 inspection of the facility. These conditions included removal of oil from one of the Ballard Ponds, and investigating the fluids present in the impoundment leak detection system.

September 1, 2009 – Enterprise responded to OCD concerns noted in the July 14, 2009 discharge plan permit renewal, including removing oil present in the Ballard Ponds for recycling, and stating that closure of the ponds was being scheduled during 2010.

February 3, 2011 – A LSI of soil and groundwater conditions adjacent to the Ballard Ponds is completed and submitted to the OCD. This investigation was conducted by Enterprise during December 2010 to determine if soil and groundwater had been impacted during historical impoundment operations what would require remedial actions during closure. No subsurface soil or groundwater impacts exceeding applicable OCD/NMED action levels were found during this investigation. Analytical data from the LSI activities is summarized in Table 1 and Table 2 in Appendix C. The locations of the LSI borings and temporary sampling wells are depicted on Figure 3, provided in Appendix A.

September 26, 2011 – Enterprise submits the proposed *Closure Plan – Chaco Ballard Ponds*, dated September 19, 2011, to the OCD.

January 24, 2012 – Enterprise provides notification to the OCD that closure activities for the Chaco Ballard Ponds are scheduled to begin on February 6th, 2012.

2.3 Scope of Work

The objective of the proposed closure activities was to permanently remove the Ballard Ponds from service and to evaluate and/or remediate potential hydrocarbon impact to soils, if any, in the vicinity of the ponds prior to restoration to approximate natural grade.

2.4 Standard of Care & Limitations

The findings and recommendations contained in this report represent SWG's professional opinions based upon information derived from on-Site activities and other services performed under this scope of work, and were arrived at in accordance with currently acceptable professional standards. The findings were based, in part, upon analytical results provided by an independent laboratory.

Evaluations of the geologic/hydrogeologic conditions at the Site for the purpose of this plan are made from a limited number of available data points (i.e. soil borings and ground water samples) and Site-wide subsurface conditions may vary from those observed at these data points. SWG makes no warranties, express or implied, as to the services performed hereunder. Additionally, SWG does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties).

This report is based upon a specific scope of work requested by Enterprise. The agreement between SWG and Enterprise outlines the scope of work, and only those tasks specifically authorized by that agreement or outlined in this report were performed. This report has been prepared for the intended use of Enterprise and their subsidiaries, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and SWG.

3.0 SITE CHARACTERIZATION

3.1 Geology & Hydrogeology

The Geologic Map of New Mexico (2003), published by the New Mexico Bureau of Geology and Mineral Resources, indicates the Site is located over soils formed from the Nacimiento Formation. The Nacimiento Formation in the area of the Site is composed of shale, siltstone, and sandstone, deposited in floodplain, fluvial and lacustrine settings, and made up of sediment shed from the San Juan uplift to the north and the Brazos-Sangre de Cristo uplift to the east.

Subsurface lithology at the Chaco Gas Plant was documented during the LSI activities in December 2010. The lithology encountered during these activities included moderate yellowish brown silty sand fill underlain by native moderate yellowish brown silty sands or sandstones with occasional moderate brown to reddish brown clays.

Based on existing groundwater monitoring wells at the site, the depth of groundwater in the vicinity of the Ballard Ponds is anticipated to occur at approximately 20 feet bgs. The groundwater depth associated with the initial shallow, unconfined groundwater-bearing unit (Nacimiento Formation) likely varies depending upon seasonal variations in precipitation and the depth to the initial confining unit. Recharge areas for shallow unconfined units are typically local and can be influenced by surface development of impervious cover (buildings, parking lots, roads). The groundwater flow direction in these unconfined aquifer units is highly variable but is generally toward the nearest down-gradient water body (lakes, creeks, rivers) and can be approximated by observing the surface topography. The groundwater gradient in the vicinity of the Ballard Ponds is anticipated to be toward the west-northwest, based on the observed gradient from monitoring wells on the western side of the Chaco Gas Plant.

The major aquifer underlying the Site vicinity is listed as the Colorado Plateaus Aquifer, which is made up of four smaller aquifers, the Uinta-Animas, the Mesa Verde, the Dakota-Glen, and the Coconino-De Chelly. The Uinta-Animas is the uppermost of these aquifers, and is present in the San Juan Basin. The general

composition of the aquifers is moderately to well-consolidated sedimentary rocks of an age ranging from Permian to Tertiary. Each aquifer is separated from the others by an impermeable confining unit. Two of the confining units are completely impermeable and cover the entire area of the aquifers. The other two confining units are less extensive and are thinner. These units allow water to flow between the principal aquifers. There are countless streams, rivers, and lakes that overlay the Colorado Plateaus Aquifers. The surface water bodies in this region provide a place for the aquifers to discharge. Some of the high altitude rivers and lakes may also provide recharge.

Permanent monitoring wells are not present in the immediate vicinity of the Ballard Ponds. However, based on monitoring information from the western portion of the site, it is inferred that groundwater in this area generally flows to the west-northwest at an average hydraulic gradient of 0.015 ft/ft.

3.2 Surface Water Hydrology

Stormwater from the Site surface flows to a stormwater retention pond located on the southwestern portion of the Site (non-contact water pond #8). The Site vicinity topographically slopes to the west, towards the West Fork of Gallegos Canyon, which flows north to the San Juan River.

3.3 Land Use & Classification

Land use was determined by comparison of existing land use of the Site to the definitions for residential and non-residential (commercial/industrial) land use published in the applicable regulatory guidance. The Site is currently utilized as a gas plant; therefore, commercial/industrial land use is deemed appropriate for the Site.

4.0 BALLARD PONDS CLOSURE

The closure activities included the removal of the Ballard Ponds located on the east-central portion of the Site and the evaluation and remediation of potential hydrocarbon impact to soils, if any, in the vicinity of the ponds prior to restoration to approximate natural grade.

The Ballard Ponds consisted of two (2) lined contact water ponds originally designed as part of a hydrocarbon recovery system for liquids recovered from the Ballard operational area. Design specifications indicated that each sub-grade pond is 120 feet long on each side, with sloping sidewalls measuring 4 feet vertically from the bottom of the pond. Actual measurements indicate the ponds are approximately 140 feet long on each side. These ponds were predominantly sub-grade, excavated into the native silty sand soils, and possessed shallow berms which assisted in anchoring the primary and secondary HDPE liners. A leak detection system was present in each of the ponds between the primary and secondary liners. Two (2) tanks and a separator were identified in the original Ballard discharge permit, and existed at the Site at one time. However, these tanks and the separator were never utilized, and were subsequently removed and placed in storage at the southwest corner of the Chaco Gas Plant. One (1) unused concrete containment structure remained at the Site, located between the two ponds, and was removed during

closure activities with no environmental impact detected with field instrumentation. A copy of the construction plans for the Ballard Ponds is included in the original discharge permit in Appendix D.

4.1 Pond Contents Characterization and Disposal

Prior to the initiation of liner removal activities, approximately 348 cubic yards of residual sediment and blow sand were removed from the West Pond and disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico. In addition to residual sediment and blow sand, the East Pond exhibited considerable fluid and the contents required stabilization prior to removal from the pond. Blow sand was utilized to stabilize the contents, resulting in approximately 1,778 cubic yards of soil. Toxicity Characteristic Leaching Procedure (TCLP) analyses of the characterization samples indicate that total metals concentrations identified in the East Ballard Pond soils were present in non-leachable form, and the soils were subsequently accepted by, and delivered to, Industrial Ecosystems, Inc.'s Crouch Mesa facility for treatment/disposal. The contents of the each pond were staged/stockpiled in temporary 20-mil HDPE containment cells prior to shipment and to assist with characterization. Waste characterization data and disposal documentation is provided in Appendix E. All waste was determined by analytical analyses to be non-hazardous, non-exempt oil and gas waste.

4.2 Liner Removal

The Ballard Ponds were constructed utilizing reinforced HDPE liners, HDPE mesh, and geotextile fabric. The West Pond utilized a geotextile felt intermediate liner between the primary (40-mil) and secondary (10- to 20-mil) HDPE liners, while the East Pond utilized a HDPE mesh to provide cushion between the primary (40 mil) and secondary (40-mil) liners, and possessed an additional geotextile felt liner beneath the lower HDPE liner. Gravel-packed PVC leak detection systems were present between the primary and secondary HDPE liners in both ponds.

During the completion of the pond closure activities, the liners and associated infrastructure (concrete anchors, fencing, etc.) were removed, cleaned of debris and residuals, and disposed off-site in accordance with applicable local, state and federal regulations. In addition, piping, valves and related appurtenances associated with the leak detection system, which was located between the HDPE liners, were removed and disposed off-site at Waste Management's San Juan Regional Landfill. Waste characterization data and disposal documentation is provided in Appendix E.

4.3 Affected Soil Removal

Subsequent to the removal of the liners from the East Pond, petroleum hydrocarbon impacted native soils were identified underlying the northern and northeastern portion of the East Pond. The affected area coincided with the areas along the edge of the pond where the liner had previously burned and pulled away from the wall. At some point in the past, fluids appear to have breached the liner in this area. Based on the visual, olfactory, laboratory analyses, and/or photoionization detector (PID) evidence of impairment, SWG excavated approximately 840 cubic yards of

material from the native soils underlying the East Pond, which were disposed off-site as non-hazardous, non-exempt oil and gas waste at Envirotech's landfarm facility near Angel Peak, New Mexico, in accordance with applicable local, state and federal regulations. The excavation ranged in depth from approximately 4.5 feet below grade surface (bgs) to approximately 13 feet bgs. No affected soils were identified beneath the liners of the West Pond. Waste characterization data and disposal documentation is provided in Appendix E.

4.4 Confirmation Sampling

Subsequent to the removal of the liners and/or completion of excavation activities, SWG collected a total of twenty (20) confirmation soil samples from the exposed floor underlying the former ponds and the floor and sidewalls of the excavation areas. The proposed *Closure Plan – Chaco Ballard Ponds* (dated September 19th, 2011) called for the collection of 4 samples beneath each pond's lower liner. However, additional confirmation samples were collected to address the design of the leak detection systems, and to delineate the affected soil beneath the lower liner of the East Pod. Each of the soil samples were analyzed (at a minimum) for total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) utilizing EPA method SW-846 #8015m and benzene, toluene, ethylbenzene and xylenes (BTEX) utilizing EPA method SW-846 #8021B, and RCRA-8 metals.

Soil samples were collected and placed in laboratory prepared glassware, sealed with custody tape and placed on ice in a cooler. The sample coolers and completed chain-of-custody forms were relinquished to Hall Environmental analytical laboratory in Albuquerque, NM.

Figure 3 indicates the approximate confirmation sample locations in relation to pertinent Site features and general Site boundaries.

4.5 Confirmation Sampling Results

SWG compared the TPH GRO/DRO, BTEX, concentrations or laboratory reporting limits (RLs) associated with the confirmation samples to the OCD *Remediation Action Levels*.

TPH GRO/DRO

Confirmation samples CS-11 and CS-17 exhibited total TPH GRO/DRO concentrations above the OCD's *Remediation Action Level* of 100 mg/Kg at levels of 388 mg/Kg and 238 mg/kg, respectively. These areas were over-excavated during the completion of corrective actions. After over-excavation was complete, confirmation sample CS-19 was collected to verify the successful removal of affected material in the vicinity of samples CS-11 and CS-17. The confirmation soil samples collected from the soils which remain in-place did not exhibit TPH GRO/DRO concentrations above the laboratory RLs, which are below the OCD's Remediation Action Level of 100 mg/Kg.

Benzene

The confirmation soil samples collected from beneath the Ballard Ponds did not exhibit benzene concentrations above the laboratory RL, which is below the OCD's *Remediation Action Level* of 10 mg/Kg.

Total BTEX

The confirmation soil samples collected from beneath the Ballard Ponds exhibited total BTEX concentrations from below the laboratory RLs to 28.6 mg/Kg, which are below the OCD's *Remediation Action Level* of 50 mg/Kg.

RCRA-8

The confirmation soils samples collected from beneath the Ballard Ponds did not exhibit elevated RCRA-8 metals concentrations.

The results of the confirmation soil sample analyses are summarized in Table 3 and Table 4 of Appendix C. Laboratory Data Sheets for the confirmation soil samples are presented in Appendix F.

4.6 Site Restoration

Directly upon completion of liner removal activities and receipt of satisfactory confirmation sample analyses, the OCD inspected each pond prior to the initiation of backfill activities. The West Pond was inspected on March 22nd, 2012 and the East Pond was inspected on May 31st, 2012. Subsequent to the inspections, the ponds were backfilled with native soils and blow sand. These materials were obtained from the former residential area immediately north of the ponds, and excavated material from one of the plant's northern retention ponds. Restoration activities at the Site were completed on June 15th, 2012. Figure 4 in Appendix A depicts the backfill sampling locations in the northern ponds, and identified which source area was ultimately utilized for backfill (NW-B). Analytical data for backfill source areas near the northern retention ponds is presented in Table 5 and Table 6 in Appendix C. The reclaimed Ballard Pond area was compacted utilizing a tracked dozer. The executed chain-of-custody documentation and laboratory data sheets are provided in Appendix F.

4.7 Future Use of Site

The Site is expected to be utilized for industrial use as a natural gas processing plant and compression facility.

5.0 FINDINGS

- Approximately 348 cubic yards of residual sediment and blow sand were removed from the West Pond and disposed off-site at Envirotech's landfarm facility near Angel Peak, New Mexico.

- Approximately 1,778 cubic yards of material was delivered to Industrial Ecosystems, Inc.'s Crouch Mesa facility for treatment/disposal.

- During the completion of the pond closure activities, the liners and associated debris (concrete anchors, fencing, etc.) were removed, cleaned of debris and residuals, and disposed off-site in accordance with applicable local, state and federal regulations. In addition, piping, valves and related appurtenances associated with the leak detection system, which was located between the HDPE liners, were removed and disposed off-site.

- Confirmation samples CS-11 and CS-17 exhibited total TPH GRO/DRO concentrations above the OCD's *Remediation Action Level* of 100 mg/Kg at levels of 388 mg/Kg and 238 mg/kg, respectively. The soil from with these samples was collected was over-excavated and the remaining soil re-sampled (confirmation sample CS-19).

- Approximately 840 cubic yards of affected soils underlying the East Pond were disposed of off-site at Envirotech's landfarm facility near Angel Peak, New Mexico, in accordance with applicable local, state and federal regulations.

- Directly upon completion of liner removal activities and receipt of satisfactory confirmation sample analyses and verbal OCD approval, the ponds were backfilled with native soils and blow sand.

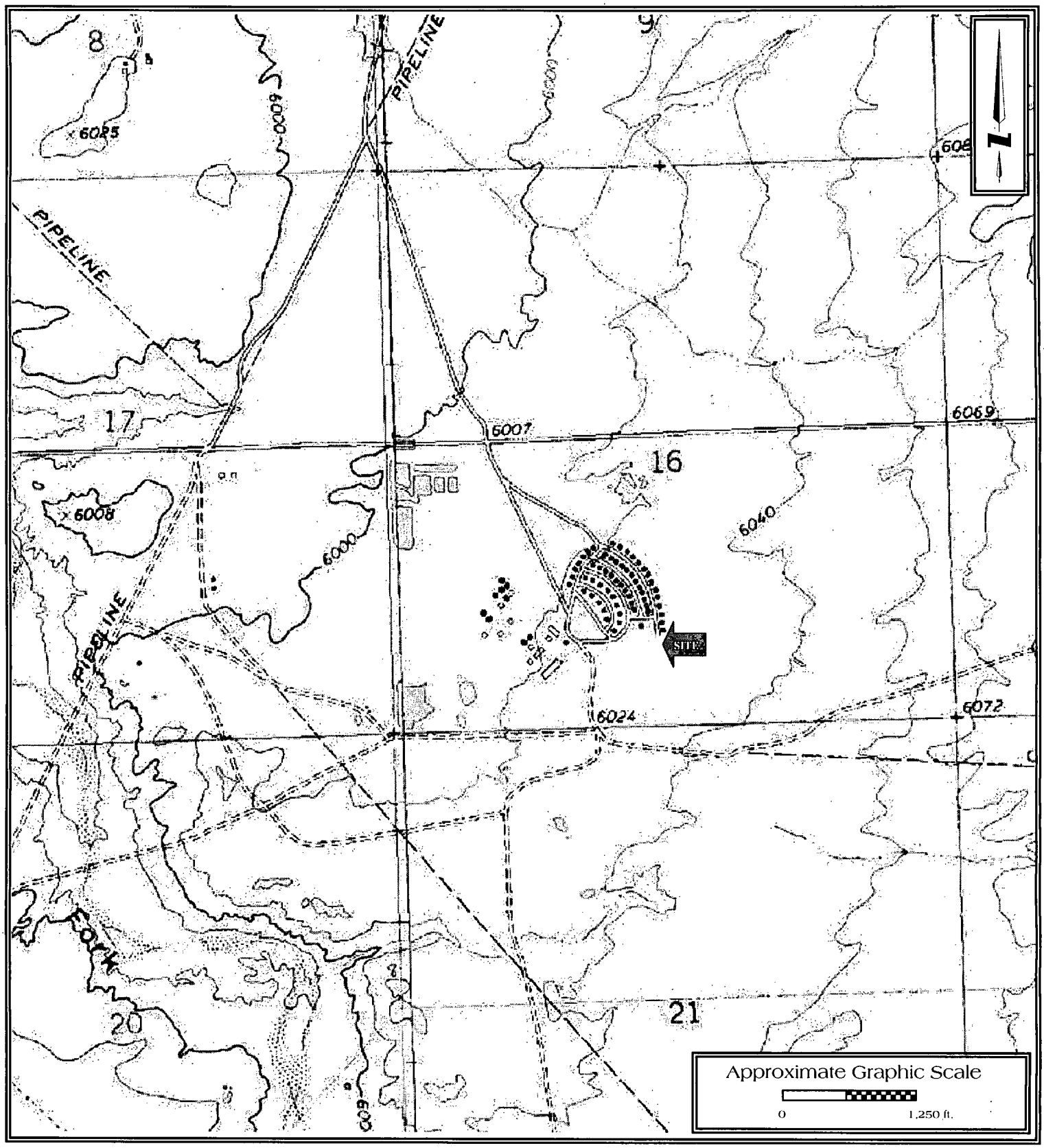
6.0 RECOMMENDATIONS

Based on the laboratory analytical results from confirmation sampling, the soils which remain in-place underlying the former Ballard Ponds did not exhibit petroleum hydrocarbon COC concentrations above the New Mexico OCD ***Remediation Action Levels***. No further action is recommended for the former Ballard Pond area at this time.

Southwest GEOSCIENCE

APPENDIX A

Figures



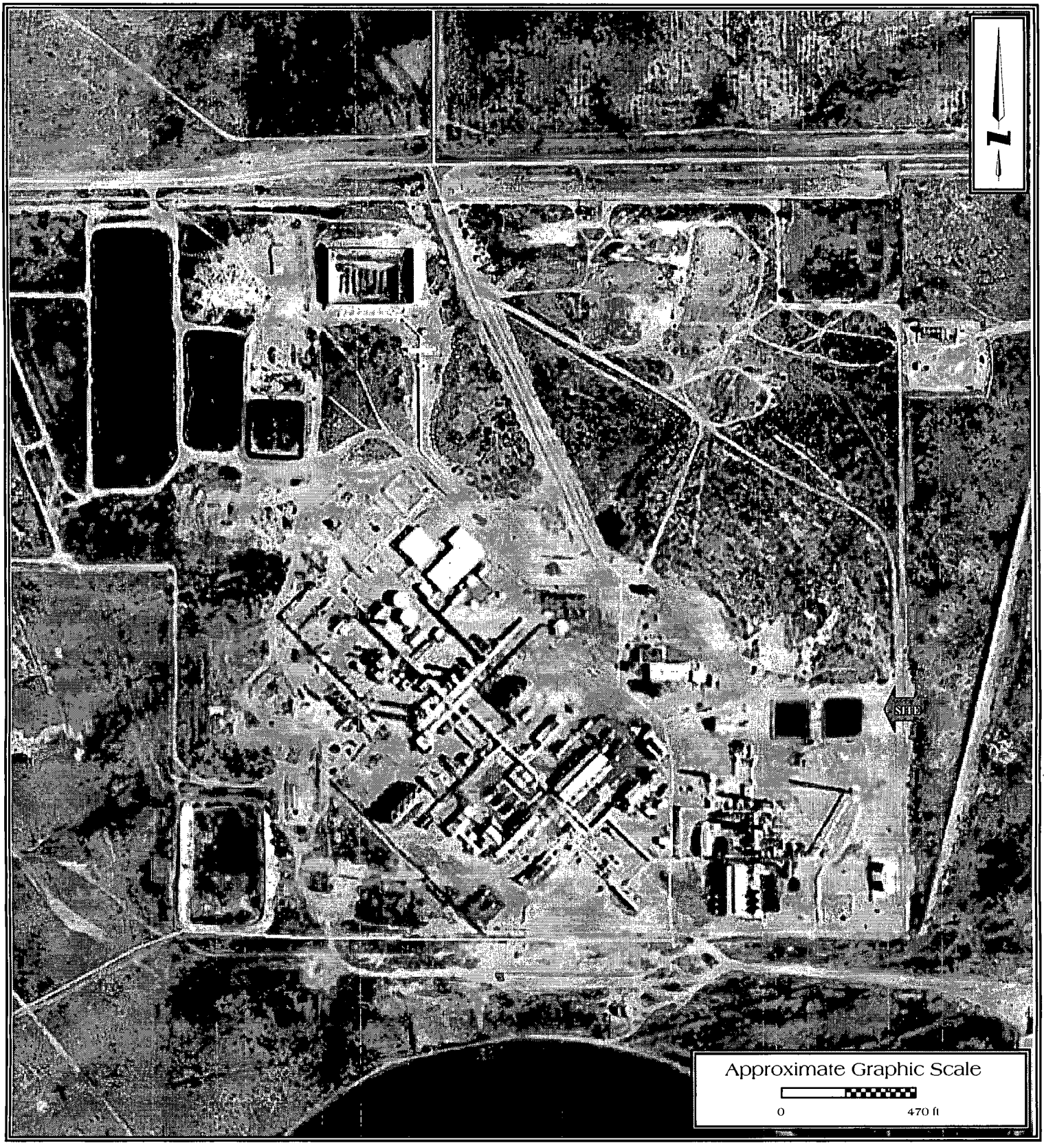
Ballard Pond Closure
Chaco Gas Plant – Ballard Ponds
NE ¼ of SW ¼, S16 T26N R12W
San Juan Co., New Mexico
N° 36' 28" 59.42"; W108° 07' 04.68"

SWG Project No. 0410001A

Southwest GEOSCIENCE

FIGURE 1

Topographic Map
Carson Trading Post, NM Quadrangle
Contour Interval – 20 Feet
1995



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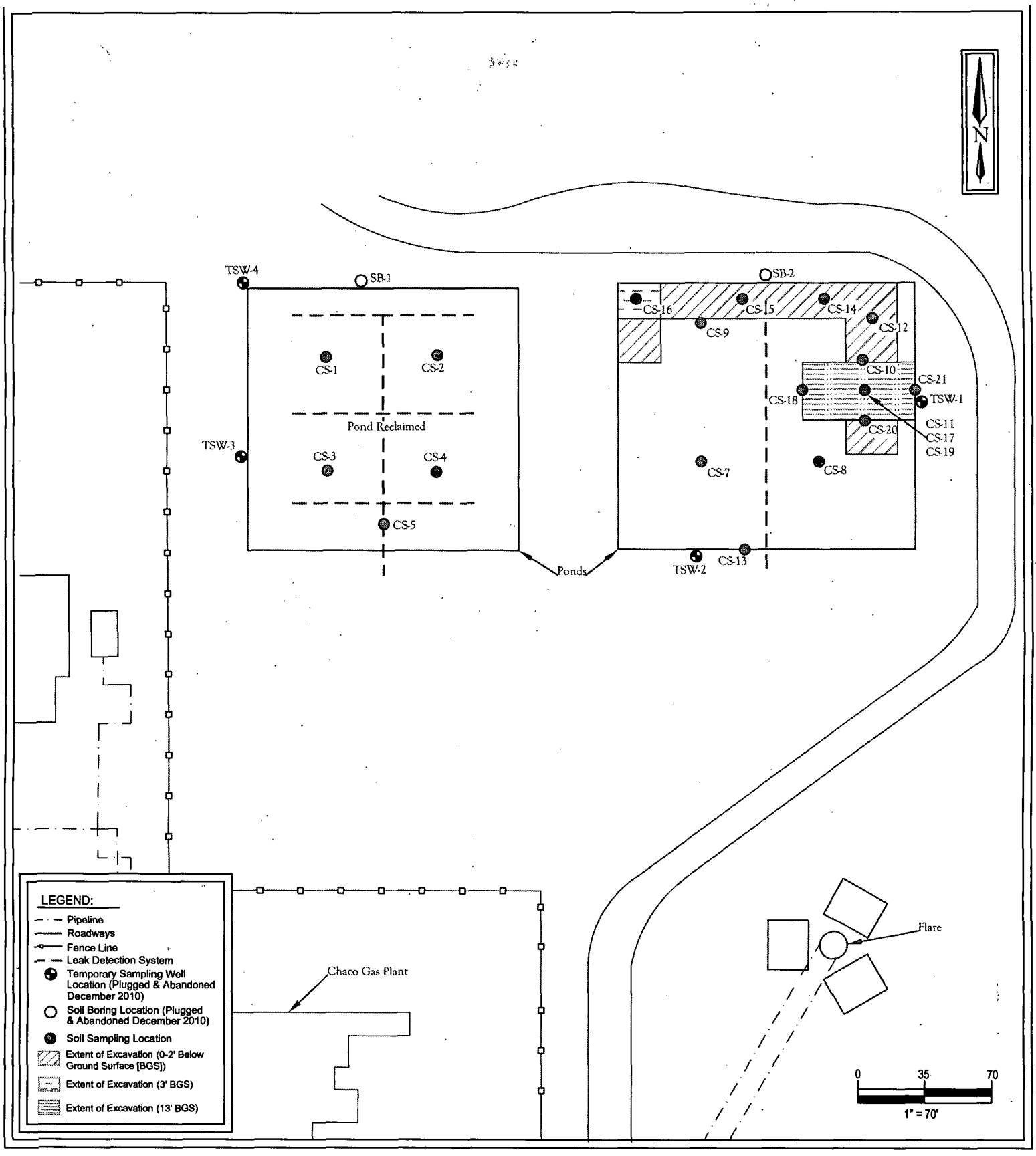
San Juan Co., New Mexico
N° 36' 28" 59.42"; W108° 07' 04.68"

SWG Project No. 0410001A

Southwest GEOSCIENCE

FIGURE 2
Site Vicinity Map
2010 Google Earth



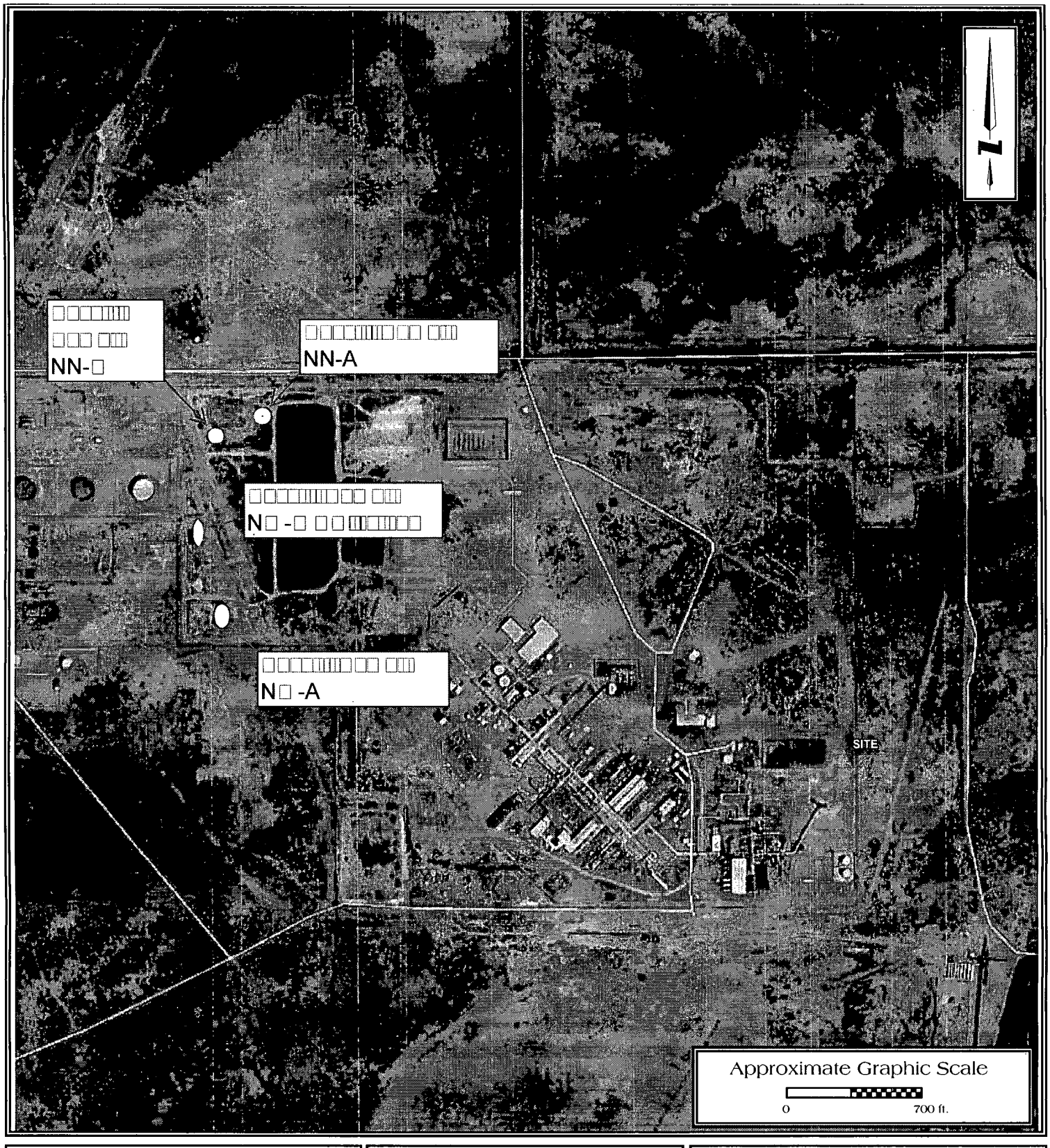
Ballard Pond Closure
Chaco Gas Plant
N36° 29' 09.27"; W108° 07' 28.19"
Off CR 7100
San Juan County, New Mexico

SWG Project No. 0410001A

Southwest GEOSCIENCE

FIGURE 3

SITE MAP



Ballard Pond Closure

Chaco Gas Plan

N36° 29' 09.27"; W108° 07' 28.19"

Off CR 7100

San Juan County, New Mexico

SWG Project No. 0410001A

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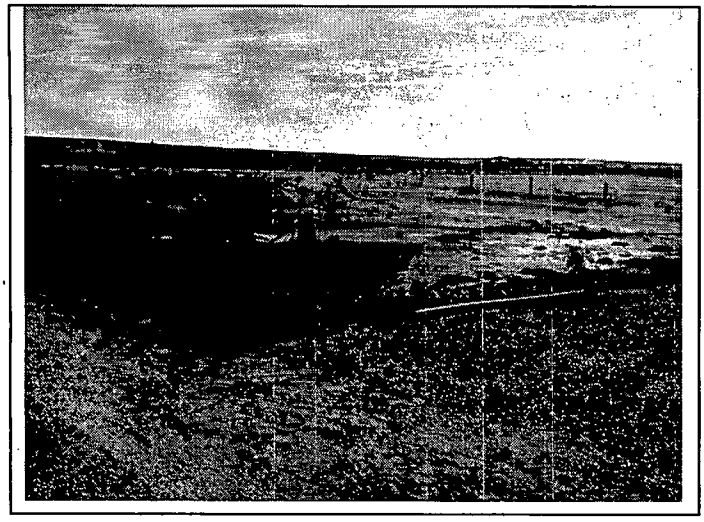
FIGURE 4

Backfill Sample Locations

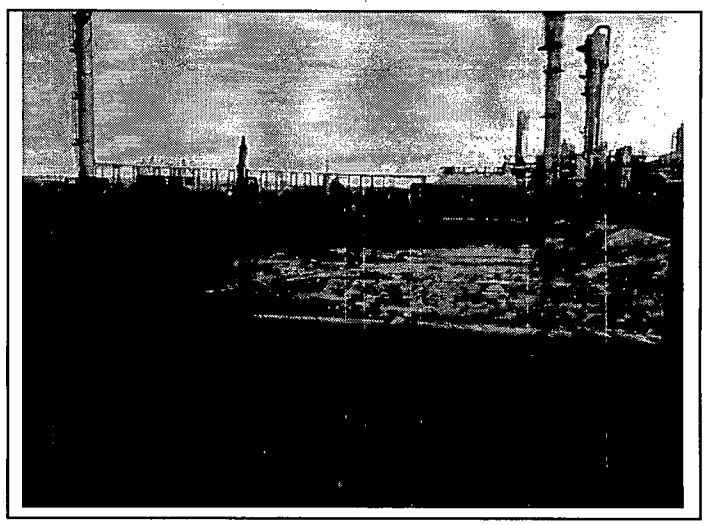
Southwest GEOSCIENCE

APPENDIX B

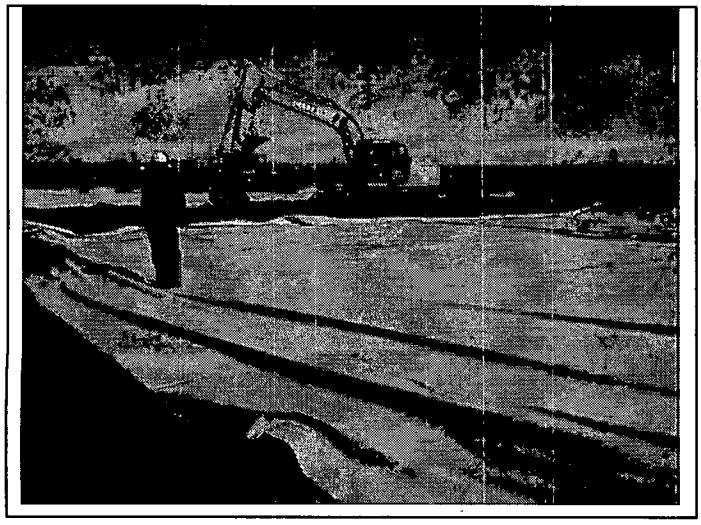
Photographic Documentation



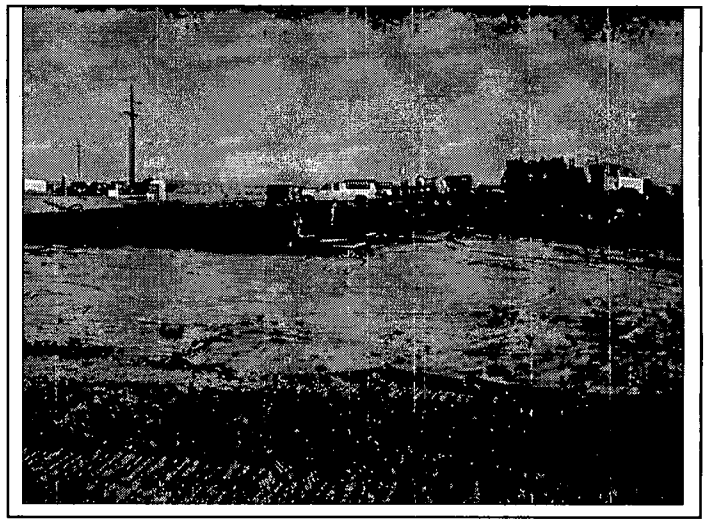
1.) East Pond with netting removed, prior to solidification.



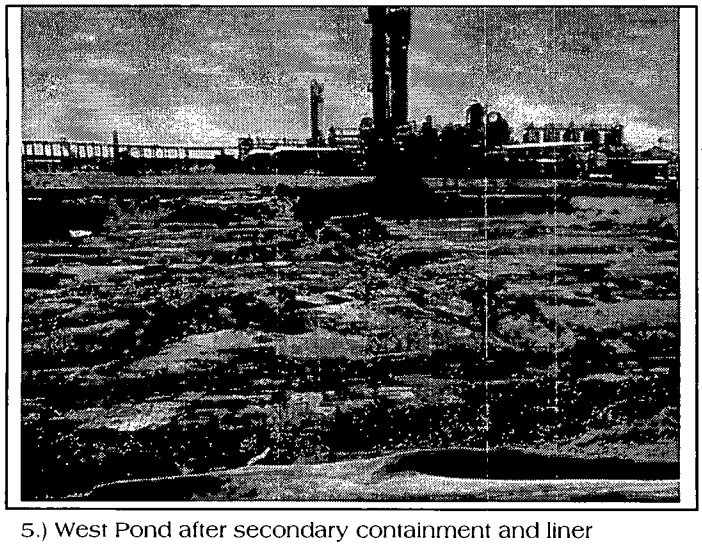
2.) West Pond during content removal.



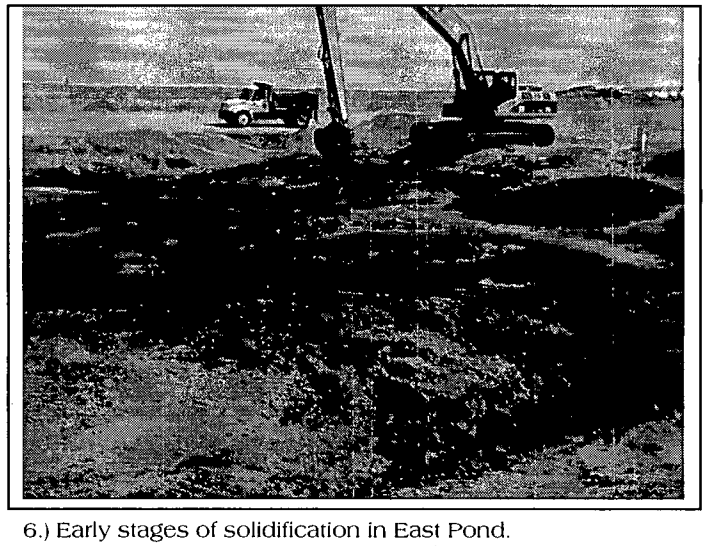
3.) Secondary containment construction for staging of soils.



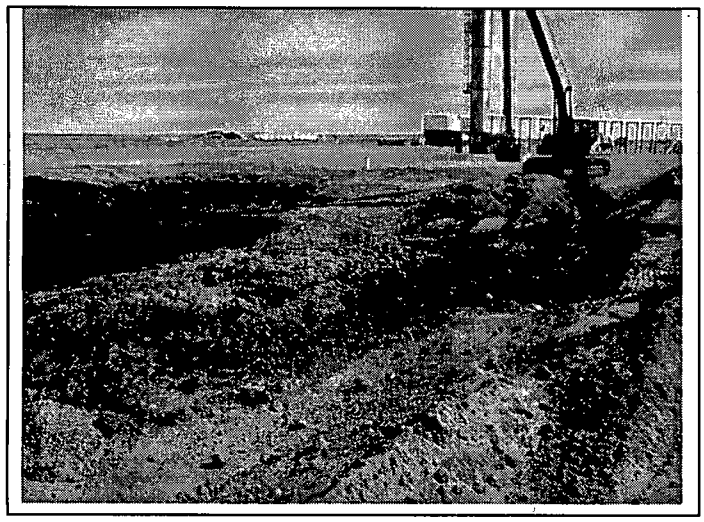
4.) West pond during initial liner cleaning.



5.) West Pond after secondary containment and liner removal.

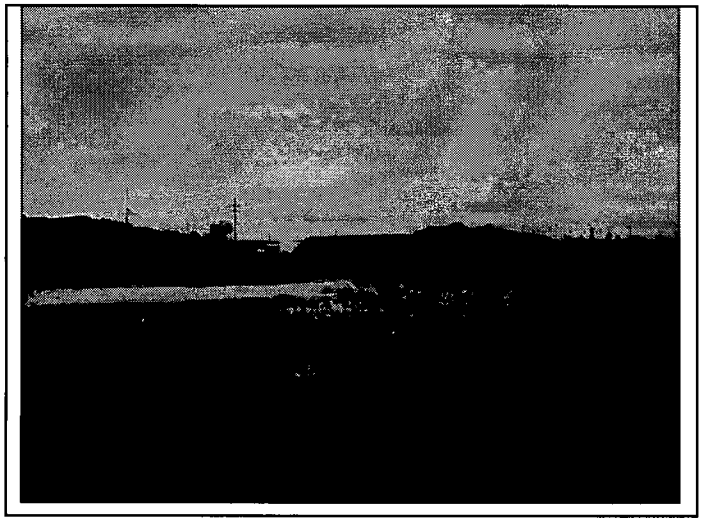


6.) Early stages of solidification in East Pond.

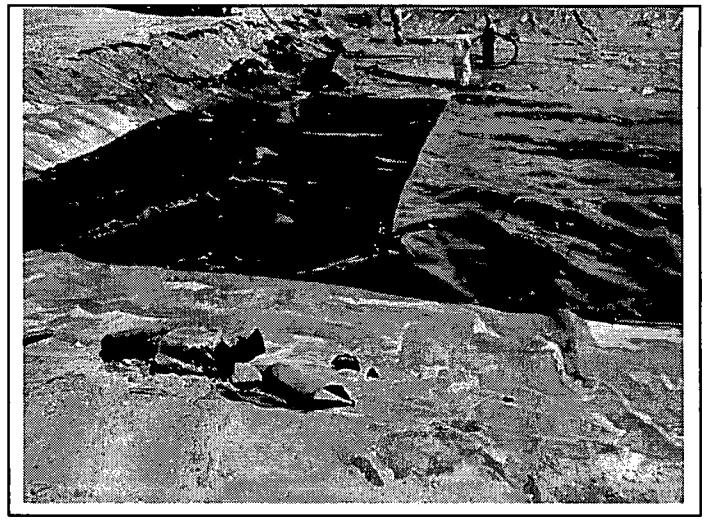


7.) Solidification of East Pond material utilizing blow sand.

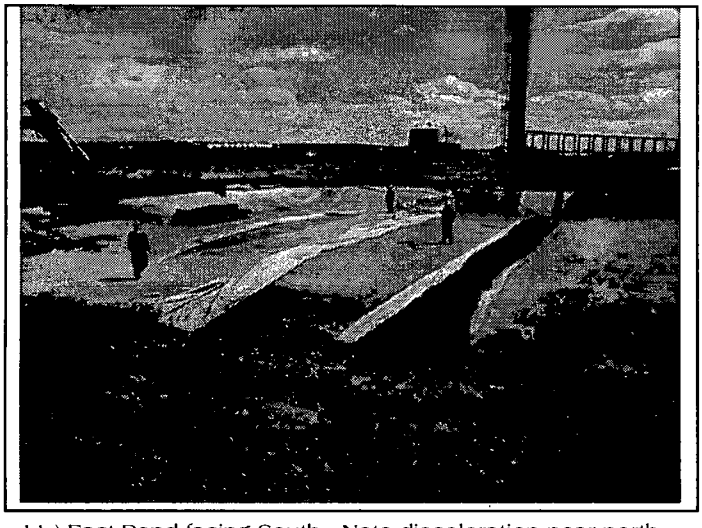
8.) Removal of solidified material in East Pond.



9.) Stockpiled material awaiting land farm acceptance.

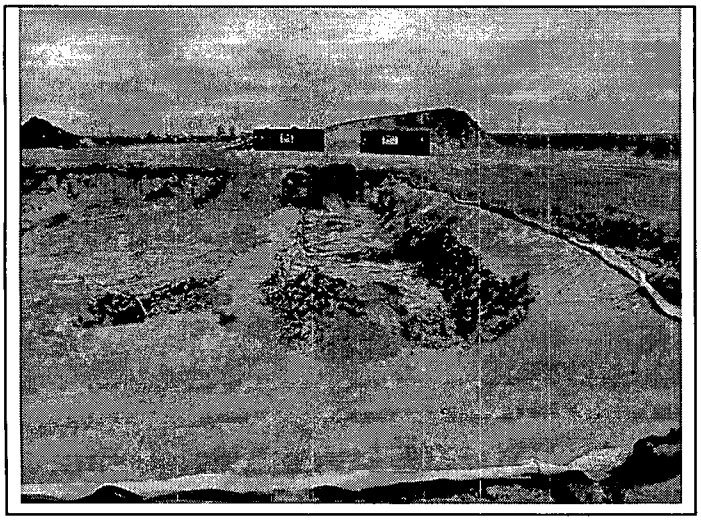


10.) Pressure washing and removing upper liner at East Pond.



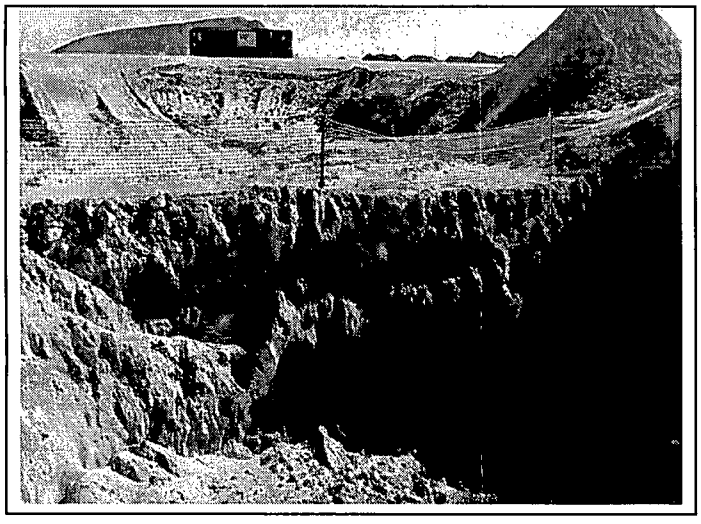
11.) East Pond facing South. Note discoloration near north and east walls which was later excavated (see arrows).

12.) Leak detection system removed from East Pond.

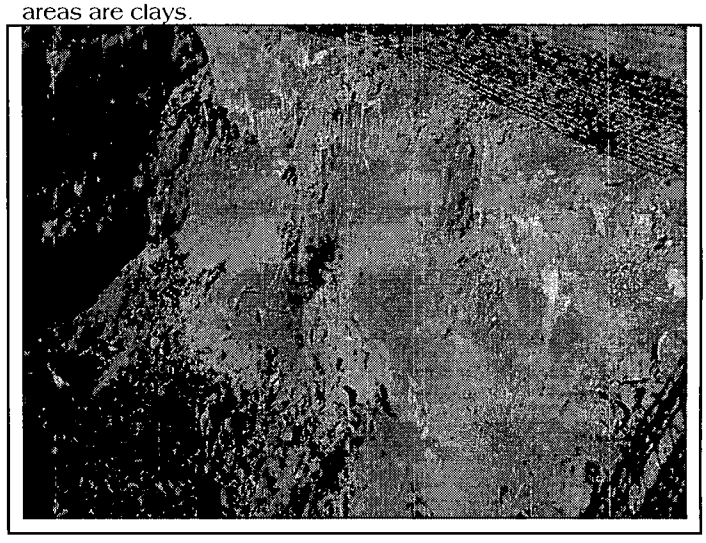


13.) General view of the initial sampling locations the along east wall of the East Pond.

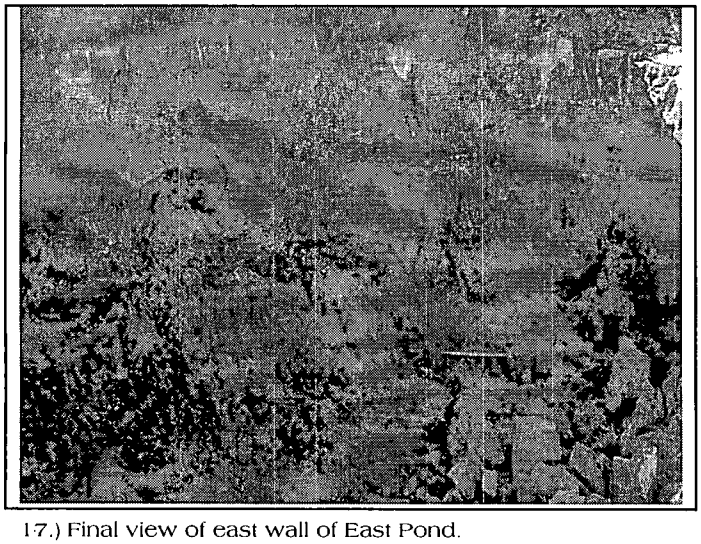
14.) General view of the over-excavation at south wall of East Pond. Minor slough occurred overnight. White/gray areas are clays.



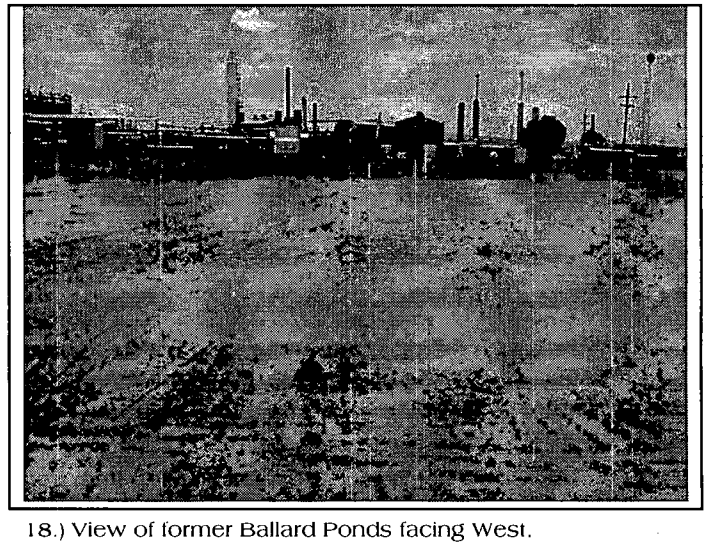
15.) General view of the final excavation at north wall of East Pond.



16.) General view of the west wall of the East Pond final excavation.



17.) Final view of east wall of East Pond.



18.) View of former Ballard Ponds facing West.

Southwest GEOSCIENCE

APPENDIX C

Tables

Southwest GEOSCIENCE

TABLE 1
Chaco Gas Plant - Ballard Ponds LSI
SOIL ANALYTICAL SUMMARY - from January 2011 LSI Report

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
SB-1	11.30.10	10 to 11	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
SB-1	11.30.10	23 to 24	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
SB-2	11.30.10	15 to 16	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
SB-2	11.30.10	18 to 19	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
TSW-1	11.30.10	9 to 10	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
TSW-2	11.30.10	10 to 11	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
TSW-3	12.1.10	13 to 14	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10
TSW-4	12.1.10	17 to 18	<0.05	<0.05	<0.05	<0.10	<0.25	<5.0	<10

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NE = Not Established

Southwest GEOSCIENCE

TABLE 2
Chaco Gas Plant - Ballard Ponds LSI
GROUNDWATER ANALYTICAL SUMMARY - from January 2011 LSI Report

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Control Commmission Groundwater Quality Standards		10	750	750	620	NE	NE
TSW-1	12.8.10	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
TSW-2	12.8.10	<1.0	1.3	<1.0	11	0.11	1.9
TSW-3	12.8.10	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0
TSW-4	12.8.10	<1.0	<1.0	<1.0	<2.0	<0.05	<1.0

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NE = Not Established

Southwest GEOSCIENCE

TABLE 3

Ballard Ponds - Confirmation Samples
SOIL ORGANIC ANALYTICAL RESULTS

Sample I.D.	Date	Sample Depth (feet below pond floor)	Sample Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Minerals & Natural Resources Department, Oil Conservation Division, Remediation Action Level				10	NE	NE	NE	50	100	
Confirmation Samples From Soils Which Were Removed - East Pond										
CS-11*	5.01.12	1.0 - 2.0	5.0 - 6.0	<0.50	5.8	1.8	21	28.6	**330**	**58**
CS-17*	5.10.12	3.0 - 4.0	7.0 - 8.0	<.25	3.0	1.3	15.0	19.3	**190**	**48**
Confirmation Samples From Soils Remaining In Place - West Pond										
CS-1	3.15.12	0 - 1.0	4.0 - 5.0	<0.047	<0.047	<0.047	<0.095	ND	<4.8	<10
CS-2	3.15.12	0 - 1.0	4.0 - 5.0	<0.049	<0.049	<0.049	<0.098	ND	<4.9	<10
CS-3	3.15.12	0 - 1.0	4.0 - 5.0	<0.046	<0.046	<0.046	<0.092	ND	<4.6	<10
CS-4	3.15.12	0 - 1.0	4.0 - 5.0	<0.047	<0.047	<0.047	<0.095	ND	<4.7	<9.6
CS-5	3.15.12	0 - 1.0	5.0 - 6.0	<0.050	<0.050	<0.050	<0.099	ND	<5.0	<10
CS-6	This sample number was skipped									
Confirmation Samples From Soils Remaining In Place - East Pond										
CS-7	4.20.12	0 - 1.0	4.0 - 5.0	<0.048	<0.048	<0.048	<0.096	ND	<4.8	<9.8
CS-8	4.20.12	0 - 1.0	4.0 - 5.0	<0.049	<0.049	<0.049	<0.097	ND	<4.9	<10
CS-9	4.20.12	5.0 - 6.0	9.0 - 10.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
CS-10	4.20.12	5.0 - 6.0	9.0 - 10.0	<0.048	<0.048	<0.048	<0.095	ND	<4.8	<9.9
CS-12	5.01.12	1.0 - 2.0	5.0 - 6.0	<0.050	0.19	0.055	0.70	0.95	8.0	<9.6
CS-13	5.01.12	1.0 - 2.0	5.0 - 6.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
CS-14	5.02.12	1.0 - 2.0	5.0 - 6.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
CS-15	5.02.12	1.0 - 2.0	5.0 - 6.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<9.8
CS-16	5.02.12	3.0 - 4.0	7.0 - 8.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
CS-18	5.16.12	7.0 - 8.0	11.0 - 12.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
CS-19	5.16.12	8.0 - 9.0	12.0 - 13.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<9.8
CS-20	5.16.12	7.0 - 8.0	11.0 - 12.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
CS-21	5.16.12	7.0 - 8.0	11.0 - 12.0	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10

Note: Concentrations in bold and yellow exceed the applicable OCD Remediation Action Level

ND = Non Detect

NE = Not Established

Southwest GEOSCIENCE

TABLE 4

Ballard Ponds - Confirmation Samples
SOIL INORGANIC ANALYTICAL RESULTS

Sample I.D.	Date	Sample Depth (feet below pond floor)	Sample Depth (feet bgs)	Mercury (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
Confirmation Samples From Soils Which Were Removed - East Pond											
CS-11*	5.01.12	1.0 - 2.0	5.0 - 6.0	<0.033	<2.5	66	<0.10	2.9	1.5	<2.5	<0.25
CS-17*	5.10.12	3.0 - 4.0	7.0 - 8.0	<0.033	2.5	42.0	<0.10	2.2	1.9	<2.5	<0.25
Confirmation Samples From Soils Remaining In Place - West Pond											
CS-1	3.15.12	0 - 1.0	4.0 - 5.0	<0.033	3.4	110	<0.10	2.7	1.6	<2.5	<0.25
CS-2	3.15.12	0 - 1.0	4.0 - 5.0	<0.033	<2.5	45	<0.10	3.4	1.7	<2.5	<0.25
CS-3	3.15.12	0 - 1.0	4.0 - 5.0	<0.033	<2.5	56	<0.10	3.0	1.7	<2.5	<0.25
CS-4	3.15.12	0 - 1.0	4.0 - 5.0	<0.033	<2.5	93	<0.10	3.8	1.9	<2.5	<0.25
CS-5	3.15.12	0 - 1.0	5.0 - 6.0	<0.033	<2.5	70	<0.10	6.2	1.7	<2.5	<0.25
CS-6	This sample number was skipped										
Confirmation Samples From Soils Remaining In Place - East Pond											
CS-7	4.20.12	0 - 1.0	4.0 - 5.0	<0.033	2.6	36	<0.10	3.2	1.9	<2.5	<0.25
CS-8	4.20.12	0 - 1.0	4.0 - 5.0	<0.033	<2.5	67	<0.10	3.1	1.9	<2.5	<0.25
CS-9	4.20.12	5.0 - 6.0	9.0 - 10.0	<0.033	<2.5	45	<0.10	3.4	2.0	<2.5	<0.25
CS-10	4.20.12	5.0 - 6.0	9.0 - 10.0	<0.033	<2.5	74	<0.10	2.5	1.9	<2.5	<0.25
CS-12	5.01.12	1.0 - 2.0	5.0 - 6.0	<0.033	<12	45	<0.50	2.9	2.9	<12	<1.2
CS-13	5.01.12	1.0 - 2.0	5.0 - 6.0	<0.033	<12	61	<0.50	3.6	2.4	<12	<1.2
CS-14	5.02.12	1.0 - 2.0	5.0 - 6.0	<0.033	<12	140	<0.50	1.5	1.2	<12	<1.2
CS-15	5.02.12	1.0 - 2.0	5.0 - 6.0	<0.033	<12	140	<0.50	4.6	1.6	<12	<1.2
CS-16	5.02.12	3.0 - 4.0	7.0 - 8.0	<0.033	<12	54	<0.50	2.7	2.7	<12	<1.2
CS-18	5.16.12	7.0 - 8.0	11.0 - 12.0	<0.033	<2.5	28	<0.10	2.5	1.9	<2.5	<0.25
CS-19	5.16.12	8.0 - 9.0	12.0 - 13.0	<0.033	<2.5	22	<0.10	1.6	2.1	<2.5	<0.25
CS-20	5.16.12	7.0 - 8.0	11.0 - 12.0	<0.033	<2.5	35	<0.10	2.0	2.1	<2.5	<0.25
CS-21	5.16.12	7.0 - 8.0	11.0 - 12.0	<0.033	<2.5	35	<0.10	3.0	1.9	<2.5	<0.25

* = This area was subsequently over-excavated

Southwest GEOSCIENCE

TABLE 5

Chaco Plant - Backfill Source Samples

SOIL ORGANIC ANALYTICAL RESULTS

Sample I.D.	Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Energy, Minerals & Natural Resources Department, Oil Conservation Division, Remediation Action Level			10	NE	NE	NE	50	100	
Backfill Source Samples - Not Utilized									
NN-A*	5.23.12	1	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
NN-B*	5.23.12	1	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<10
NW-A*	5.23.12	1	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<9.9
Backfill Source Samples - Utilized									
NW-B	5.23.12	1	<0.050	<0.050	<0.050	<0.10	ND	<5.0	<9.8

Note: Concentrations in bold and yellow exceed the applicable OCD Remediation Action Level

ND = Non Detect

* - These sources were not utilized

Southwest GEOSCIENCE

TABLE 6

Chaco Plant - Backfill Source Samples
SOIL INORGANIC ANALYTICAL RESULTS

Sample I.D	Date	Sample Depth (feet bgs)	Mercury (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
Backfill Source Samples - Not Utilized										
NN-A*	5.23.12	1	<0.033	<5.0	230	<0.20	5.5	1.6	<5.0	<0.50
NN-B*	5.23.12	1	0.064	<5.0	83	<0.20	54	3.0	<5.0	<0.50
NW-A*	5.23.12	1	<0.033	<12	59	<0.50	3.8	2.7	<12	<1.2
Backfill Source Samples - Utilized										
NW-B	5.23.12	1	<0.033	<5.0	44	<0.20	2.5	3.6	<5.0	<0.50

* - These sources were not utilized

Southwest GEOSCIENCE

APPENDIX D

Supporting Documentation

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

July 2, 2001

Mr. David Bays
El Paso Natural Gas Co.
614 Reilly Avenue
Farmington, NM 87401

Dear Mr. Bays:

Your request, of April 26, 2001, to close the discharge plan on the Ballard Hydrocarbon Recovery Facility (GW-71-1) is hereby approved. This facility will be incorporated into GW-71 for the Chaco Gas Plant.

My inspection of June 28, 2001 showed that this facility apparently had never been operated and was located on the Chaco Plant property. Since the wastewater ponds have already been incorporated into the Chaco Plant, it is practical to incorporate the HC recovery unit as well.

Should El Paso Field Services place this HC recovery unit back in operation, please advise this office.

If you have any questions please contact me at (505) 476-3492, or e-mail me at emartin@state.nm.us.

New Mexico Oil Conservation Division

Ed Martin

Edwin E. Martin
Environmental Bureau

cc: OCD Aztec Office

EPFS

EL PASO FIELD SERVICES

BALLARD HYDROCARBON RECOVERY FACILITY DISCHARGE PLAN Number GW-071-1

January 1996

Prepared for:

NEW MEXICO OIL CONSERVATION DIVISION

2040 S. Pacheco

Santa Fe, New Mexico 87505

El Paso Field Services Company
P. O. Box 99234
El Paso, Texas 79999-9234
(915) 541-5200

This Discharge Plan has been prepared in accordance with Oil Conservation Division "Guidelines for the Preparation of Ground Water Discharge Plans at Natural Gas Processing Plants".

I. Type of Operation

El Paso Natural Gas Company (EPNG) proposes to modify the existing wastewater handling facilities at the Ballard Hydrocarbon Recovery Facility by the addition of a second lined evaporation pond. Construction drawings for the proposed pond are attached behind tab C Currently installed Facility equipment is:

one 120 barrel aboveground steel tank
one 50 barrel below ground classifier tank
one electrically heated separator
a 120 foot by 120 foot by 4 foot deep evaporation pond.

El Paso Field Services Company is the owner and will operate the facility.

II. Operator/Legally Responsible Party and Local Representative

Legally Responsible Party:	Hugh A. Shaffer Vice President, Operations and Engineering El Paso Field Services Company 100 N. Stanton El Paso, TX 79901 (915) 541-5200
Local Representative:	Sandra Miller Superintendent, Environmental Compliance El Paso Field Services Company 614 Reilly Ave. Farmington New Mexico 87401 (505) 599-2141 24 hour - (505) 325-2841
Facility Operator:	El Paso Field Services Company Ballard Pipeline District Bloomfield, New Mexico 87413 (505) 632-0619

III. Location of Facility

The Facility is located in the southwest 1/4 of Section 16, T26N, R12W, of San Juan County, New Mexico. The Facility is approximately 18 miles southwest of Bloomfield, NM, adjacent to the El Paso Natural Gas Co. Chaco Gasoline Plant. A topographic map is attached under Tab A.

IV. Landowner

El Paso Field Services Company
P. O. Box 99234
El Paso, Texas 79999-9234

V. Facility Description

A plot plan of the facility indicating location of fences, gates, and equipment on the facility is attached at Tab B. The proposed new evaporation pond cell is located immediately west of the existing pond.

VI. Sources and Quantities of Effluent

The Ballard Hydrocarbon Recovery Facility primarily receives excess water transferred from the Kutz Hydrocarbon Recovery Facility lined pond. (See Discharge Plan GW-049-1).

The Facility also receives produced water and nonhazardous industrial wastewater from each of the following facilities:

Liquids Source	Est. Volume (barrels per year)
Ballard Station	250
Kutz Station	250
Largo Station	200
Lindrith Station	150
Hart Canyon #1 Station	150
Hart Canyon #2 Station	150
Hart Canyon #3 Station	150
San Juan Basin Gathering System	2,000
Transferred from Kutz Hydrocarbon Recovery Facility	17,000
Total Estimated Throughput	20,300

VII. Transfer and Storage of Process Fluids and Effluent

A. Water and Wastewater Schematic

The plot plan at Tab B indicates the location of the wastewater system components. All waste water delivered to the Facility is off loaded directly into the evaporation pond(s).

B. Specifications

Pipelines - All wastewater and hydrocarbon liquids piping is above ground.

C. Fluids Disposal and Storage Tanks

The hydrocarbons recovered at the Facility are recycled. The water fraction is separated and is discharged into the double lined evaporation pond(s).

D. Prevention of Unintentional and Inadvertent Discharges

The above ground storage tank is bermed to contain one-third more that the tank contents. It is also placed on a gravel so that leaks can be visually detected. The below grade 50 bbl. tank is constructed of single walled steel. All Facility equipment except the evaporation pond is currently out of service.

There will be no chemical or drum storage area. No chemicals are used at the Facility.

VIII. Effluent Disposal

Offsite Disposal

All liquids from this site will be handled in accordance with OCD and NMED regulations. All hydrocarbon liquids will be recycled if possible.

EPNG has the following hauling/disposal contracts:

Hauling Agent:

Three Rivers Trucking
603 E. Murray Drive
Farmington, NM 87401
(505) 325-8017

or

Chief Transport Co.
604 West Piñon
Farmington, NM 87401
(505) 325-2396

Final Disposal:

Oil:
Hay Hot Oil, Inc.
P.O. Box 2
Cortez, CO 81321
(303) 565-8637

Water:
On Site Evaporation Pond(s)

IX. Inspection, Maintenance and Reporting

The site will be visited on a regular basis by EPNG employees. The tanks, piping, and pond leak detection system will be inspected for any leaks or spills.

X. Spill/Leak Prevention and Reporting (Contingency Plans)

Since the site will be visited on a regular basis by EPNG, any leaks, spills, and or drips will be identified. Regular scheduled maintenance procedures will also help to assure that the equipment remains functional and thus the possibility of spills or leaks is further minimized. EPNG Compliance will be notified upon discovery of any leaks which result in any soil contamination.

Leaks, spills, and drips will be handled in accordance with NMWQCR 1-203 and OCD Rule 116 as follows:

A) Small spills will be absorbed with soil and shoveled into drums for off-site disposal. If the soil is an "exempt" waste, the soil will be disposed at Envirotech or other OCD approved landfarm facility. If the soil is an "nonexempt" waste the soil will be characterized and disposed according to the analytical profile.

B) Large spills will be contained with temporary berms. Free liquids will be pumped out by a vacuum truck. Any hydrocarbon liquids will be recycled. Any contaminated soil will be disposed of as discussed in the paragraph above.

C) Verbal and written notification of leaks or spills will be made to OCD in accordance with Rule 116.

D) All areas identified during operations as susceptible to leaks or spills will be bermed or otherwise contained to prevent the discharge of effluent.

E) EPNG personnel will carry oil absorbent booms in their trucks. The booms will be used as needed to contain any spills or leaks. The booms will be disposed of according to OCD and NMED guidelines.

XI. Site Characteristics

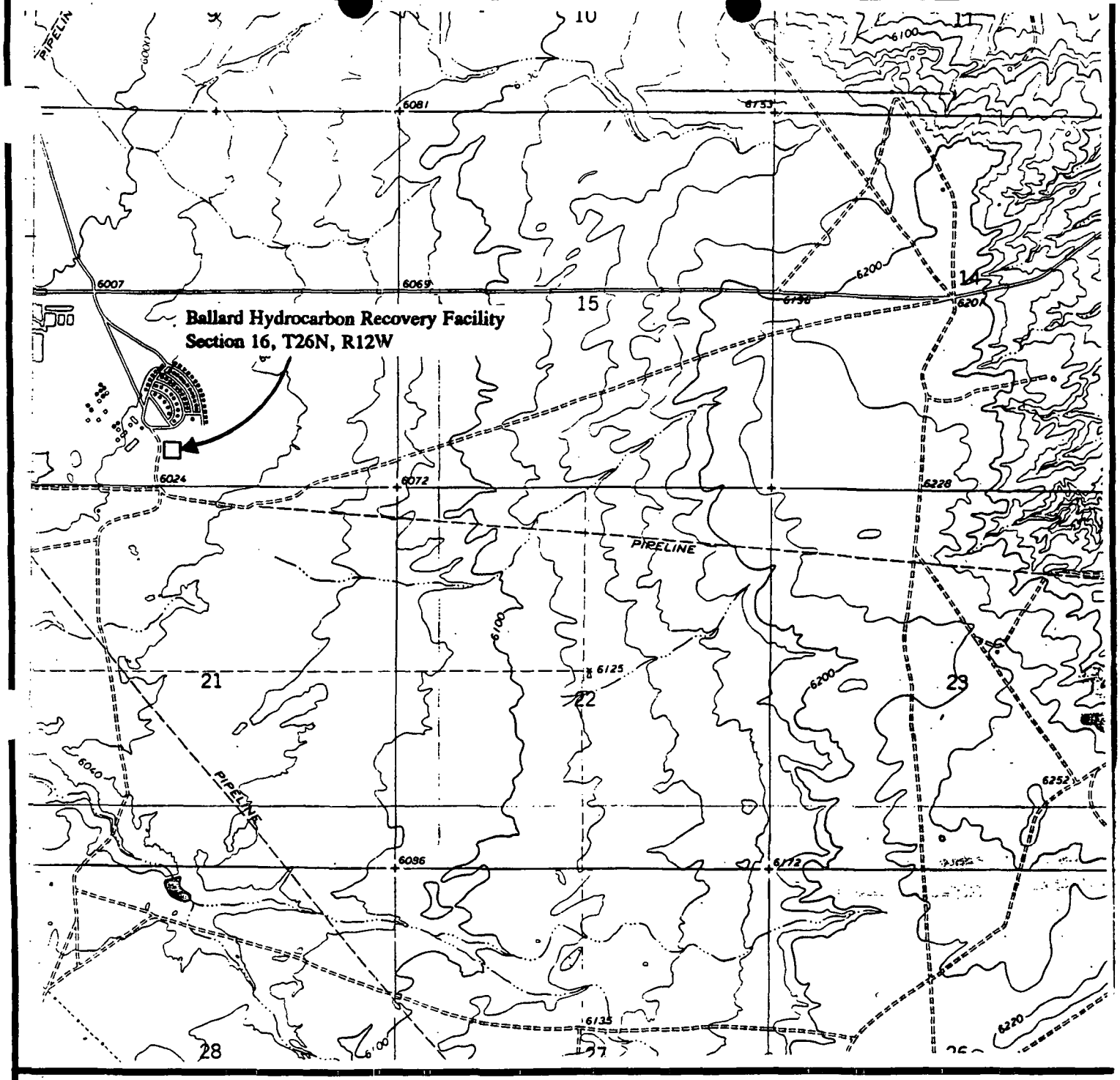
The facility is located immediately adjacent to the El Paso Natural Gas Co. Chaco Gas Plant. Hydrogeological information is detailed in the Chaco Discharge Plan, Number GW-071.

XIII. Affirmation

I here by certify that I am familiar with the information contained in and submitted with this discharge plan for the Trunk A Compressor Station, and that such information is true, accurate, and complete to the best of my knowledge and belief.

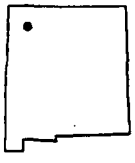
David Bays, REM
Sr. Environmental Scientist

Date: January 30, 1995



N
W E
S

Carson Trading Post Quadrangle
7.5 Minute Series Quadrangle
Prepared for: Ballard Hydrocarbon Recovery Facility



Quadgrangle Location

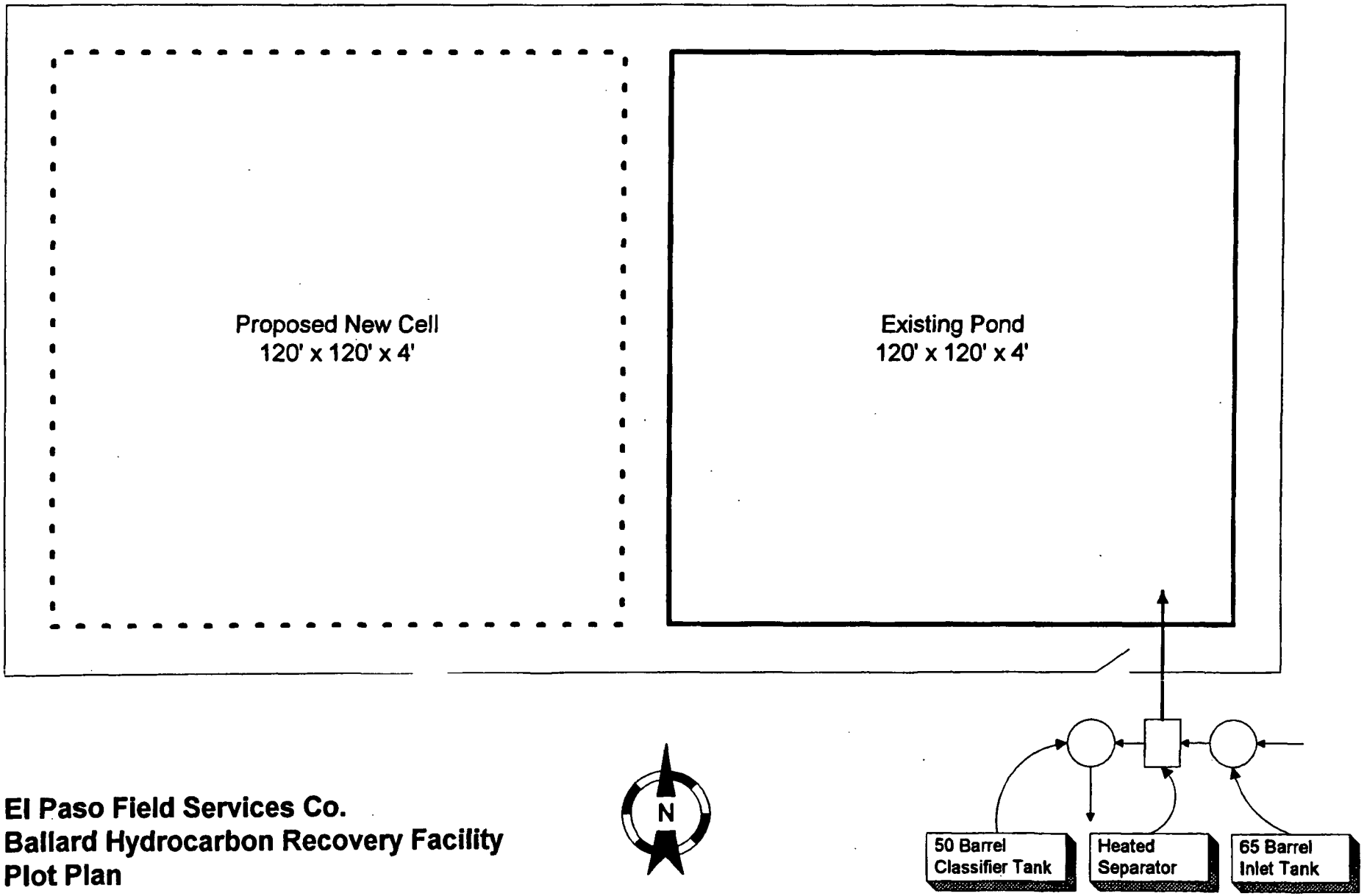
SCALE 1:24 000

1 0 1 MILE

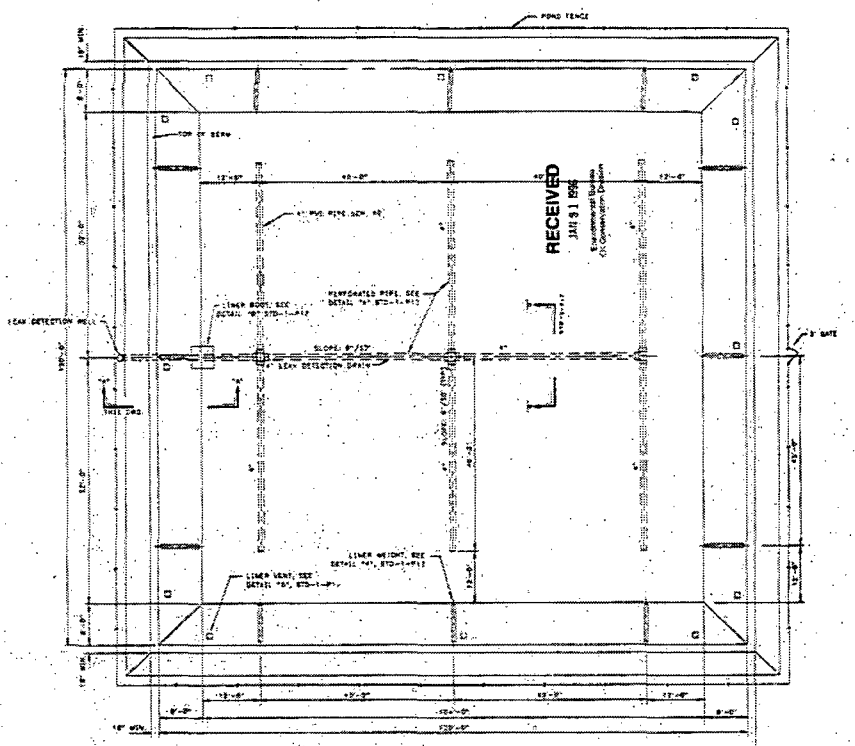
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

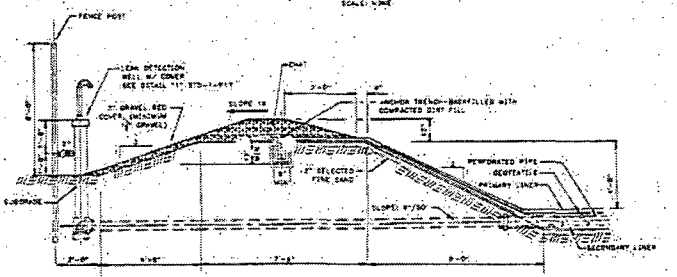
CONTOUR INTERVAL 20 FEET



El Paso Field Services Co.
Ballard Hydrocarbon Recovery Facility
Plot Plan
Scale: None



EVAPORATION POND
PLAN
SCALE: 1/16"



SECTION "A-A"
SCALE: 3/8" = 1'-0"

LEGEND

DWG. NO.	TITLE	NO.	DATE	BY	DESCRIPTION
	REFERENCE DRAWINGS				REVISIONS

W.O.	APP. SHT. REF.	DATE	U.S.

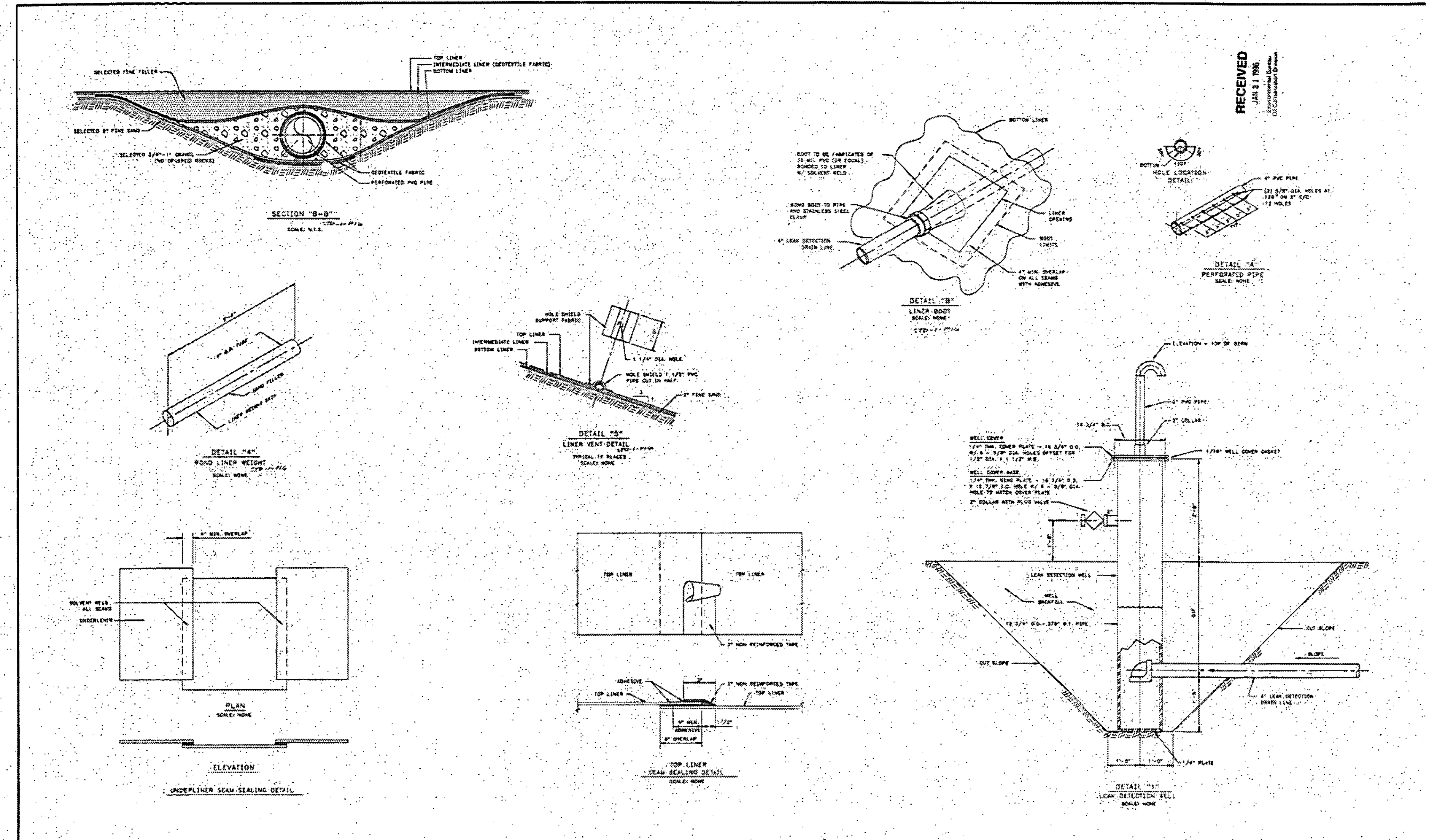
WEIGHT RECORD

ENG. RECORD		DATE
DRAFTING DESIGN	JH	1/29/97
COMPUTER GRAPHICS	MO	4/29/97
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SHEET NAME	STD1117	

El Paso
NATURAL GAS Company

EVAPORATION POND
PLANS AND SECTIONS

SCALE: NOTED	DWG. NO.	STD-1-P16	REV.
P NO.			



LEGEND	REFERENCE DRAWINGS		REVISIONS	PRINT RECORD
	STD-1-P17	EVAPORATION POND		

DWG. RECORD		DATE
DRAFTING DESIGN	JN	4/17/87
COMPUTER GRAPHICS	MD	4/17/87
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	STD144	

El Paso NATURAL GAS COMPANY

EVAPORATION POND
MISCELLANEOUS SECTIONS AND DETAILS

SCALE: NOTED
DWG. NO. STD-1-P17

Southwest GEOSCIENCE

APPENDIX E

Waste Documentation

Southwest GEOSCIENCE

West Pond Contents

Note: Samples B-1, B-2, and B-3 represent the West Pond Contents.
The remaining samples are from pre-stabilized East Pond.

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

04061-0032

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Products Operating, L.P.

2. Originating Site:
Blanco Separator Pond (West Pond) – Chaco Gas Plant

3. Location of Material (Street Address, City, State or ULSTR):
Unit C Sec 16 T 26 N R 12 W, San Juan County, NM

4. Source and Description of Waste:
Source: West Ballard Pond.
Description: Soil/blow sand accumulation removed from West Ballard Pond at Chaco Gas Plant. Analytical = 8015, 8021, RCRA-8, TCLP (Sample #s B-1, B-2, B-3) and Chloride Sample #W-Cl-1.
Estimated Volume 400 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 748 yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, [signature], representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☒ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, [signature], representative for Enterprise Products Operating authorize Envirotech to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, [signature], representative for Envirotech do hereby certify that
Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Riley Industrial, Hall Services

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011**

Address of Facility: **Hilltop, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status: ☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Rumuny TITLE: Waste Coordinator DATE: 3/8/12
SIGNATURE: [signature] TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

envirotech

Bill of Lading

MANIFEST # 40931

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-8-12 JOB# 04061-0032

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise	LF II-5	CONT Soil	P-13	10	—	Riley	19029	9:00	Geoffrey Woolard
2	West Pond	"	"	P-13	10	—	"	19028	9:00	
3	Blanco	"	"	P-13	10	—	"	11039	9:00	
4	Sep	"	"	P-13	10	—	"	18088	9:00	
5	"	"	"	P-13	10	—	"	19029	10:30	
6	"	"	"	P-13	10	—	"	19028	10:30	
7	"	"	"	P-13	10	—	"	11039	10:30	
8	"	"	"	P-13	10	—	"	18088	10:30	
9	"	"	"	P-13	10	—	"	~~19029~~ 19028	12:05	
10	"	"	"	P-13	10	—	"	19028	12:05	
11	"	"	"	P-13	10	—	"	18088	12:05	
12	"	"	"	P-13	10	—	"	11039	12:05	

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
<280	CHLORIDE TEST	3	Gary Robinson	
	PAINT FILTER TEST	3	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Geoffrey Woolard SIGNATURE Geoffrey Woolard

COMPANY CONTACT Dave Brackney PHONE (505)327-4947 DATE 3/8/12

Signatures required prior to distribution of this legal document.

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envirotech

Bill of Lading

MANIFEST # 40934

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-8-12 JOB# 04061-0032

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise West Bond Blanco	LF II-5	Cut Soil		10		Riley	18088	13:20	
2	" Sep "	" "	" "		10		" "	12029	13:20	
3	" "	" "	" "		10		" "	19028	13:20	
4	" "	" "	" "		10		" "	11039	13:30	
					40					

RESULTS:

280 CHLORIDE TEST

PAINT FILTER TEST

LANDFARM EMPLOYEE:

NOTES:

Certification of above receival & placement

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Herman John SIGNATURE

COMPANY CONTACT DAVE BRACKNEY PHONE 327-4947 DATE 3-8-12

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Bill of Lading

MANIFEST # 40936

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-8-12 JOB# 04101-0032

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise	LFII-5	Cont Soil	P-13	10	-	Riley	19029	1416	Geoffrey Woolard
2	West Pond Blanco Sep.	"	"	P-13	10	-	"	18088	1416	Herman Salas
3		"	"	P-13	10	-	"	19028	1416	[signature]
4		"	"	P-13	10	-	"	11039	1416	[signature]
5		"	"	P-13	10	-	"	19029	1508	Geoffrey Woolard
6		"	"	P-13	10	-	"	19028	1508	[signature]
7		"	"	P-13	10	-	"	11039	1508	[signature]
8		"	"	P-13	10	-	"	18088	1508	Herman Salas
					80					

RESULTS:

1180	CHLORIDE TEST	Y
	PAINT FILTER TEST	Y

LANDFARM EMPLOYEE: Cory Coleman

Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Geoffrey Woolard SIGNATURE Geoffrey Woolard

COMPANY CONTACT Dave Brackney PHONE (505) 327-4947 DATE 3/8/12

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Bill of Lading

MANIFEST # 40968

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-14-12 JOB# 04061-0032

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise	CFII-5	contd soil	S-13	12	—	Halo Services	T-24	8:00	Marcus Cheney
2	Blanco Separator Pond	"	"	S-13	12	—	"	T-24	9:17	Marcus Cheney
3	"	"	"	S-13	12	—	"	T-24	10:02	Marcus Cheney
4	"	"	"	S-13	12	—	"	T-24	10:45	Marcus Cheney
5	"	"	"	S-13	12	—	"	T-24	11:36	Marcus Cheney
					60					

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
<100	CHLORIDE TEST	Z		
	PAINT FILTER TEST	Z	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Halo Service NAME Marcus Cheney SIGNATURE Marcus Cheney

COMPANY CONTACT Daniel or Nate Vaughn PHONE 632-7007 DATE 3-14-12

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Bill of Lading

MANIFEST # 40969

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 3-14-12 JOB# 04061-0032

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise	LF II-5	Contam Soil	S-13	12	—	Riley	19028	8:20	Pete Brown
2	Blanco Separator Pond	"	"	S-13	12	—	"	19028	9:26	Pete Brown
3	" "	"	"	S-13	12	—	"	19028	10:22	Pete Brown
4	" "	"	"	S-13	12	—	"	19028	11:16	Pete Brown
					48					

RESULTS:

<200 CHLORIDE TEST

PAINT FILTER TEST

LANDFARM EMPLOYEE:

Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley Industrial Serv. NAME Pete Brown SIGNATURE Pete Brown

COMPANY CONTACT Dave Brackney PHONE (505) 327-4947 DATE 3/13/12

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ACCENT Printing • Form 28-1212

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, October 05, 2011

Kyle Summers
Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410

TEL: (903) 821-5603
FAX

RE: Chaco Ballard Ponds

Order No.: 1109823

Dear Kyle Summers:

Hall Environmental Analysis Laboratory, Inc. received 6 sample(s) on 9/22/2011 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 27, 2011

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

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

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Oct-11*
Analytical Report

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Waste B-1
Lab Order:	1109823	**Collection Date:**	9/21/2011 8:50:00 AM
Project:	Chaco Ballard Ponds	**Date Received:**	9/22/2011
Lab ID:	1109823-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	17000	980		mg/Kg	100	9/23/2011 10:33:34 PM
Surr: DNOP	0	73.4-123	S	%REC	100	9/23/2011 10:33:34 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	49		mg/Kg	10	9/25/2011 3:09:41 AM
Surr: BFB	91.4	75.2-136		%REC	10	9/25/2011 3:09:41 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.49		mg/Kg	10	9/25/2011 3:09:41 AM
Toluene	ND	0.49		mg/Kg	10	9/25/2011 3:09:41 AM
Ethylbenzene	ND	0.49		mg/Kg	10	9/25/2011 3:09:41 AM
Xylenes, Total	ND	0.98		mg/Kg	10	9/25/2011 3:09:41 AM
Surr: 4-Bromofluorobenzene	80.8	80-120		%REC	10	9/25/2011 3:09:41 AM
EPA METHOD 7471: MERCURY						Analyst: **BRM**
Mercury	17	3.3		mg/Kg	100	9/22/2011 5:13:07 PM
MERCURY, TCLP						Analyst: **BRM**
Mercury	ND	0.020		mg/L	1	10/3/2011 2:52:25 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	5.2	2.5		mg/Kg	1	9/23/2011 11:29:17 AM
Barium	71	0.50		mg/Kg	5	9/23/2011 11:46:09 AM
Cadmium	0.14	0.10		mg/Kg	1	9/23/2011 11:29:17 AM
Chromium	64	1.5		mg/Kg	5	9/23/2011 11:46:09 AM
Lead	15	0.25		mg/Kg	1	9/23/2011 11:29:17 AM
Selenium	ND	2.5		mg/Kg	1	9/23/2011 11:29:17 AM
Silver	ND	0.25		mg/Kg	1	9/23/2011 11:29:17 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	10/3/2011 6:44:53 AM
Chromium	ND	5.0		mg/L	1	10/3/2011 6:44:53 AM
Lead	ND	5.0		mg/L	1	10/3/2011 6:44:53 AM

Qualifiers:

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

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Waste B-2
Lab Order:	1109823	**Collection Date:**	9/21/2011 9:10:00 AM
Project:	Chaco Ballard Ponds	**Date Received:**	9/22/2011
Lab ID:	1109823-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	1000	500		mg/Kg	50	9/23/2011 8:16:28 PM
Surr: DNOP	0	73.4-123	S	%REC	50	9/23/2011 8:16:28 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	46		mg/Kg	10	9/25/2011 3:39:40 AM
Surr: BFB	99.3	75.2-136		%REC	10	9/25/2011 3:39:40 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.46		mg/Kg	10	9/25/2011 3:39:40 AM
Toluene	ND	0.46		mg/Kg	10	9/25/2011 3:39:40 AM
Ethylbenzene	ND	0.46		mg/Kg	10	9/25/2011 3:39:40 AM
Xylenes, Total	ND	0.92		mg/Kg	10	9/25/2011 3:39:40 AM
Surr: 4-Bromofluorobenzene	92.8	80-120		%REC	10	9/25/2011 3:39:40 AM
EPA METHOD 7471: MERCURY						Analyst: **BRM**
Mercury	3.0	0.33		mg/Kg	10	9/22/2011 5:14:51 PM
MERCURY, TCLP						Analyst: **BRM**
Mercury	ND	0.020		mg/L	1	10/3/2011 2:54:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	3.7	2.5		mg/Kg	1	9/23/2011 11:31:40 AM
Barium	45	0.10		mg/Kg	1	9/23/2011 11:31:40 AM
Cadmium	0.17	0.10		mg/Kg	1	9/23/2011 11:31:40 AM
Chromium	19	0.30		mg/Kg	1	9/23/2011 11:31:40 AM
Lead	14	0.25		mg/Kg	1	9/23/2011 11:31:40 AM
Selenium	ND	2.5		mg/Kg	1	9/23/2011 11:31:40 AM
Silver	ND	0.25		mg/Kg	1	9/23/2011 11:31:40 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Chromium	ND	5.0		mg/L	1	10/3/2011 6:46:51 AM
Lead	ND	5.0		mg/L	1	10/3/2011 6:46:51 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Oct-11*
Analytical Report

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Waste B-3
Lab Order:	1109823	**Collection Date:**	9/21/2011 9:20:00 AM
Project:	Chaco Ballard Ponds	**Date Received:**	9/22/2011
Lab ID:	1109823-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	2600	500		mg/Kg	50	9/23/2011 8:50:52 PM
Surr: DNOP	0	73.4-123	S	%REC	50	9/23/2011 8:50:52 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	48		mg/Kg	10	9/25/2011 4:09:41 AM
Surr: BFB	95.9	75.2-136		%REC	10	9/25/2011 4:09:41 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.48		mg/Kg	10	9/25/2011 4:09:41 AM
Toluene	ND	0.48		mg/Kg	10	9/25/2011 4:09:41 AM
Ethylbenzene	ND	0.48		mg/Kg	10	9/25/2011 4:09:41 AM
Xylenes, Total	ND	0.96		mg/Kg	10	9/25/2011 4:09:41 AM
Surr: 4-Bromofluorobenzene	86.0	80-120		%REC	10	9/25/2011 4:09:41 AM
EPA METHOD 7471: MERCURY						Analyst: **BRM**
Mercury	3.0	0.66		mg/Kg	20	9/22/2011 5:27:28 PM
MERCURY, TCLP						Analyst: **BRM**
Mercury	ND	0.020		mg/L	1	10/3/2011 2:55:56 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	3.2	2.5		mg/Kg	1	9/23/2011 11:33:35 AM
Barium	45	0.10		mg/Kg	1	9/23/2011 11:33:35 AM
Cadmium	0.12	0.10		mg/Kg	1	9/23/2011 11:33:35 AM
Chromium	22	0.30		mg/Kg	1	9/23/2011 11:33:35 AM
Lead	7.7	0.25		mg/Kg	1	9/23/2011 11:33:35 AM
Selenium	ND	2.5		mg/Kg	1	9/23/2011 11:33:35 AM
Silver	ND	0.25		mg/Kg	1	9/23/2011 11:33:35 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Chromium	ND	5.0		mg/L	1	10/3/2011 6:54:26 AM
Lead	ND	5.0		mg/L	1	10/3/2011 6:54:26 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Oct-11*
Analytical Report

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Waste B-4
Lab Order:	1109823	**Collection Date:**	9/21/2011 10:00:00 AM
Project:	Chaco Ballard Ponds	**Date Received:**	9/22/2011
Lab ID:	1109823-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	36000	5100		mg/Kg	100	9/23/2011 11:07:59 PM
Surr: DNOP	0	73.4-123	S	%REC	100	9/23/2011 11:07:59 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	1700	49		mg/Kg	10	9/25/2011 4:39:36 AM
Surr: BFB	209	75.2-136	S	%REC	10	9/25/2011 4:39:36 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	16	0.49		mg/Kg	10	9/25/2011 4:39:36 AM
Toluene	99	2.4		mg/Kg	50	9/25/2011 9:22:58 PM
Ethylbenzene	11	0.49		mg/Kg	10	9/25/2011 4:39:36 AM
Xylenes, Total	120	0.97		mg/Kg	10	9/25/2011 4:39:36 AM
Surr: 4-Bromofluorobenzene	94.6	80-120		%REC	10	9/25/2011 4:39:36 AM
EPA METHOD 7471: MERCURY						Analyst: **BRM**
Mercury	70	33		mg/Kg	500	9/23/2011 9:35:09 AM
MERCURY, TCLP						Analyst: **BRM**
Mercury	ND	0.020		mg/L	1	10/3/2011 2:57:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	14	2.5		mg/Kg	1	9/23/2011 11:35:39 AM
Barium	160	0.97		mg/Kg	5	9/23/2011 11:48:04 AM
Cadmium	1.2	0.10		mg/Kg	1	9/23/2011 11:35:39 AM
Chromium	88	0.30		mg/Kg	1	9/23/2011 11:35:39 AM
Lead	8.7	0.25		mg/Kg	1	9/23/2011 11:35:39 AM
Selenium	ND	2.5		mg/Kg	1	9/23/2011 11:35:39 AM
Silver	0.87	0.25		mg/Kg	1	9/23/2011 11:35:39 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	10/3/2011 6:56:30 AM
Barium	ND	100		mg/L	1	10/3/2011 6:56:30 AM
Cadmium	ND	1.0		mg/L	1	10/3/2011 6:56:30 AM
Chromium	ND	5.0		mg/L	1	10/3/2011 6:56:30 AM
Lead	ND	5.0		mg/L	1	10/3/2011 6:56:30 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Oct-11*
Analytical Report

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Waste B-5
Lab Order:	1109823	**Collection Date:**	9/21/2011 10:30:00 AM
Project:	Chaco Ballard Ponds	**Date Received:**	9/22/2011
Lab ID:	1109823-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	25000	1000		mg/Kg	100	9/23/2011 11:42:05 PM
Surr: DNOP	0	73.4-123	S	%REC	100	9/23/2011 11:42:05 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	3200	49		mg/Kg	10	9/25/2011 5:09:24 AM
Surr: BFB	390	75.2-136	S	%REC	10	9/25/2011 5:09:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	19	0.49		mg/Kg	10	9/25/2011 5:09:24 AM
Toluene	110	4.9		mg/Kg	100	9/25/2011 9:52:53 PM
Ethylbenzene	11	0.49		mg/Kg	10	9/25/2011 5:09:24 AM
Xylenes, Total	180	9.9		mg/Kg	100	9/25/2011 9:52:53 PM
Surr: 4-Bromofluorobenzene	122	80-120	S	%REC	10	9/25/2011 5:09:24 AM
EPA METHOD 7471: MERCURY						Analyst: **BRM**
Mercury	63	33		mg/Kg	500	9/23/2011 9:36:53 AM
MERCURY, TCLP						Analyst: **BRM**
Mercury	ND	0.020		mg/L	1	10/3/2011 2:59:31 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	10	2.5		mg/Kg	1	9/23/2011 11:37:40 AM
Barium	130	0.91		mg/Kg	5	9/23/2011 11:58:09 AM
Cadmium	0.92	0.10		mg/Kg	1	9/23/2011 11:37:40 AM
Chromium	37	0.30		mg/Kg	1	9/23/2011 11:37:40 AM
Lead	8.4	0.25		mg/Kg	1	9/23/2011 11:37:40 AM
Selenium	ND	2.5		mg/Kg	1	9/23/2011 11:37:40 AM
Silver	0.41	0.25		mg/Kg	1	9/23/2011 11:37:40 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Arsenic	ND	5.0		mg/L	1	10/3/2011 6:58:15 AM
Barium	ND	100		mg/L	1	10/3/2011 6:58:15 AM
Chromium	ND	5.0		mg/L	1	10/3/2011 6:58:15 AM
Lead	ND	5.0		mg/L	1	10/3/2011 6:58:15 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Oct-11*
Analytical Report

CLIENT:	Southwest Geoscience	**Client Sample ID:**	Waste B-6
Lab Order:	1109823	**Collection Date:**	9/21/2011 11:00:00 AM
Project:	Chaco Ballard Ponds	**Date Received:**	9/22/2011
Lab ID:	1109823-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	16000	990		mg/Kg	100	9/24/2011 12:16:28 AM
Surr: DNOP	0	73.4-123	S	%REC	100	9/24/2011 12:16:28 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	610	48		mg/Kg	10	9/25/2011 5:39:24 AM
Surr: BFB	185	75.2-136	S	%REC	10	9/25/2011 5:39:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	2.1	0.48		mg/Kg	10	9/25/2011 5:39:24 AM
Toluene	13	0.48		mg/Kg	10	9/25/2011 5:39:24 AM
Ethylbenzene	1.3	0.48		mg/Kg	10	9/25/2011 5:39:24 AM
Xylenes, Total	29	0.97		mg/Kg	10	9/25/2011 5:39:24 AM
Surr: 4-Bromofluorobenzene	90.3	80-120		%REC	10	9/25/2011 5:39:24 AM
EPA METHOD 7471: MERCURY						Analyst: **BRM**
Mercury	510	65		mg/Kg	1000	9/23/2011 9:40:32 AM
MERCURY, TCLP						Analyst: **BRM**
Mercury	ND	0.020		mg/L	1	10/3/2011 3:01:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAGS**
Arsenic	4.8	2.5		mg/Kg	1	9/23/2011 11:39:40 AM
Barium	160	0.50		mg/Kg	5	9/23/2011 12:00:09 PM
Cadmium	0.59	0.10		mg/Kg	1	9/23/2011 11:39:40 AM
Chromium	16	0.30		mg/Kg	1	9/23/2011 11:39:40 AM
Lead	15	0.25		mg/Kg	1	9/23/2011 11:39:40 AM
Selenium	ND	2.5		mg/Kg	1	9/23/2011 11:39:40 AM
Silver	ND	0.25		mg/Kg	1	9/23/2011 11:39:40 AM
EPA METHOD 6010B: TCLP METALS						Analyst: **ELS**
Barium	ND	100		mg/L	1	10/3/2011 6:59:59 AM
Chromium	ND	5.0		mg/L	1	10/3/2011 6:59:59 AM
Lead	ND	5.0		mg/L	1	10/3/2011 6:59:59 AM

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Southwest Geoscience
Project: Chaco Ballard Ponds **Work Order:** 1109823

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: MB-28539		*MBLK*				Batch ID:	**28539**	Analysis Date:		9/23/2011 7:39:44 AM	
Diesel Range Organics (DRO)	ND	mg/Kg	10								
Sample ID: LCS-28539		*LCS*				Batch ID:	**28539**	Analysis Date:		9/23/2011 8:13:57 AM	
Diesel Range Organics (DRO)	54.40	mg/Kg	10	50	3.573	102	66.7	119			
Method: EPA Method 8015B: Gasoline Range											
Sample ID: 1109823-01AMSD		*MSD*				Batch ID:	**28556**	Analysis Date:		9/25/2011 4:52:03 PM	
Gasoline Range Organics (GRO)	ND	mg/Kg	48	23.95	0	178	72.4	149	0	19.2	S
Sample ID: MB-28556		*MBLK*				Batch ID:	**28556**	Analysis Date:		9/24/2011 4:38:33 PM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0								
Sample ID: LCS-28556		*LCS*				Batch ID:	**28556**	Analysis Date:		9/24/2011 10:39:17 PM	
Gasoline Range Organics (GRO)	28.10	mg/Kg	5.0	25	0	112	86.4	132			
Sample ID: 1109823-01AMS		*MS*				Batch ID:	**28556**	Analysis Date:		9/25/2011 4:22:04 PM	
Gasoline Range Organics (GRO)	ND	mg/Kg	49	24.39	0	181	72.4	149			S
Method: EPA Method 8021B: Volatiles											
Sample ID: MB-28556		*MBLK*				Batch ID:	**28556**	Analysis Date:		9/24/2011 4:38:33 PM	
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-28556		*LCS*				Batch ID:	**28556**	Analysis Date:		9/24/2011 11:09:29 PM	
Benzene	0.9413	mg/Kg	0.050	1	0.0192	92.2	83.3	107			
Toluene	0.8581	mg/Kg	0.050	1	0.0063	85.2	74.3	115			
Ethylbenzene	0.9613	mg/Kg	0.050	1	0.0106	95.1	80.9	122			
Xylenes, Total	2.960	mg/Kg	0.10	3	0	98.7	85.2	123			
Method: EPA Method 7471: Mercury											
Sample ID: MB-28553		*MBLK*				Batch ID:	**28553**	Analysis Date:		9/22/2011 4:39:41 PM	
Mercury	ND	mg/Kg	0.033								
Sample ID: LCS-28553		*LCS*				Batch ID:	**28553**	Analysis Date:		9/22/2011 4:41:26 PM	
Mercury	0.1794	mg/Kg	0.033	0.167	0	108	80	120			
Method: MERCURY, TCLP											
Sample ID: MB-28699		*MBLK*				Batch ID:	**28699**	Analysis Date:		10/3/2011 2:48:55 PM	
Mercury	ND	mg/L	0.020								
Sample ID: LCS-28699		*LCS*				Batch ID:	**28699**	Analysis Date:		10/3/2011 2:50:40 PM	
Mercury	ND	mg/L	0.020	0.005	0	96.9	80	120			

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Southwest Geoscience
Project: Chaco Ballard Ponds **Work Order:** 1109823

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Soil Metals											
Sample ID: MB-28557		*MBLK*				**Batch ID: 28557**		**Analysis Date: 9/23/2011 11:02:21 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-28557		*LCS*				**Batch ID: 28557**		**Analysis Date: 9/23/2011 11:04:30 AM**			
Arsenic	25.57	mg/Kg	2.5	25	0	102	80	120			
Barium	23.92	mg/Kg	0.10	25	0	95.7	80	120			
Cadmium	25.05	mg/Kg	0.10	25	0	100	80	120			
Chromium	24.05	mg/Kg	0.30	25	0	96.2	80	120			
Lead	23.66	mg/Kg	0.25	25	0	94.6	80	120			
Selenium	25.21	mg/Kg	2.5	25	0	101	80	120			
Silver	5.043	mg/Kg	0.25	5	0	101	80	120			
Method: EPA Method 6010B: TCLP Metals											
Sample ID: 1109823-02BMSD		*MSD*				**Batch ID: 28680**		**Analysis Date: 10/3/2011 6:52:25 AM**			
Chromium	ND	mg/L	5.0	0.5	0.0060	97.4	75	125	0	20	
Lead	ND	mg/L	5.0	0.5	0.0090	95.9	75	125	0	20	
Sample ID: MB-28680		*MBLK*				**Batch ID: 28680**		**Analysis Date: 10/3/2011 6:40:37 AM**			
Arsenic	ND	mg/L	5.0								
Barium	ND	mg/L	100								
Cadmium	ND	mg/L	1.0								
Chromium	ND	mg/L	5.0								
Lead	ND	mg/L	5.0								
Sample ID: LCS-28680		*LCS*				**Batch ID: 28680**		**Analysis Date: 10/3/2011 6:42:47 AM**			
Arsenic	ND	mg/L	5.0	0.5	0	114	80	120			
Barium	ND	mg/L	100	0.5	0	99.6	80	120			
Cadmium	ND	mg/L	1.0	0.5	0	107	80	120			
Chromium	ND	mg/L	5.0	0.5	0	99.8	80	120			
Lead	ND	mg/L	5.0	0.5	0	98.8	80	120			
Sample ID: 1109823-02BMS		*MS*				**Batch ID: 28680**		**Analysis Date: 10/3/2011 6:50:24 AM**			
Chromium	ND	mg/L	5.0	0.5	0.0060	98.5	75	125			
Lead	ND	mg/L	5.0	0.5	0.0090	97.5	75	125			

Qualifiers:

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

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: K. Summers

Laboratory: Hall
Address: Albuquerque
Contact: Andy Freeman
Phone: 505 345 3975
PO/SO #:

Sampler's Name: Kyle Summers
Sampler's Signature:

Proj. No.: 04100018
Project Name: Chaco Ballard Ponds
No/Type of Containers

ANALYSIS REQUESTED: TPH GRO/DRO 8015 | BTEX 8021 | RCRA-8

Lab use only
Due Date:
Temp. of coolers when received (C°): 1.3 / 1.0 / 1.0
1 | 2 | 3 | 4 | 5
Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	P/O	TPH GRO/DRO 8015	BTEX 8021	RCRA-8	Lab Sample ID (Lab Use Only)
S	9/21/11	0850	X		Waste B-1						2	X	X	X	1109823-1
S		0910			Waste B-2										-2
S		0920			Waste B-3										-3
S/SL		1000			Waste B-4										-4
S/SL		1030			Waste B-5										-5
S/SL		1100			Waste B-6										-6

NFS
K.S

Turn around time: ☐ Normal ☒ 25% Rush ☐ 50% Rush ☐ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	9/21/11	1435	Martin Walters	9/21/11	1435
Martin Walters	9/21/11	1630		9/22/11	0940

NOTES: 25% Rush data by 28th.

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

Andy Freeman

From: Kyle Summers <kyle.summers@southwestgeoscience.com>
Sent: Wednesday, September 28, 2011 3:03 PM
To: Andy Freeman
Cc: 'Chris Mitchell'; 'Smith, David'
Subject: 1109823-01 Chaco Ballard Ponds

~~Andy, let me know what you find on the Selenium PQL, so I know if I am going to have to run a TCLP on the NDs.~~
In the meantime:

Waste B-1: TCLP – Hg, As, Cr, Pb
Waste B-2: TCLP – Hg, Cr, Pb
Waste B-3: TCLP – Hg, Cr, Pb
Waste B-4: TCLP – Hg, As, Ba, Cd, Cr, Pb
Waste B-5: TCLP – Hg, As, Ba, Cr, Pb
Waste B-6: TCLP – Hg, Ba, Cr, Pb

Feel free to let me know if you think I missed something.

ADD 1109823

Due 10/7/11

Kyle Summers | Manager, Four Corners
Southwest Geoscience | 606 S. Rio Grande | Aztec, NM 87410
☎ Office Phone # (505) 334-5200 | 🖷 Fax # (505) 334-5204
☎ Mobile # (903) 821-5603
www.southwestgeoscience.com

Southwest GEOSCIENCE

East Pond Contents

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-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

5-8-12 376 cy
5-8-12 72 cy
5-8-12 48 cy

1. Generator Name and Address:
Enterprise Products Operating, L.P. Bill: SW Geoscience

2. Originating Site:
Enterprise Chaco Gas Plant P.O. # 0410001A

3. Location of Material (Street Address, City, State or ULSTR):
895 CR 7100, San Juan County, NM – SW ¼ S16, T26N R12W
5-7-12 48 cy (205)
5-10-12 96 cy 5-7-12 450 cy
5-9-12 96 cy
5-7-12 72 cy (210)
520 yd³

4. Source and Description of Waste:
Source: Chaco Ballard Separator Ponds
Description: Blow sands affected with potentially non-exempt oil field waste.
Estimated Volume 1600 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) ____ yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, _____, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with no exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardo characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 26 subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for Enterprise Products Operating authorize JFJ/IEI to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for IEI do hereby certify that
Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that th have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. Tl of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 19.15.36 NMAC.

5. Transporter: Riley/Halo IEI

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B**

Address of Facility: **# 49 CR 3150 Aztec, NM 87410**

CL-2178
ph-7

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: L. Maestas TITLE: Admin. Specialist DATE: 5-4-12
SIGNATURE: _____ TELEPHONE NO.: 505-632-1782
Surface Waste Management Facility Authorized Agent

5/3/12

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 20, 2012

Kyle Summers
Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (214) 350-5469
FAX (214) 350-2914

RE: Ballard Ponds OrderNo.: 1204314

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 9 sample(s) on 4/7/2012 for the analyses presented in the following report.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: EPW-1
Project: Ballard Ponds
Collection Date: 4/5/2012 1:00:00 PM
Lab ID: 1204314-001
Matrix: SOIL
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	7,400	1,000		mg/Kg	100	4/10/2012 8:33:52 PM
Surr: DNOP	0	77.4-131	S	%REC	100	4/10/2012 8:33:52 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1,900	49		mg/Kg	10	4/10/2012 10:41:32 PM
Surr: BFB	627	69.7-121	S	%REC	10	4/10/2012 10:41:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	2.6	0.49		mg/Kg	10	4/10/2012 10:41:32 PM
Toluene	44	0.49		mg/Kg	10	4/10/2012 10:41:32 PM
Ethylbenzene	9.5	0.49		mg/Kg	10	4/10/2012 10:41:32 PM
Xylenes, Total	110	0.99		mg/Kg	10	4/10/2012 10:41:32 PM
Surr: 4-Bromofluorobenzene	125	80-120	S	%REC	10	4/10/2012 10:41:32 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	150	16		mg/Kg	500	4/12/2012 9:31:30 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 1:56:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	6.1	5.0		mg/Kg	2	4/11/2012 12:05:01 PM
Barium	120	0.50		mg/Kg	5	4/11/2012 1:22:02 PM
Cadmium	ND	0.20		mg/Kg	2	4/11/2012 12:05:01 PM
Chromium	36	0.60		mg/Kg	2	4/11/2012 12:05:01 PM
Lead	13	0.50		mg/Kg	2	4/11/2012 12:05:01 PM
Selenium	ND	5.0		mg/Kg	2	4/11/2012 12:05:01 PM
Silver	ND	0.50		mg/Kg	2	4/11/2012 12:05:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-002 **Matrix:** SOIL

Client Sample ID: EPW-2
Collection Date: 4/5/2012 1:05:00 AM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	6,200	1,000		mg/Kg	100	4/10/2012 8:55:12 PM
Surr: DNOP	0	77.4-131	S	%REC	100	4/10/2012 8:55:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	810	480		mg/Kg	100	4/11/2012 5:19:42 PM
Surr: BFB	117	69.7-121		%REC	100	4/11/2012 5:19:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	4.8		mg/Kg	100	4/11/2012 5:19:42 PM
Toluene	29	4.8		mg/Kg	100	4/11/2012 5:19:42 PM
Ethylbenzene	6.1	4.8		mg/Kg	100	4/11/2012 5:19:42 PM
Xylenes, Total	70	9.7		mg/Kg	100	4/11/2012 5:19:42 PM
Surr: 4-Bromofluorobenzene	100	80-120		%REC	100	4/11/2012 5:19:42 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	120	16		mg/Kg	500	4/12/2012 9:36:48 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 1:58:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	5.6	5.0		mg/Kg	2	4/11/2012 12:36:32 PM
Barium	120	0.50		mg/Kg	5	4/11/2012 1:26:41 PM
Cadmium	ND	0.20		mg/Kg	2	4/11/2012 12:36:32 PM
Chromium	31	0.60		mg/Kg	2	4/11/2012 12:36:32 PM
Lead	8.5	0.50		mg/Kg	2	4/11/2012 12:36:32 PM
Selenium	ND	5.0		mg/Kg	2	4/11/2012 12:36:32 PM
Silver	ND	0.50		mg/Kg	2	4/11/2012 12:36:32 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-003
Matrix: SOIL

Client Sample ID: EPW-3
Collection Date: 4/5/2012 1:15:00 AM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	6,900	990		mg/Kg	100	4/10/2012 9:16:26 PM
Surr: DNOP	0	77.4-131	S	%REC	100	4/10/2012 9:16:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2,100	470		mg/Kg	100	4/11/2012 5:48:27 PM
Surr: BFB	138	69.7-121	S	%REC	100	4/11/2012 5:48:27 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	6.5	4.7		mg/Kg	100	4/11/2012 5:48:27 PM
Toluene	86	4.7		mg/Kg	100	4/11/2012 5:48:27 PM
Ethylbenzene	14	4.7		mg/Kg	100	4/11/2012 5:48:27 PM
Xylenes, Total	150	9.4		mg/Kg	100	4/11/2012 5:48:27 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	100	4/11/2012 5:48:27 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	140	16		mg/Kg	500	4/12/2012 9:38:33 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 1:59:50 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	ND	5.0		mg/Kg	2	4/11/2012 12:41:22 PM
Barium	110	0.50		mg/Kg	5	4/11/2012 1:31:19 PM
Cadmium	ND	0.20		mg/Kg	2	4/11/2012 12:41:22 PM
Chromium	31	0.60		mg/Kg	2	4/11/2012 12:41:22 PM
Lead	7.1	0.50		mg/Kg	2	4/11/2012 12:41:22 PM
Selenium	ND	5.0		mg/Kg	2	4/11/2012 12:41:22 PM
Silver	ND	0.50		mg/Kg	2	4/11/2012 12:41:22 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: EPW-4
Project: Ballard Ponds
Collection Date: 4/5/2012 1:20:00 AM
Lab ID: 1204314-004
Matrix: SOIL
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	5,600	990		mg/Kg	100	4/10/2012 9:37:42 PM
Surr: DNOP	0	77.4-131	S	%REC	100	4/10/2012 9:37:42 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3,500	490		mg/Kg	100	4/11/2012 6:17:10 PM
Surr: BFB	165	69.7-121	S	%REC	100	4/11/2012 6:17:10 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	8.9	4.9		mg/Kg	100	4/11/2012 6:17:10 PM
Toluene	110	4.9		mg/Kg	100	4/11/2012 6:17:10 PM
Ethylbenzene	19	4.9		mg/Kg	100	4/11/2012 6:17:10 PM
Xylenes, Total	200	9.9		mg/Kg	100	4/11/2012 6:17:10 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	100	4/11/2012 6:17:10 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	50	15		mg/Kg	10	4/10/2012 2:41:16 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	82	16		mg/Kg	500	4/12/2012 9:40:19 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 2:01:35 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	ND	12		mg/Kg	5	4/11/2012 1:34:46 PM
Barium	100	0.50		mg/Kg	5	4/11/2012 1:34:46 PM
Cadmium	ND	0.50		mg/Kg	5	4/11/2012 1:34:46 PM
Chromium	35	1.5		mg/Kg	5	4/11/2012 1:34:46 PM
Lead	7.0	1.2		mg/Kg	5	4/11/2012 1:34:46 PM
Selenium	ND	12		mg/Kg	5	4/11/2012 1:34:46 PM
Silver	ND	1.2		mg/Kg	5	4/11/2012 1:34:46 PM
EPA METHOD 8270C TCLP						Analyst: **JDC**
2,4-Dinitrotoluene	ND	0.13		mg/L	1	4/11/2012 1:13:00 PM
Hexachlorobenzene	ND	0.13		mg/L	1	4/11/2012 1:13:00 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	4/11/2012 1:13:00 PM
Hexachloroethane	ND	3.0		mg/L	1	4/11/2012 1:13:00 PM
Nitrobenzene	ND	2.0		mg/L	1	4/11/2012 1:13:00 PM
Pentachlorophenol	ND	100		mg/L	1	4/11/2012 1:13:00 PM
Pyridine	ND	5.0		mg/L	1	4/11/2012 1:13:00 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	4/11/2012 1:13:00 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	4/11/2012 1:13:00 PM
Cresols, Total	ND	200		mg/L	1	4/11/2012 1:13:00 PM
2-Methylphenol	ND	200		mg/L	1	4/11/2012 1:13:00 PM
3+4-Methylphenol	ND	200		mg/L	1	4/11/2012 1:13:00 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-004
Matrix: SOIL

Client Sample ID: EPW-4
Collection Date: 4/5/2012 1:20:00 AM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Phenol	ND	200		mg/L	1	4/11/2012 1:13:00 PM
Surr: 2,4,6-Tribromophenol	79.7	17.5-122		%REC	1	4/11/2012 1:13:00 PM
Surr: 2-Fluorobiphenyl	73.7	29.6-132		%REC	1	4/11/2012 1:13:00 PM
Surr: 2-Fluorophenol	42.3	21.9-91.3		%REC	1	4/11/2012 1:13:00 PM
Surr: 4-Terphenyl-d14	75.9	35.3-110		%REC	1	4/11/2012 1:13:00 PM
Surr: Nitrobenzene-d5	78.6	20.2-128		%REC	1	4/11/2012 1:13:00 PM
Surr: Phenol-d5	44.5	16.4-72.4		%REC	1	4/11/2012 1:13:00 PM
VOLATILES BY 8260B/1311						Analyst: **JDJ**
Benzene	0.51	0.50		mg/L	1	4/11/2012 2:20:24 AM
2-Butanone	ND	10		mg/L	1	4/11/2012 2:20:24 AM
Carbon Tetrachloride	ND	0.50		mg/L	1	4/11/2012 2:20:24 AM
Chlorobenzene	ND	100		mg/L	1	4/11/2012 2:20:24 AM
Chloroform	ND	6.0		mg/L	1	4/11/2012 2:20:24 AM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	4/11/2012 2:20:24 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	4/11/2012 2:20:24 AM
1,1-Dichloroethene	ND	0.70		mg/L	1	4/11/2012 2:20:24 AM
Hexachlorobutadiene	ND	0.50		mg/L	1	4/11/2012 2:20:24 AM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	4/11/2012 2:20:24 AM
Trichloroethene (TCE)	ND	0.50		mg/L	1	4/11/2012 2:20:24 AM
Vinyl chloride	ND	0.20		mg/L	1	4/11/2012 2:20:24 AM
Surr: 1,2-Dichloroethane-d4	99.9	69.9-130		%REC	1	4/11/2012 2:20:24 AM
Surr: 4-Bromofluorobenzene	116	71.2-123		%REC	1	4/11/2012 2:20:24 AM
Surr: Dibromofluoromethane	97.1	73.9-134		%REC	1	4/11/2012 2:20:24 AM
Surr: Toluene-d8	110	81.9-122		%REC	1	4/11/2012 2:20:24 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-005 **Matrix:** SOIL

Client Sample ID: EPW-5
Collection Date: 4/5/2012 1:30:00 AM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	7,100	990		mg/Kg	100	4/10/2012 11:02:39 PM
Surr: DNOP	0	77.4-131	S	%REC	100	4/10/2012 11:02:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	4,400	490		mg/Kg	100	4/11/2012 6:46:02 PM
Surr: BFB	179	69.7-121	S	%REC	100	4/11/2012 6:46:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	13	4.9		mg/Kg	100	4/11/2012 6:46:02 PM
Toluene	160	4.9		mg/Kg	100	4/11/2012 6:46:02 PM
Ethylbenzene	26	4.9		mg/Kg	100	4/11/2012 6:46:02 PM
Xylenes, Total	280	9.8		mg/Kg	100	4/11/2012 6:46:02 PM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	100	4/11/2012 6:46:02 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	110	16		mg/Kg	500	4/12/2012 9:42:05 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 2:03:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	ND	12		mg/Kg	5	4/11/2012 3:26:47 PM
Barium	98	0.50		mg/Kg	5	4/11/2012 1:44:08 PM
Cadmium	ND	0.50		mg/Kg	5	4/11/2012 1:44:08 PM
Chromium	26	1.5		mg/Kg	5	4/11/2012 1:44:08 PM
Lead	7.4	1.2		mg/Kg	5	4/11/2012 1:44:08 PM
Selenium	ND	12		mg/Kg	5	4/11/2012 1:44:08 PM
Silver	ND	1.2		mg/Kg	5	4/11/2012 1:44:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-006 **Matrix:** SOIL

Client Sample ID: EPW-6
Collection Date: 4/5/2012 1:40:00 AM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	6,700	1,000		mg/Kg	100	4/10/2012 11:23:50 PM
Surr: DNOP	0	77.4-131	S	%REC	100	4/10/2012 11:23:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3,500	500		mg/Kg	100	4/11/2012 7:14:50 PM
Surr: BFB	158	69.7-121	S	%REC	100	4/11/2012 7:14:50 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	13	5.0		mg/Kg	100	4/11/2012 7:14:50 PM
Toluene	130	5.0		mg/Kg	100	4/11/2012 7:14:50 PM
Ethylbenzene	20	5.0		mg/Kg	100	4/11/2012 7:14:50 PM
Xylenes, Total	200	9.9		mg/Kg	100	4/11/2012 7:14:50 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	100	4/11/2012 7:14:50 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	120	16		mg/Kg	500	4/12/2012 9:43:53 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 2:08:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	ND	25		mg/Kg	10	4/11/2012 3:29:50 PM
Barium	96	1.0		mg/Kg	10	4/11/2012 1:59:04 PM
Cadmium	ND	1.0		mg/Kg	10	4/11/2012 1:59:04 PM
Chromium	28	3.0		mg/Kg	10	4/11/2012 1:59:04 PM
Lead	13	2.5		mg/Kg	10	4/11/2012 1:59:04 PM
Selenium	ND	25		mg/Kg	10	4/11/2012 1:59:04 PM
Silver	ND	2.5		mg/Kg	10	4/11/2012 1:59:04 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-007 **Matrix:** SOIL

Client Sample ID: EPW-7
Collection Date: 4/5/2012 1:50:00 AM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	4,600	990		mg/Kg	100	4/10/2012 11:45:06 PM
Surr: DNOP	0	77.4-131	S	%REC	100	4/10/2012 11:45:06 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	4,500	480		mg/Kg	100	4/11/2012 10:36:03 PM
Surr: BFB	165	69.7-121	S	%REC	100	4/11/2012 10:36:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	13	4.8		mg/Kg	100	4/11/2012 10:36:03 PM
Toluene	150	4.8		mg/Kg	100	4/11/2012 10:36:03 PM
Ethylbenzene	24	4.8		mg/Kg	100	4/11/2012 10:36:03 PM
Xylenes, Total	260	9.7		mg/Kg	100	4/11/2012 10:36:03 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	100	4/11/2012 10:36:03 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	35	15		mg/Kg	10	4/10/2012 2:53:40 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	97	16		mg/Kg	500	4/12/2012 9:45:40 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 2:10:29 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	ND	12		mg/Kg	5	4/11/2012 3:32:52 PM
Barium	100	0.50		mg/Kg	5	4/11/2012 1:50:24 PM
Cadmium	ND	0.50		mg/Kg	5	4/11/2012 1:50:24 PM
Chromium	31	1.5		mg/Kg	5	4/11/2012 1:50:24 PM
Lead	6.4	1.2		mg/Kg	5	4/11/2012 1:50:24 PM
Selenium	ND	12		mg/Kg	5	4/11/2012 1:50:24 PM
Silver	ND	1.2		mg/Kg	5	4/11/2012 1:50:24 PM
EPA METHOD 8270C TCLP						Analyst: **JDC**
2,4-Dinitrotoluene	ND	0.13		mg/L	1	4/11/2012 2:40:42 PM
Hexachlorobenzene	ND	0.13		mg/L	1	4/11/2012 2:40:42 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	4/11/2012 2:40:42 PM
Hexachloroethane	ND	3.0		mg/L	1	4/11/2012 2:40:42 PM
Nitrobenzene	ND	2.0		mg/L	1	4/11/2012 2:40:42 PM
Pentachlorophenol	ND	100		mg/L	1	4/11/2012 2:40:42 PM
Pyridine	ND	5.0		mg/L	1	4/11/2012 2:40:42 PM
2,4,5-Trichlorophenol	ND	400		mg/L	1	4/11/2012 2:40:42 PM
2,4,6-Trichlorophenol	ND	2.0		mg/L	1	4/11/2012 2:40:42 PM
Cresols, Total	ND	200		mg/L	1	4/11/2012 2:40:42 PM
2-Methylphenol	ND	200		mg/L	1	4/11/2012 2:40:42 PM
3+4-Methylphenol	ND	200		mg/L	1	4/11/2012 2:40:42 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: EPW-7
Project: Ballard Ponds
Collection Date: 4/5/2012 1:50:00 AM
Lab ID: 1204314-007
Matrix: SOIL
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C TCLP						Analyst: **JDC**
Phenol	ND	200		mg/L	1	4/11/2012 2:40:42 PM
Surr: 2,4,6-Tribromophenol	84.2	17.5-122		%REC	1	4/11/2012 2:40:42 PM
Surr: 2-Fluorobiphenyl	86.0	29.6-132		%REC	1	4/11/2012 2:40:42 PM
Surr: 2-Fluorophenol	37.5	21.9-91.3		%REC	1	4/11/2012 2:40:42 PM
Surr: 4-Terphenyl-d14	81.0	35.3-110		%REC	1	4/11/2012 2:40:42 PM
Surr: Nitrobenzene-d5	85.4	20.2-128		%REC	1	4/11/2012 2:40:42 PM
Surr: Phenol-d5	48.6	16.4-72.4		%REC	1	4/11/2012 2:40:42 PM
VOLATILES BY 8260B/1311						Analyst: **JDJ**
Benzene	ND	0.50		mg/L	1	4/11/2012 2:48:40 AM
2-Butanone	ND	10		mg/L	1	4/11/2012 2:48:40 AM
Carbon Tetrachloride	ND	0.50		mg/L	1	4/11/2012 2:48:40 AM
Chlorobenzene	ND	100		mg/L	1	4/11/2012 2:48:40 AM
Chloroform	ND	6.0		mg/L	1	4/11/2012 2:48:40 AM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	4/11/2012 2:48:40 AM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	4/11/2012 2:48:40 AM
1,1-Dichloroethene	ND	0.70		mg/L	1	4/11/2012 2:48:40 AM
Hexachlorobutadiene	ND	0.50		mg/L	1	4/11/2012 2:48:40 AM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	4/11/2012 2:48:40 AM
Trichloroethene (TCE)	ND	0.50		mg/L	1	4/11/2012 2:48:40 AM
Vinyl chloride	ND	0.20		mg/L	1	4/11/2012 2:48:40 AM
Surr: 1,2-Dichloroethane-d4	106	69.9-130		%REC	1	4/11/2012 2:48:40 AM
Surr: 4-Bromofluorobenzene	103	71.2-123		%REC	1	4/11/2012 2:48:40 AM
Surr: Dibromofluoromethane	105	73.9-134		%REC	1	4/11/2012 2:48:40 AM
Surr: Toluene-d8	93.8	81.9-122		%REC	1	4/11/2012 2:48:40 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-008 **Matrix:** SOIL

Client Sample ID: EPW-8
Collection Date: 4/5/2012 2:05:00 PM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	4,900	980		mg/Kg	100	4/11/2012 12:06:15 AM
Surr: DNOP	0	77.4-131	S	%REC	100	4/11/2012 12:06:15 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3,600	460		mg/Kg	100	4/11/2012 11:04:51 PM
Surr: BFB	165	69.7-121	S	%REC	100	4/11/2012 11:04:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	11	4.6		mg/Kg	100	4/11/2012 11:04:51 PM
Toluene	120	4.6		mg/Kg	100	4/11/2012 11:04:51 PM
Ethylbenzene	20	4.6		mg/Kg	100	4/11/2012 11:04:51 PM
Xylenes, Total	210	9.3		mg/Kg	100	4/11/2012 11:04:51 PM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	100	4/11/2012 11:04:51 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	94	16		mg/Kg	500	4/12/2012 9:47:27 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 2:12:14 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	ND	25		mg/Kg	10	4/11/2012 3:37:25 PM
Barium	100	1.0		mg/Kg	10	4/11/2012 2:02:14 PM
Cadmium	ND	1.0		mg/Kg	10	4/11/2012 2:02:14 PM
Chromium	29	3.0		mg/Kg	10	4/11/2012 2:02:14 PM
Lead	7.2	2.5		mg/Kg	10	4/11/2012 2:02:14 PM
Selenium	ND	25		mg/Kg	10	4/11/2012 2:02:14 PM
Silver	ND	2.5		mg/Kg	10	4/11/2012 2:02:14 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Ballard Ponds
Lab ID: 1204314-009 **Matrix:** SOIL

Client Sample ID: EPW-9
Collection Date: 4/5/2012 2:20:00 PM
Received Date: 4/7/2012 1:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	5,000	990		mg/Kg	100	4/11/2012 12:27:28 AM
Surr: DNOP	0	77.4-131	S	%REC	100	4/11/2012 12:27:28 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3,700	480		mg/Kg	100	4/11/2012 11:33:39 PM
Surr: BFB	170	69.7-121	S	%REC	100	4/11/2012 11:33:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	10	4.8		mg/Kg	100	4/11/2012 11:33:39 PM
Toluene	130	4.8		mg/Kg	100	4/11/2012 11:33:39 PM
Ethylbenzene	23	4.8		mg/Kg	100	4/11/2012 11:33:39 PM
Xylenes, Total	250	9.5		mg/Kg	100	4/11/2012 11:33:39 PM
Surr: 4-Bromofluorobenzene	105	80-120		%REC	100	4/11/2012 11:33:39 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	95	16		mg/Kg	500	4/12/2012 9:49:15 AM
MERCURY, TCLP						Analyst: **JLF**
Mercury	ND	0.020		mg/L	1	4/18/2012 2:14:00 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **RAG**
Arsenic	5.0	5.0		mg/Kg	2	4/11/2012 1:14:11 PM
Barium	91	0.20		mg/Kg	2	4/11/2012 1:14:11 PM
Cadmium	ND	0.20		mg/Kg	2	4/11/2012 1:14:11 PM
Chromium	28	0.60		mg/Kg	2	4/11/2012 1:14:11 PM
Lead	7.3	0.50		mg/Kg	2	4/11/2012 1:14:11 PM
Selenium	ND	5.0		mg/Kg	2	4/11/2012 1:14:11 PM
Silver	ND	0.50		mg/Kg	2	4/11/2012 1:14:11 PM

Qualifiers:

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

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B12040788-001
Client Sample ID 1204314-004B EPW-4

Report Date: 04/18/12
Collection Date: 04/05/12 01:20
DateReceived: 04/10/12
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	04/11/12 13:50 / amn
GLYCOL BY GC/FID							
Diethanolamine	ND	mg/kg		50		SW8015B	04/11/12 17:32 / jp
Diethylene Glycol	ND	mg/kg	1	100		SW8015B	04/10/12 19:32 / skw
Methyldiethanolamine	ND	mg/kg	1 2	200		SW8015B	04/10/12 19:32 / skw
Triethylene Glycol	96	mg/kg		5.0		SW8015B	04/10/12 19:32 / jp
Surr: 2-Butoxyethanol	83.0	%REC		76-117		SW8015B	04/11/12 17:32 / jp
Surr: 2-Butoxyethanol	133	%REC	S	76-117		SW8015B	04/10/12 19:32 / jp
Surr: sec-Butyl Alcohol	88.0	%REC		41-138		SW8015B	04/11/12 17:32 / jp

- S=Surrogate recovery outside QC advisory limits due to positive sample matrix interference.

- The results were confirmed by Gas Chromatography Mass Spectrometry (GC/MS).
- 1 = Reporting limit was raised due matrix interference.
- 2 = There was no matrix spike recovery for this compound at a 200 mg/kg spiking level. Low recovery is expected Methyldiethanolamine in certain soil types due to its sorption properties. The result is suspect.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B12040788-002
Client Sample ID 1204314-007B EPW-7

Report Date: 04/18/12
Collection Date: 04/05/12 01:50
DateReceived: 04/10/12
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	04/11/12 13:50 / amn
GLYCOL BY GC/FID							
Diethanolamine	ND	mg/kg		50		SW8015B	04/11/12 17:46 / jp
Diethylene Glycol	ND	mg/kg	1	100		SW8015B	04/10/12 19:51 / skw
Methyldiethanolamine	ND	mg/kg	1 2	200		SW8015B	04/10/12 19:51 / skw
Triethylene Glycol	193	mg/kg		5.0		SW8015B	04/10/12 19:51 / jp
Surr: 2-Butoxyethanol	95.0	%REC		76-117		SW8015B	04/11/12 17:46 / jp
Surr: 2-Butoxyethanol	140	%REC	S	76-117		SW8015B	04/10/12 19:51 / jp
Surr: sec-Butyl Alcohol	87.0	%REC		41-138		SW8015B	04/11/12 17:46 / jp

- S=Surrogate recovery outside QC advisory limits due to positive sample matrix interference.

- The results were confirmed by Gas Chromatography Mass Spectrometry (GC/MS).
- 1 = Reporting limit was raised due matrix interference.
- 2 = There was no matrix spike recovery for this compound at a 200 mg/kg spiking level. Low recovery is expected Methyldiethanolamine in certain soil types due to its sorption properties. The result is suspect.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Report Date: 04/18/12
Project: Not Indicated
Work Order: B12040788

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015B										Batch: 61581
Sample ID: LCS-61581-MDEA	2	Laboratory Control Sample				Run: GCFID-HP1-B_120410B				04/10/12 12:09
Methyldiethanolamine		199	mg/kg	50	80	70	130			
Surr: 2-Butoxyethanol				1.0	96	76	117			
Sample ID: MB-61581	2	Method Blank				Run: GCFID-HP1-B_120410B				04/10/12 13:25
Methyldiethanolamine		ND	mg/kg	50						
Surr: 2-Butoxyethanol				1.0	95	76	117			
Sample ID: LCS-61581	2	Laboratory Control Sample				Run: GCFID-HP1-B_120410D				04/10/12 18:53
Triethylene Glycol		91.0	mg/kg	5.0	91	44	126			
Surr: 2-Butoxyethanol				1.0	99	76	117			
Sample ID: MB-61581	2	Method Blank				Run: GCFID-HP1-B_120410D				04/10/12 19:13
Triethylene Glycol		ND	mg/kg	5.0						
Surr: 2-Butoxyethanol				1.0	102	76	117			
Sample ID: B12040788-002AMS	2	Sample Matrix Spike				Run: GCFID-HP1-B_120410D				04/10/12 20:11
Triethylene Glycol		278	mg/kg	5.0	85	44	126			
Surr: 2-Butoxyethanol				1.0	146	76	117			S
- S=Surrogate recovery outside QC advisory limits due to positive sample matrix interference.										
Sample ID: B12040788-002AMSD	2	Sample Matrix Spike Duplicate				Run: GCFID-HP1-B_120410D				04/10/12 20:30
Triethylene Glycol		278	mg/kg	5.0	85	44	126	0.1	20	
Surr: 2-Butoxyethanol				1.0	142	76	117			S
- S=Surrogate recovery outside QC advisory limits due to positive sample matrix interference.										
Sample ID: LCS-61581	2	Laboratory Control Sample				Run: GCFID-HP1-B_120410E				04/10/12 18:53
Diethylene Glycol		101	mg/kg		101	70	130			
Surr: 2-Butoxyethanol				1.0	99	76	117			
Sample ID: MB-61581	3	Method Blank				Run: GCFID-HP1-B_120410E				04/10/12 19:13
Diethanolamine		ND	mg/kg	50						
Diethylene Glycol		ND	mg/kg							
Surr: 2-Butoxyethanol				1.0	102	76	117			
Sample ID: B12040788-002AMS	3	Sample Matrix Spike				Run: GCFID-HP1-B_120410E				04/10/12 20:11
Diethylene Glycol		162	mg/kg	100	162	70	130			S
Methyldiethanolamine		ND	mg/kg	200		70	130			S
Surr: 2-Butoxyethanol				1.0	146	76	117			S
Sample ID: B12040788-002AMSD	3	Sample Matrix Spike Duplicate				Run: GCFID-HP1-B_120410E				04/10/12 20:30
Diethylene Glycol		161	mg/kg	100	161	70	130		20	S
Methyldiethanolamine		ND	mg/kg	200		70	130		20	S
Surr: 2-Butoxyethanol				1.0	142	76	117			S

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Hall Environmental
Report Date: 04/18/12
Project: Not Indicated
Work Order: B12040788

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015B										Batch: 61609
Sample ID: LCS-61609	3	Laboratory Control Sample				Run: GCFID-HP1-B_120411A				04/11/12 11:07
Diethanolamine		184	mg/kg	50	92	70	130			
Surr: 2-Butoxyethanol				1.0	99	76	117			
Surr: sec-Butyl Alcohol				1.0	95	41	138			
Sample ID: MB-61609	3	Method Blank				Run: GCFID-HP1-B_120411A				04/11/12 12:41
Diethanolamine		ND	mg/kg	50						
Surr: 2-Butoxyethanol				1.0	89	76	117			
Surr: sec-Butyl Alcohol				1.0	95	41	138			
Sample ID: B12040788-001BMS	3	Sample Matrix Spike				Run: GCFID-HP1-B_120411A				04/11/12 16:50
Diethanolamine		96.0	mg/kg	50	48	70	130			S
Surr: 2-Butoxyethanol				1.0	85	76	117			
Surr: sec-Butyl Alcohol				1.0	97	41	138			
- S=Spike recovery outside QC advisory limits due to sample matrix interference.										
Sample ID: B12040788-001BMSD	3	Sample Matrix Spike Duplicate				Run: GCFID-HP1-B_120411A				04/11/12 17:05
Diethanolamine		102	mg/kg	50	51	70	130	6.1	20	S
Surr: 2-Butoxyethanol				1.0	89	76	117			
Surr: sec-Butyl Alcohol				1.0	90	41	138			
- S=Spike recovery outside QC advisory limits due to sample matrix interference.										
Method: SW8015B										Analytical Run: R183305
Sample ID: CCV_0411HD125r-W	3	Continuing Calibration Verification Standard								04/11/12 16:36
Diethanolamine		203	mg/kg	50	102	85	115			
Surr: 2-Butoxyethanol				1.0	90	70	130			
Surr: sec-Butyl Alcohol				1.0	99	70	130			
Method: SW8015B										Analytical Run: R183430
Sample ID: CCV_0410HG134r-W	2	Continuing Calibration Verification Standard								04/10/12 18:31
Triethylene Glycol		96.7	mg/kg	5.0	97	85	115			
Surr: 2-Butoxyethanol				1.0	105	70	130			

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID	**MB-1453**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**1453**	RunNo:	**2032**					
Prep Date:	**4/10/2012**	Analysis Date:	**4/10/2012**	SeqNo:	**56531**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-1453**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**1453**	RunNo:	**2032**					
Prep Date:	**4/10/2012**	Analysis Date:	**4/10/2012**	SeqNo:	**56532**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.3	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID **MB-1435**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **1435**	RunNo: **1997**
Prep Date: **4/9/2012**	Analysis Date: **4/10/2012**	SeqNo: **56265** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.5		10.00		94.8	77.4	131			

Sample ID **LCS-1435**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **1435**	RunNo: **1997**
Prep Date: **4/9/2012**	Analysis Date: **4/10/2012**	SeqNo: **56506** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.7	62.7	139			
Surr: DNOP	4.5		5.000		89.7	77.4	131			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID **MB-1436**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **1436**	RunNo: **2021**
Prep Date: **4/9/2012**	Analysis Date: **4/11/2012**	SeqNo: **56803** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1,000		1,000		101	69.7	121			

Sample ID **LCS-1436**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **1436**	RunNo: **2021**
Prep Date: **4/9/2012**	Analysis Date: **4/11/2012**	SeqNo: **56804** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	114	98.5	133			
Surr: BFB	1,100		1,000		111	69.7	121			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID **MB-1436**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **1436**	RunNo: **2021**
Prep Date: **4/9/2012**	Analysis Date: **4/11/2012**	SeqNo: **56829** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		95.9	80	120			

Sample ID **LCS-1436**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **1436**	RunNo: **2021**
Prep Date: **4/9/2012**	Analysis Date: **4/11/2012**	SeqNo: **56834** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.050	1.000	0	81.2	83.3	107			S
Toluene	0.84	0.050	1.000	0	84.0	74.3	115			
Ethylbenzene	0.84	0.050	1.000	0	83.8	80.9	122			
Xylenes, Total	2.5	0.10	3.000	0	84.2	85.2	123			S
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID **mb-1443**	SampType: **MBLK**	TestCode: **Volatiles by 8260B/1311**
Client ID: **PBS**	Batch ID: **1443**	RunNo: **2036**
Prep Date: **4/9/2012**	Analysis Date: **4/10/2012**	SeqNo: **56644** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.50								
2-Butanone	ND	10								
Carbon Tetrachloride	ND	0.50								
Chlorobenzene	ND	100								
Chloroform	ND	6.0								
1,4-Dichlorobenzene	ND	7.5								
1,2-Dichloroethane (EDC)	ND	0.50								
1,1-Dichloroethene	ND	0.70								
Hexachlorobutadiene	ND	0.50								
Tetrachloroethene (PCE)	ND	0.70								
Trichloroethene (TCE)	ND	0.50								
Vinyl chloride	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.20		0.2000		101	69.9	130			
Surr: 4-Bromofluorobenzene	0.24		0.2000		119	71.2	123			
Surr: Dibromofluoromethane	0.19		0.2000		96.3	73.9	134			
Surr: Toluene-d8	0.21		0.2000		104	81.9	122			

Sample ID **lcs-1443**	SampType: **LCS**	TestCode: **Volatiles by 8260B/1311**
Client ID: **LCSS**	Batch ID: **1443**	RunNo: **2036**
Prep Date: **4/9/2012**	Analysis Date: **4/10/2012**	SeqNo: **56645** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.34	0.10	0.4000	0	84.4	51.1	171			
Chlorobenzene	0.39	0.10	0.4000	0	97.8	36.1	191			
1,1-Dichloroethene	0.35	0.10	0.4000	0	87.5	49.1	162			
Trichloroethene (TCE)	0.35	0.10	0.4000	0	87.6	41.2	166			
Surr: 1,2-Dichloroethane-d4	0.20		0.2000		98.2	69.9	130			
Surr: 4-Bromofluorobenzene	0.22		0.2000		109	71.2	123			
Surr: Dibromofluoromethane	0.21		0.2000		103	73.9	134			
Surr: Toluene-d8	0.22		0.2000		108	81.9	122			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID **mb-1480**	SampType: **MBLK**	TestCode: **EPA Method 8270C TCLP**
Client ID: **PBS**	Batch ID: **1480**	RunNo: **2055**
Prep Date: **4/11/2012**	Analysis Date: **4/11/2012**	SeqNo: **57200** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	0.13								
Hexachlorobenzene	ND	0.13								
Hexachlorobutadiene	ND	0.50								
Hexachloroethane	ND	3.0								
Nitrobenzene	ND	2.0								
Pentachlorophenol	ND	100								
Pyridine	ND	5.0								
2,4,5-Trichlorophenol	ND	400								
2,4,6-Trichlorophenol	ND	2.0								
Cresols, Total	ND	200								
2-Methylphenol	ND	200								
3+4-Methylphenol	ND	200								
Phenol	ND	200								
Surr: 2,4,6-Tribromophenol	0.17		0.2000		85.8	17.5	122			
Surr: 2-Fluorobiphenyl	0.083		0.1000		82.5	29.6	132			
Surr: 2-Fluorophenol	0.13		0.2000		64.1	21.9	91.3			
Surr: 4-Terphenyl-d14	0.081		0.1000		81.0	35.3	110			
Surr: Nitrobenzene-d5	0.082		0.1000		81.5	20.2	128			
Surr: Phenol-d5	0.094		0.2000		47.2	16.4	72.4			

Sample ID **lcs-1480**	SampType: **LCS**	TestCode: **EPA Method 8270C TCLP**
Client ID: **LCSS**	Batch ID: **1480**	RunNo: **2055**
Prep Date: **4/11/2012**	Analysis Date: **4/11/2012**	SeqNo: **57201** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	0.080	0.010	0.1000	0	80.2	18.2	108			
Hexachlorobenzene	0.060	0.010	0.1000	0	60.5	34.2	74.5			
Hexachlorobutadiene	0.067	0.010	0.1000	0	66.5	31.3	88.5			
Hexachloroethane	0.069	0.010	0.1000	0	69.3	31.6	94.6			
Nitrobenzene	0.084	0.010	0.1000	0	84.0	39.7	107			
Pentachlorophenol	0.045	0.010	0.1000	0	45.3	15.9	86.7			
Pyridine	0.023	0.010	0.1000	0	23.4	14.7	73.6			
2,4,5-Trichlorophenol	0.069	0.010	0.1000	0	69.2	18.9	102			
2,4,6-Trichlorophenol	0.063	0.010	0.1000	0	62.9	12.3	103			
Cresols, Total	0.24	0.010	0.3000	0	81.5	25.9	99.2			
2-Methylphenol	0.071	0.010	0.1000	0	71.0	22	81.7			
3+4-Methylphenol	0.17	0.010	0.2000	0	86.7	2.89	157			
Surr: 2,4,6-Tribromophenol	0.18		0.2000		89.1	17.5	122			
Surr: 2-Fluorobiphenyl	0.078		0.1000		78.4	29.6	132			
Surr: 2-Fluorophenol	0.13		0.2000		65.2	21.9	91.3			
Surr: 4-Terphenyl-d14	0.089		0.1000		89.4	35.3	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID	**lcs-1480**	SampType: **LCS**		TestCode: **EPA Method 8270C TCLP**					
Client ID:	**LCSS**	Batch ID: **1480**		RunNo: **2055**					
Prep Date:	**4/11/2012**	Analysis Date: **4/11/2012**		SeqNo: **57201**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	0.084		0.1000		84.4	20.2	128			
Surr: Phenol-d5	0.10		0.2000		50.3	16.4	72.4			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID	**MB-1489**	SampType:	**MBLK**		TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**PBS**	Batch ID:	**1489**		RunNo:	**2075**					
Prep Date:	**4/11/2012**	Analysis Date:	**4/12/2012**		SeqNo:	**57584**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	ND	0.033									

Sample ID	**LCS-1489**	SampType:	**LCS**		TestCode:	**EPA Method 7471: Mercury**					
Client ID:	**LCSS**	Batch ID:	**1489**		RunNo:	**2075**					
Prep Date:	**4/11/2012**	Analysis Date:	**4/12/2012**		SeqNo:	**57585**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.17	0.033	0.1667	0	105	80	120				

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID	**MB-1587**	SampType:	**MBLK**	TestCode:	**MERCURY, TCLP**					
Client ID:	**PBW**	Batch ID:	**1587**	RunNo:	**2208**					
Prep Date:	**4/18/2012**	Analysis Date:	**4/18/2012**	SeqNo:	**61394**	Units:	**mg/L**			

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

Sample ID	**LCS-1587**	SampType:	**LCS**	TestCode:	**MERCURY, TCLP**					
Client ID:	**LCSW**	Batch ID:	**1587**	RunNo:	**2208**					
Prep Date:	**4/18/2012**	Analysis Date:	**4/18/2012**	SeqNo:	**61395**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.020	0.005000	0	103	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1204314**

20-Apr-12

Client: Southwest Geoscience

Project: Ballard Ponds

Sample ID **MB-1448**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **1448**	RunNo: **2033**
Prep Date: **4/10/2012**	Analysis Date: **4/11/2012**	SeqNo: **56575** Units: **mg/Kg**

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

Sample ID **LCS-1448**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **1448**	RunNo: **2033**
Prep Date: **4/10/2012**	Analysis Date: **4/11/2012**	SeqNo: **56576** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	27	2.5	25.00	0.2295	107	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Selenium	27	2.5	25.00	0	108	80	120			
Silver	5.1	0.25	5.000	0	103	80	120			

Sample ID **MB-1448**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **1448**	RunNo: **2053**
Prep Date: **4/10/2012**	Analysis Date: **4/11/2012**	SeqNo: **57137** Units: **mg/Kg**

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

Sample ID **LCS-1448**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **1448**	RunNo: **2053**
Prep Date: **4/10/2012**	Analysis Date: **4/11/2012**	SeqNo: **57138** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	26	0.10	25.00	0	105	80	120			
Chromium	28	0.30	25.00	0.1195	111	80	120			
Lead	27	0.25	25.00	0	106	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name:	Southwest Geoscience	Work Order Number:	1204314
Received by/date:	MG	04/07/12	
Logged By:	Michelle Garcia	4/7/2012 1:00:00 PM	Michelle Garcia
Completed By:	Michelle Garcia	4/9/2012 9:05:17 AM	Michelle Garcia
Reviewed By:		04/09/12	

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: K. Summers

Laboratory: Hall
Address: ABQ
Contact: Andy Freeman
Phone: 505 345 3975
PO/SO #:

Sampler's Name: Kyle Summers
Sampler's Signature:

Proj. No.: 04100014
Project Name: Ballard Ponds

Lab use only
Due Date:

Temp. of coolers when received (C°): 2.1°

1 | 2 | 3 | 4 | 5

Page 1 of 1

ANALYSIS REQUESTED

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	P/O	BTEX 8021	TPH GRO/DRO 8015	RCRA-8	TCLP VOCs	TCLP SVOCs	Amines	Triethylene/Diethylene Glycols	Cations/Anions	Chloride	Lab Sample ID (Lab Use Only)
S	4/5/12	1300		X	EPW-1						2	X	X	X							1204314-001
		1305			EPW-2						2										-002
		1315			EPW-3						2										-003
		1320			EPW-4						3				X	X	X	X	X		-004
		1330			EPW-5						2										-005
		1340			EPW-6						2										-006
		1350			EPW-7						3				X	X	X	X	X		-007
		1405			EPW-8						2										-008
		1420			EPW-9						2										-009

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	4/6/12	7:34	Christine Walters	4/6/12	7:34
Christine Walters	4/6/12	11:20		04/07/12	1300

NOTES:

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other _____

Southwest GEOSCIENCE

Affected Soil Beneath East Pond Liner

Samples CS-11 and CS-17 represent the affected soil beneath the East Pond Liner.

07174-0006

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-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC

2. Originating Site:
Enterprise Chaco Gas Plant

3. Location of Material (Street Address, City, State or ULSTR):
895 CR 7100, San Juan County, NM – SW ¼ S16, T26N R12W

4. Source and Description of Waste:
Source: Chaco Ballard Separator Ponds
Description: Native Soils from beneath the liner that were affected by a historic fluid overflow of the liner(s) as the result of a fire. Analytical provided.
Estimated Volume 700 yd^3 / bbls. Known Volume (to be entered by the operator at the end of the haul) 840 yd^3 / bbls.

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, (David R. Smith), representative or authorized agent for Enterprise Field Services, LLC do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☒ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☒ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, (David R. Smith), representative for Enterprise Field Services, LLC authorize Envirotech to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for _____ do hereby certify that
Representative/Agent Signature
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: RILEY/HALO, Max Ramirez, Fonseca, Rehi Trucking

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech, Inc. * Permit #: NM 01-0011**

Address of Facility: **Hilltop, NM**

Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Runung TITLE: Waste Coordinator DATE: 5/22/12
SIGNATURE: Kendra Runung TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

envirotech

Bill of Lading

MANIFEST # 41429

DATE 5-22-12 JOB # 97051-0529

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Gas Plant	LFII-5	Cont Soil	O-33	12	—	Riley	19028	7:30am	Geoffrey Ballard
2	Ballard Pond	"	"	033	12	—	"	19029	7:30	
3	"	"	"	033	12	—	"	18088	7:30	Chris LaFlin
4	"	"	"	033	12	—	"	11039	7:30AM	Brinte Clark
5	"	"	"	033	12	—	"	19029	8:35	
6	"	"	"	033	12	—	"	19028	840	Geoffrey Ballard
7	"	"	"	033	12	—	"	18088	843	Chris LaFlin
8	"	"	"	033	12	—	"	11039	851	Brinte Clark
9	"	"	"	033	12	—	"	19029	9:26	
10	"	"	"	033	12	—	"	19028	9:32A	Geoffrey Ballard
11	"	"	"	033	12	—	"	9135	940	Chris LaFlin
12	"	"	"	033	12	—	"	11039	947	Brinte Clark

RESULTS:

NA	CHLORIDE TEST	3
	PAINT FILTER TEST	3

LANDFARM EMPLOYEE: Gary Robinson

Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley Ind. NAME Geoffrey Ballard SIGNATURE Geoffrey Ballard

COMPANY CONTACT Dave Brackney PHONE (505) 327-4947 DATE 5-22-12

Signatures required prior to distribution of the legal document.

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Bill of Lading

MANIFEST # 41435

DATE 5-22-12 JOB # 97051-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Gas Plant	LF II-5	Con't Soil	O33	12	—	Riley	19029	10:14	
2	Ballard Pond	"	"	O-33	12	—	"	19028	10:26	
3	"	"	"	O-33	12	—	"	18088	1032	
4	"	"	"	P33	12	—	"	18039	1043	Brink Clark
5	"	"	"	P33	12	—	"	19029	11.02	
6	"	"	"	P33	12	—	"	19028	1116	
7	"	"	"	P33	12	—	"	18088	1120	
8	"	"	"	P33	12	—	"	18039	1138	Brink Clark
9	"	"	"	P33	12	—	"	19029	1215	
10	"	"	"	P33	12	—	"	19028	1222	
11	"	"	"	P33	12	—	"	18088	1227	
12	"	"	"	P33	12	—	"	18039	1234	Brink Clark

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
-212	CHLORIDE TEST	✓	Gary Johnson 144	
	PAINT FILTER TEST	✓	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Shaun C Woodard SIGNATURE

COMPANY CONTACT Dave Bracknell PHONE (505) 327-4947 DATE 5-22-12

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Bill of Lading

MANIFEST # 41439

DATE 5-22-12 JOB # 97057-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Gas Plant	LF11-5	Cont. Soil	P-33	12	-	Riley	19029	1302	
2	"	"	"	P33	12	—	"	19028	1315	
3	Ballard Pond	"	"	P33	12	-	"	18088	1315	
4	"	"	"	P33	12	—	"	11039	1327	
					48					

RESULTS:

292 CHLORIDE TEST (1)

PAINT FILTER TEST (1)

LANDFARM EMPLOYEE: Gary Robinson

Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Shaun Woodard SIGNATURE

COMPANY CONTACT Dave. PHONE (505) 327-4947 DATE 5-22-12

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Bill of Lading

MANIFEST # 41441

DATE 5-23-12 JOB # 97051-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise ChacoGas	LF II-5	Cont. Soil	Q 33	12	—	Riley	19029	7:17AM	
2	Plant Ballard	"	"	Q 33	12	—	Riley	19088	7:21AM	
3	Pond "	"	"	Q 33	12	—	Riley	11039	7:26AM	
4	" "	"	"	Q 33	12	—	Riley	18088	7385	
5	" "	"	"	Q 33	12	—	Riley	19029	8:25	
6	" "	"	"	Q 33	12	—	Riley	19088	834	
7	" "	"	"	Q 33	12	—	Riley	11039	835	
8	" "	"	"	Q 33	12	—	Riley	18088	8:39	
9	" "	"	"	Q 33	12	—	Riley	19029	9:15	
10	" "	"	"	Q 33	12	—	Riley	19088	918	
11	" "	"	"	Q 33	12	—	Riley	11039	9:30	
12	" "	"	"	Q 33	12	—	Riley	18088	9:35	

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
NAD	CHLORIDE TEST	B	Gary Robinson 144	
	PAINT FILTER TEST	B	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Shawn C Woolard SIGNATURE

COMPANY CONTACT David Bradcney PHONE (505) 330-3947 DATE 5/23/12

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Bill of Lading

MANIFEST # 41444

DATE 5-23-12 JOB # 97057-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Gas	LF II-5	Cont soil	Q33	12	—	Riehl Trucking	03	9:45	Curtis A. Riehl
2	Plant	"	"	R33	12	—	"	03	1046	Curtis A Riehl
3	Ballard Pond	"	"	R33	12	—	"	03	1153	Curtis A Riehl
4	" "	"	"	R33	12	—	"	03	1247	Curtis A. Riehl
5	" "	"	"	S-33	12	—	"	03	1350	Curtis A. Riehl
6	" "	"	"	S-33	12	—	"	03	1448	Curtis A. Riehl
					72					

RESULTS:			LANDFARM EMPLOYEE:	NOTES:
202	CHLORIDE TEST	✓	Gary Robinson	
	PAINT FILTER TEST	✓	Certification of above receival & placement	

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riehl Trucking LLC NAME Curtis Riehl SIGNATURE Curtis A. Riehl

COMPANY CONTACT Charlie Dean PHONE 505 330 4089 DATE 5-23-12

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Bill of Lading

MANIFEST # 41445

DATE 5-23-12 JOB # 97057-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Gas Plant	LF II-5	cont soil	Q33	12	—	Fonseca	R01	10:00	Gilbert Garcia
2	Ballard Pond	"	"	R-33	12	—	"	R01	1108	Gilbert Garcia
3	" "	"	"	R-33	12	—	"	R01	1205	Gilbert Garcia
4	" "	"	"	R-33	12	—	"	R01	1300	Gilbert Garcia
5	" "	"	"	S-33	12	—	"	R01	1402	Gilbert Garcia
					60					

RESULTS:

NA	CHLORIDE TEST	✓	LANDFARM EMPLOYEE: Gary Robinson
	PAINT FILTER TEST	✓	Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Fonseca NAME Gilbert Garcia SIGNATURE Gilbert Garcia

COMPANY CONTACT Charlie Dean PHONE 505 330 4089 DATE 5-23-12

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Bill of Lading

MANIFEST # 41446

DATE 5-23-10 JOB # 97057-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Gas Plant	LF II-5	Cont. soil	Q33	12	—	Riley	19029	10:03	
2	Ballard pond	"	"	Q33	12	—	"	19026	1005	
3	"	"	"	R-33	12	—	"	11039	1021	Brink Clark
4	"	"	"	R-33	12	—	"	18088	1026	Travis Sanderson
5	"	"	"	R-33	12	—	"	19029	10:56	
6	"	"	"	R-33	12	—	"	19028	1105	
7	"	"	"	R 33	12	—	"	18088	11:55	Travis Sanderson
8	"	"	"	R-33	12	—	"	11039	11:55	Brink Clark
9	"	"	"	R-33	12	—	"	19029	12:39	
10	"	"	"	R 33	12	—	"	18088	12:55	
11	" " "	"	"	S 33	12	—	"	11039	107	
12				S 33	12	—	"	19029	1330	

RESULTS:

-192 CHLORIDE TEST [illegible]

PAINT FILTER TEST [illegible]

LANDFARM EMPLOYEE: Gary Robinson 144

Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Shawn Woolard SIGNATURE

COMPANY CONTACT PHONE DATE

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Bill of Lading

MANIFEST # 41447

DATE 5-23-12 JOB # 97057-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise	LF II-5	Con't Soil	R-33	12	-	Max	01	1041	
2	Chaco Gas Plant	"	"	R-33	12	—	"	01	1151	
3	Ballard	"	"	R-33	12	—	"	01	1252	
4	" "	"	"	S-33	12	-	"	01	1350	
5	" "	"	"	S-33	12	-	"	01	1453	

RESULTS:			
✓	CHLORIDE TEST	✓	LANDFARM EMPLOYEE: Gary Robertson
	PAINT FILTER TEST	✓	Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Max Ramirez NAME Max Ramirez SIGNATURE

COMPANY CONTACT PHONE DATE

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Bill of Lading

MANIFEST # 41450

DATE 5-23-12 JOB # 07057-0509

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Chaco Gas Plant	LF II-5	Cont soil	S-33	12	—	Riley	11039	1406	Brinte Clark
2	Ballard Pond			S-33	12	—	Riley	18088	1407	Travis Sandoval
					24					

RESULTS:

CHLORIDE TEST

PAINT FILTER TEST

LANDFARM EMPLOYEE: Gary Robinson

Certification of above receival & placement

NOTES:

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

TRANSPORTER CO. Riley NAME Brinte Clark SIGNATURE

COMPANY CONTACT PHONE DATE

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White - Company Records, Yellow - Billing, Pink - Customer

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 04, 2012

Kyle Summers

Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (214) 350-5469
FAX (214) 350-2914

RE: Chaco Ballard Ponds OrderNo.: 1205084

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/2/2012 for the analyses presented in the following report.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1205084**
Date Reported: **5/4/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Chaco Ballard Ponds
Lab ID: 1205084-001

Client Sample ID: CS-11
Collection Date: 5/1/2012 12:35:00 PM
Matrix: MEOH (SOIL) **Received Date:** 5/2/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	58	10		mg/Kg	1	5/3/2012 9:36:53 AM
Surr: DNOP	108	77.4-131		%REC	1	5/3/2012 9:36:53 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	330	50		mg/Kg	10	5/2/2012 1:07:25 PM
Surr: BFB	208	69.7-121	S	%REC	10	5/2/2012 1:07:25 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		mg/Kg	10	5/2/2012 1:07:25 PM
Toluene	5.8	0.50		mg/Kg	10	5/2/2012 1:07:25 PM
Ethylbenzene	1.8	0.50		mg/Kg	10	5/2/2012 1:07:25 PM
Xylenes, Total	21	1.0		mg/Kg	10	5/2/2012 1:07:25 PM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	10	5/2/2012 1:07:25 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	5/4/2012 8:41:39 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	ND	2.5		mg/Kg	1	5/3/2012 6:26:06 AM
Barium	66	0.50		mg/Kg	5	5/3/2012 6:28:37 AM
Cadmium	ND	0.10		mg/Kg	1	5/3/2012 6:26:06 AM
Chromium	2.9	0.30		mg/Kg	1	5/3/2012 6:26:06 AM
Lead	1.5	0.25		mg/Kg	1	5/3/2012 6:26:06 AM
Selenium	ND	2.5		mg/Kg	1	5/3/2012 6:26:06 AM
Silver	ND	0.25		mg/Kg	1	5/3/2012 6:26:06 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: CS-12
Project: Chaco Ballard Ponds
Collection Date: 5/1/2012 12:40:00 PM
Lab ID: 1205084-002
Matrix: MEOH (SOIL)
Received Date: 5/2/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/3/2012 9:58:24 AM
Surr: DNOP	107	77.4-131		%REC	1	5/3/2012 9:58:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	8.0	5.0		mg/Kg	1	5/2/2012 5:55:16 PM
Surr: BFB	133	69.7-121	S	%REC	1	5/2/2012 5:55:16 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	5/2/2012 5:55:16 PM
Toluene	0.19	0.050		mg/Kg	1	5/2/2012 5:55:16 PM
Ethylbenzene	0.055	0.050		mg/Kg	1	5/2/2012 5:55:16 PM
Xylenes, Total	0.70	0.10		mg/Kg	1	5/2/2012 5:55:16 PM
Surr: 4-Bromofluorobenzene	95.9	80-120		%REC	1	5/2/2012 5:55:16 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	5/4/2012 8:47:05 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	ND	12		mg/Kg	5	5/3/2012 6:42:17 AM
Barium	45	0.50		mg/Kg	5	5/3/2012 6:42:17 AM
Cadmium	ND	0.50		mg/Kg	5	5/3/2012 6:42:17 AM
Chromium	2.9	1.5		mg/Kg	5	5/3/2012 6:42:17 AM
Lead	2.9	1.2		mg/Kg	5	5/3/2012 6:42:17 AM
Selenium	ND	12		mg/Kg	5	5/3/2012 6:42:17 AM
Silver	ND	1.2		mg/Kg	5	5/3/2012 6:42:17 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: CS-13
Project: Chaco Ballard Ponds
Collection Date: 5/1/2012 12:45:00 PM
Lab ID: 1205084-003
Matrix: MEOH (SOIL)
Received Date: 5/2/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/3/2012 10:20:08 AM
Surr: DNOP	101	77.4-131		%REC	1	5/3/2012 10:20:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/2/2012 2:05:06 PM
Surr: BFB	105	69.7-121		%REC	1	5/2/2012 2:05:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	5/2/2012 2:05:06 PM
Toluene	ND	0.050		mg/Kg	1	5/2/2012 2:05:06 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/2/2012 2:05:06 PM
Xylenes, Total	ND	0.10		mg/Kg	1	5/2/2012 2:05:06 PM
Surr: 4-Bromofluorobenzene	94.7	80-120		%REC	1	5/2/2012 2:05:06 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	5/4/2012 8:48:50 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	ND	12		mg/Kg	5	5/3/2012 6:48:04 AM
Barium	61	0.50		mg/Kg	5	5/3/2012 6:48:04 AM
Cadmium	ND	0.50		mg/Kg	5	5/3/2012 6:48:04 AM
Chromium	3.6	1.5		mg/Kg	5	5/3/2012 6:48:04 AM
Lead	2.4	1.2		mg/Kg	5	5/3/2012 6:48:04 AM
Selenium	ND	12		mg/Kg	5	5/3/2012 6:48:04 AM
Silver	ND	1.2		mg/Kg	5	5/3/2012 6:48:04 AM

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205084**

04-May-12

Client: Southwest Geoscience

Project: Chaco Ballard Ponds

Sample ID: **MB-1776**	Sample Type: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **1776**	RunNo: **2540**
Prep Date: **5/2/2012**	Analysis Date: **5/3/2012**	Seq No: **70532** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.9		10.00		98.6	77.4	131			

Sample ID: **LCS-1776**	Sample Type: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **1776**	RunNo: **2540**
Prep Date: **5/2/2012**	Analysis Date: **5/3/2012**	Seq No: **70709** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	72.5	62.7	139			
Surr: DNOP	4.5		5.000		90.4	77.4	131			

Sample ID: **1205012-001AMS**	Sample Type: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **1776**	RunNo: **2540**
Prep Date: **5/2/2012**	Analysis Date: **5/3/2012**	Seq No: **71014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Diesel Range Organics (DRO)	38	9.8	48.78	0	78.3	57.2	146			
Surr: DNOP	4.4		4.878		90.4	77.4	131			

Sample ID: **1205012-001AMSD**	Sample Type: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **1776**	RunNo: **2540**
Prep Date: **5/2/2012**	Analysis Date: **5/3/2012**	Seq No: **71026** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Diesel Range Organics (DRO)	38	10	51.18	0	74.7	57.2	146	0.123	26.7	
Surr: DNOP	4.7		5.118		91.6	77.4	131	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205084**

04-May-12

Client: Southwest Geoscience

Project: Chaco Ballard Ponds

Sample ID: **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	SeqNo: **70032** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1,000		1,000		101	69.7	121			

Sample ID: **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	SeqNo: **70746** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	98.5	133			
Surr: BFB	1,100		1,000		109	69.7	121			

Sample ID: **1205084-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **CS-11**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	SeqNo: **70752** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	550	50	223.4	331.7	99.6	85.4	147			
Surr: BFB	19,000		8,936		213	69.7	121			S

Sample ID: **1205084-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **CS-11**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	SeqNo: **70753** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	540	50	223.4	331.7	95.4	85.4	147	1.69	19.2	
Surr: BFB	20,000		8,936		220	69.7	121	0	0	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205084**

04-May-12

Client: Southwest Geoscience

Project: Chaco Ballard Ponds

Sample ID **5ML RB**	Sample Type: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	Seq No: **70035** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.4	80	120			

Sample ID **100NG BTEX LCS**	Sample Type: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	Seq No: **70778** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.5	83.3	107			
Toluene	1.0	0.050	1.000	0	100	74.3	115			
Ethylbenzene	0.99	0.050	1.000	0	99.2	80.9	122			
Xylenes, Total	2.9	0.10	3.000	0	98.2	85.2	123			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.6	80	120			

Sample ID **1205086-001AMS**	Sample Type: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	Seq No: **70782** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPDLimit	Qual
Benzene	0.77	0.050	0.7871	0	98.3	67.2	113			
Toluene	0.80	0.050	0.7871	0	101	62.1	116			
Ethylbenzene	0.79	0.050	0.7871	0	101	67.9	127			
Xylenes, Total	2.4	0.10	2.361	0	102	60.6	134			
Surr: 4-Bromofluorobenzene	0.78		0.7871		99.2	80	120			

Sample ID **1205086-001AMSD**	Sample Type: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **R2524**	RunNo: **2524**
Prep Date:	Analysis Date: **5/2/2012**	Seq No: **70783** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPDLimit	Qual
Benzene	0.77	0.050	0.7871	0	98.2	67.2	113	0.0845	14.3	
Toluene	0.79	0.050	0.7871	0	101	62.1	116	0.554	15.9	
Ethylbenzene	0.78	0.050	0.7871	0	98.8	67.9	127	2.04	14.4	
Xylenes, Total	2.4	0.10	2.361	0	99.7	60.6	134	2.46	12.6	
Surr: 4-Bromofluorobenzene	0.79		0.7871		101	80	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205084**

04-May-12

Client: Southwest Geoscience

Project: Chaco Ballard Ponds

Sample ID: **MB-1796**	Sample Type: **MBLK**	TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS**	Batch ID: **1796**	RunNo: **2564**
Prep Date: **5/3/2012**	Analysis Date: **5/4/2012**	Seq No: **71485** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Mercury	ND	0.033								

Sample ID: **LCS-1796**	Sample Type: **LCS**	TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS**	Batch ID: **1796**	RunNo: **2564**
Prep Date: **5/3/2012**	Analysis Date: **5/4/2012**	Seq No: **71486** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Mercury	0.17	0.033	0.1667	0	99.6	80	120			

Sample ID: **1205084-001BMS**	Sample Type: **MS**	TestCode: **EPA Method 7471: Mercury**
Client ID: **CS-11**	Batch ID: **1796**	RunNo: **2564**
Prep Date: **5/3/2012**	Analysis Date: **5/4/2012**	Seq No: **71488** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Mercury	0.17	0.033	0.1612	0	106	75	125			

Sample ID: **1205084-001BMSD**	Sample Type: **MSD**	TestCode: **EPA Method 7471: Mercury**
Client ID: **CS-11**	Batch ID: **1796**	RunNo: **2564**
Prep Date: **5/3/2012**	Analysis Date: **5/4/2012**	Seq No: **71489** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Mercury	0.16	0.033	0.1579	0	104	75	125	3.11	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205084**

04-May-12

Client: Southwest Geoscience

Project: Chaco Ballard Ponds

Sam□le ID **MB-1775**	Sam□Ty□e: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **1775**	RunNo: **2539**
Pre□ Date: **5/2/2012**	Analysis Date: **5/3/2012**	Se□No: **70513** □nits: **mg/L**

Analyte	Result	P□L	SPK value	SPK Ref □al	%REC	Lo□Limit	□ighLimit	%RPD	RPDLimit	□ual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sam□le ID **LCS-1775**	Sam□Ty□e: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **1775**	RunNo: **2539**
Pre□ Date: **5/2/2012**	Analysis Date: **5/3/2012**	Se□No: **70514** □nits: **mg/L**

Analyte	Result	P□L	SPK value	SPK Ref □al	%REC	Lo□Limit	□ighLimit	%RPD	RPDLimit	□ual
Arsenic	24	2.5	25.00	0	94.9	80	120			
Barium	24	0.10	25.00	0	94.8	80	120			
Cadmium	24	0.10	25.00	0.02550	94.9	80	120			
Chromium	24	0.30	25.00	0.1595	94.7	80	120			
Lead	23	0.25	25.00	0	92.7	80	120			
Selenium	23	2.5	25.00	0	91.1	80	120			
Silver	4.9	0.25	5.000	0	97.1	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Southwest Geoscience

Work Order Number: 1205084

Received by/date: 05/02/12

Logged By: Ashley Gallegos 5/2/2012 10:00:00 AM

Completed By: Ashley Gallegos 5/2/2012 10:12:17 AM

Reviewed By: 05/02/12

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified:		Date:	
By Whom:		Via: eMail Phone Fax In Person	
Regarding:			
Client Instructions:			

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec

Project Manager: K. Summers

Laboratory: Hall
Address: ABQ
Contact: Andy Freeman
Phone:
PO/SO #:

ANALYSIS REQUESTED: BTEX 8021; TPH GRO/DRO 8015; RCRA-8

Lab use only
Due Date:
Temp. of coolers when received (C°): 1.0
1 | 2 | 3 | 4 | 5
Page 1 of 1

Sampler's Name: Kyle Summers
Sampler's Signature: [signature]

Proj. No.: 0410001A
Project Name: Chaco Ballard Ponds

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 Lt.	250 ml	P/O	BTEX 8021	TPH GRO/DRO 8015	RCRA-8							Lab Sample ID (Lab Use Only)
S (MeOH)	5/1/12	1235		X	CS-11	1	2				2	X	X	X							1205084-001
↓	↓	1240		X	CS-12	1	2				↓	X	X	X							-002
↓	↓	1245		X	CS-13	1	2				↓	X	X	X							-003

NFS
KS

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	5/1/12	1542	Mistin Walen	5/1/12	1542
Mistin Walen	5/1/12	1720	[signature]	05/02/12	10:00

NOTES: Rush

Matrix: WW - Wastewater, W - Water, S - Soil, SD - Solid, L - Liquid, A - Air Bag, C - Charcoal tube, SL - sludge, O - Oil
Container: VOA - 40 ml vial, A/G - Amber / Or Glass 1 Liter, 250 ml - Glass wide mouth, P/O - Plastic or other

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 17, 2012

Kyle Summers
Southwest Geoscience
606 S. Rio Grande Unit A
Aztec, NM 87410
TEL: (903) 821-5603
FAX

RE: Chaco Ballard East OrderNo.: 1205505

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/10/2012 for the analyses presented in the following report.

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: CS-17
Project: Chaco Ballard East
Collection Date: 5/10/2012 9:40:00 AM
Lab ID: 1205505-001
Matrix: SOIL
Received Date: 5/10/2012 3:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	48	10		mg/Kg	1	5/14/2012 12:24:18 PM
Surr: DNOP	105	82.1-121		%REC	1	5/14/2012 12:24:18 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	190	50		mg/Kg	10	5/14/2012 3:22:24 PM
Surr: BFB	164	69.7-121	S	%REC	10	5/14/2012 3:22:24 PM
EPA METHOD 7471: MERCURY						Analyst: **JLF**
Mercury	ND	0.033		mg/Kg	1	5/14/2012 2:40:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **ELS**
Arsenic	2.5	2.5		mg/Kg	1	5/12/2012 7:13:31 AM
Barium	42	0.10		mg/Kg	1	5/12/2012 7:13:31 AM
Cadmium	ND	0.10		mg/Kg	1	5/12/2012 7:13:31 AM
Chromium	2.2	0.30		mg/Kg	1	5/12/2012 7:13:31 AM
Lead	1.9	0.25		mg/Kg	1	5/12/2012 7:13:31 AM
Selenium	ND	2.5		mg/Kg	1	5/14/2012 6:53:43 AM
Silver	ND	0.25		mg/Kg	1	5/12/2012 7:13:31 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acena□hthene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Acena□hthylene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Aniline	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Anthracene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Azobenzene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Benzo(a)□yrene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Benzo(g,h,i)□erylene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Benzo(□)fluoranthene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Benzoic acid	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Bis(2-chloroetho□y)methane	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Bis(2-chloroiso□ro□yl)ether	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Bis(2-ethylhe□yl)□hthalate	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
4-Bromo□henyl □henyl ether	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Butyl benzyl □hthalate	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Carbazole	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
4-Chloro-3-methyl□henol	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
4-Chloroaniline	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
2-Chlorona□hthalene	ND	0.50		mg/Kg	1	5/15/2012 11:04:28 AM
2-Chloro□henol	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
4-Chloro□henyl □henyl ether	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Chaco Ballard East
Lab ID: 1205505-001 **Matrix:** SOIL

Client Sample ID: CS-17
Collection Date: 5/10/2012 9:40:00 AM
Received Date: 5/10/2012 3:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Chrysene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Di-n-butyl □hthalate	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
Di-n-octyl □hthalate	ND	0.50		mg/Kg	1	5/15/2012 11:04:28 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Dibenzofuran	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
3,3□Dichlorobenzidine	ND	0.50		mg/Kg	1	5/15/2012 11:04:28 AM
Diethyl □hthalate	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Dimethyl □hthalate	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
2,4-Dichloro□henol	ND	0.79		mg/Kg	1	5/15/2012 11:04:28 AM
2,4-Dimethyl□henol	ND	0.59		mg/Kg	1	5/15/2012 11:04:28 AM
4,6-Dinitro-2-methyl□henol	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
2,4-Dinitro□henol	ND	0.79		mg/Kg	1	5/15/2012 11:04:28 AM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
Fluoranthene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Fluorene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
□e□achlorobenzene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
□e□achlorobutadiene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
□e□achlorocyclo□entadiene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
□e□achloroethane	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
□ndeno(1,2,3-cd)□yrene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
□so□horone	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
1-Methylna□hthalene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
2-Methylna□hthalene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
2-Methyl□henol	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
3□4-Methyl□henol	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
N-Nitrosodi-n-□ro□ylamine	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
N-Nitrosodi□henylamine	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Na□hthalene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
4-Nitroaniline	ND	0.79		mg/Kg	1	5/15/2012 11:04:28 AM
Nitrobenzene	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
2-Nitro□henol	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
4-Nitro□henol	ND	0.50		mg/Kg	1	5/15/2012 11:04:28 AM
Pentachloro□henol	ND	0.79		mg/Kg	1	5/15/2012 11:04:28 AM
Phenanthrene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Phenol	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Pyrene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Client Sample ID: CS-17
Project: Chaco Ballard East
Collection Date: 5/10/2012 9:40:00 AM
Lab ID: 1205505-001 **Matrix:** SOIL **Received Date:** 5/10/2012 3:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Pyridine	ND	0.99		mg/Kg	1	5/15/2012 11:04:28 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
2,4,5-Trichloro□henol	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
2,4,6-Trichloro□henol	ND	0.40		mg/Kg	1	5/15/2012 11:04:28 AM
Surr: 2,4,6-Tribromo□henol	93.7	20.1-121		%REC	1	5/15/2012 11:04:28 AM
Surr: 2-Fluorobi□henyl	83.9	19-133		%REC	1	5/15/2012 11:04:28 AM
Surr: 2-Fluoro□henol	69.5	20.2-108		%REC	1	5/15/2012 11:04:28 AM
Surr: 4-Ter□henyl-d14	87.7	18.9-115		%REC	1	5/15/2012 11:04:28 AM
Surr: Nitrobenzene-d5	89.5	20.8-123		%REC	1	5/15/2012 11:04:28 AM
Surr: Phenol-d5	87.6	19.8-115		%REC	1	5/15/2012 11:04:28 AM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Toluene	3.0	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Ethylbenzene	1.3	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,2,4-Trimethylbenzene	3.0	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,3,5-Trimethylbenzene	1.9	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,2-Dichloroethane (EDC)	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,2-Dibromoethane (EDB)	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Na□hthalene	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
1-Methylna□hthalene	ND	1.0		mg/Kg	5	5/14/2012 12:59:59 PM
2-Methylna□hthalene	ND	1.0		mg/Kg	5	5/14/2012 12:59:59 PM
Acetone	ND	3.7		mg/Kg	5	5/14/2012 12:59:59 PM
Bromobenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Bromodichloromethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Bromoform	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Bromomethane	ND	0.75		mg/Kg	5	5/14/2012 12:59:59 PM
2-Butanone	ND	2.5		mg/Kg	5	5/14/2012 12:59:59 PM
Carbon disulfide	ND	2.5		mg/Kg	5	5/14/2012 12:59:59 PM
Carbon tetrachloride	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
Chlorobenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Chloroethane	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
Chloroform	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Chloromethane	ND	0.75		mg/Kg	5	5/14/2012 12:59:59 PM
2-Chlorotoluene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
4-Chlorotoluene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
cis-1,2-DCE	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
cis-1,3-Dichloro□ro□ene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,2-Dibromo-3-chloro□ro□ane	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
Dibromochloromethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Dibromomethane	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Southwest Geoscience
Project: Chaco Ballard East
Lab ID: 1205505-001 **Matrix:** SOIL

Client Sample ID: CS-17
Collection Date: 5/10/2012 9:40:00 AM
Received Date: 5/10/2012 3:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,2-Dichlorobenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,3-Dichlorobenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,4-Dichlorobenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Dichlorodifluoromethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,1-Dichloroethane	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
1,1-Dichloroethene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,2-Dichloro□ro□ane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,3-Dichloro□ro□ane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
2,2-Dichloro□ro□ane	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
1,1-Dichloro□ro□ene	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
□e□achlorobutadiene	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
2-□e□anone	ND	2.5		mg/Kg	5	5/14/2012 12:59:59 PM
□so□ro□ylbenzene	0.38	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
4-□so□ro□yltoluene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
4-Methyl-2-□entanone	ND	2.5		mg/Kg	5	5/14/2012 12:59:59 PM
Methylene chloride	ND	0.75		mg/Kg	5	5/14/2012 12:59:59 PM
n-Butylbenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
n-Pro□ylbenzene	0.53	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
sec-Butylbenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Styrene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
tert-Butylbenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,1,1,2-Tetrachloroethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,1,2,2-Tetrachloroethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Tetrachloroethene (PCE)	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
trans-1,2-DCE	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
trans-1,3-Dichloro□ro□ene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,2,3-Trichlorobenzene	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
1,2,4-Trichlorobenzene	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,1,1-Trichloroethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,1,2-Trichloroethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Trichloroethene (TCE)	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Trichlorofluoromethane	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
1,2,3-Trichloro□ro□ane	ND	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
□inyl chloride	ND	0.25		mg/Kg	5	5/14/2012 12:59:59 PM
Xylenes, Total	15	0.50		mg/Kg	5	5/14/2012 12:59:59 PM
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	5	5/14/2012 12:59:59 PM
Surr: 4-Bromofluorobenzene	81.1	70-130		%REC	5	5/14/2012 12:59:59 PM
Surr: Dibromofluoromethane	98.9	71.7-132		%REC	5	5/14/2012 12:59:59 PM
Surr: Toluene-d8	93.2	70-130		%REC	5	5/14/2012 12:59:59 PM

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sam□le ID **MB-1913**	Sam□Ty□e: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **1913**	RunNo: **2729**
Pre□Date: **5/13/2012**	Analysis Date: **5/14/2012**	Se□No: **76201** □nits: **mg/Kg**

Analyte	Result	P□L	SPK value	SPK Ref □al	%REC	Lo□Limit	□ighLimit	%RPD	RPDLimit	□ual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.6		10.00		96.3	82.1	121			

Sam□le ID **LCS-1913**	Sam□Ty□e: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **1913**	RunNo: **2729**
Pre□Date: **5/13/2012**	Analysis Date: **5/14/2012**	Se□No: **76202** □nits: **mg/Kg**

Analyte	Result	P□L	SPK value	SPK Ref □al	%REC	Lo□Limit	□ighLimit	%RPD	RPDLimit	□ual
Diesel Range Organics (DRO)	37	10	50.00	0	73.9	52.6	130			
Surr: DNOP	4.4		5.000		89.0	82.1	121			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sample ID: **MB-1908**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **1908**	RunNo: **2746**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **77029** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1,000		1,000		101	69.7	121			

Sample ID: **LCS-1908**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **1908**	RunNo: **2746**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **77030** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	98.5	133			
Surr: BFB	1,100		1,000		110	69.7	121			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sam□le ID: **mb-1908**	Sam□Ty□e: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **1908**	RunNo: **2762**
Pre□ Date: **5/11/2012**	Analysis Date: **5/14/2012**	Se□No: **76591** □nits: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sample ID: **mb-1908**	Sample Type: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **1908**	RunNo: **2762**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	Seq No: **76591** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.6	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.9	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.4	71.7	132			
Surr: Toluene-d8	0.48		0.5000		96.3	70	130			

Sample ID: **lcs-1908**	Sample Type: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **1908**	RunNo: **2762**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	Seq No: **76592** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Benzene	1.1	0.050	1.000	0	107	70.7	123			
Toluene	0.90	0.050	1.000	0	89.6	80	120			
Chlorobenzene	0.95	0.050	1.000	0	94.6	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	113	63.1	148			
Trichloroethene (TCE)	1.0	0.050	1.000	0	99.6	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.6	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sam□le ID **lcs-1908**	Sam□Ty□e: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **1908**	RunNo: **2762**
Pre□ Date: **5/11/2012**	Analysis Date: **5/14/2012**	Se□No: **76592** □nits: **mg/Kg**

Analyte	Result	P□L	SPK value	SPK Ref □al	%REC	Lo□Limit	□ighLimit	%RPD	RPDLimit	□ual
Surr: Dibromofluoromethane	0.50		0.5000		99.7	71.7	132			
Surr: Toluene-d8	0.46		0.5000		91.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sam□le ID **mb-1921**	Sam□Ty□e: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS**	Batch ID: **1921**	RunNo: **2796**
Pre□ Date: **5/14/2012**	Analysis Date: **5/15/2012**	Se□No: **77716** □nits: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sample ID: **mb-1921**	Sample Type: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBS**	Batch ID: **1921**	RunNo: **2796**
Prep Date: **5/14/2012**	Analysis Date: **5/15/2012**	SeqNo: **77716** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.9		3.330		88.2	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		76.0	19	133			
Surr: 2-Fluorophenol	2.4		3.330		71.7	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.7	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		72.3	20.8	123			
Surr: Phenol-d5	2.4		3.330		73.2	19.8	115			

Sample ID: **lcs-1921**	Sample Type: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS**	Batch ID: **1921**	RunNo: **2796**
Prep Date: **5/14/2012**	Analysis Date: **5/15/2012**	SeqNo: **77717** Units: **mg/Kg**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sam□le ID **lcs-1921**	Sam□Ty□e: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS**	Batch ID: **1921**	RunNo: **2796**
Pre□Date: **5/14/2012**	Analysis Date: **5/15/2012**	Se□No: **77717** □nits: **mg/Kg**

Analyte	Result	P□L	SPK value	SPK Ref □al	%REC	Lo□Limit	□ighLimit	%RPD	RPDLimit	□ual
Acenaphthene	1.2	0.20	1.670	0	72.8	38.6	100			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	69.3	35.8	108			
2-Chlorophenol	2.1	0.20	3.330	0	62.3	48.2	96.1			
1,4-Dichlorobenzene	0.97	0.20	1.670	0	57.8	42.5	97.6			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	81.1	51.2	108			
N-Nitrosodi-n-propylamine	1.1	0.20	1.670	0	63.6	31.6	114			
4-Nitrophenol	2.9	0.25	3.330	0	86.7	22.7	144			
Pentachlorophenol	2.2	0.40	3.330	0	65.4	24	109			
Phenol	2.1	0.20	3.330	0	62.8	33.1	108			
Pyrene	1.2	0.20	1.670	0	69.6	42.7	98.9			
1,2,4-Trichlorobenzene	1.1	0.20	1.670	0	64.1	27.1	118			
Surr: 2,4,6-Tribromophenol	2.8		3.330		82.9	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.8	19	133			
Surr: 2-Fluorophenol	2.1		3.330		62.4	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		75.8	18.9	115			
Surr: Nitrobenzene-d5	1.1		1.670		65.7	20.8	123			
Surr: Phenol-d5	2.4		3.330		72.1	19.8	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sample ID: **MB-1923**	Sample Type: **MBLK**	TestCode: **EPA Method 7471: Mercury**
Client ID: **PBS**	Batch ID: **1923**	RunNo: **2750**
Prep Date: **5/14/2012**	Analysis Date: **5/14/2012**	Seq No: **76400** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Mercury	ND	0.033								

Sample ID: **LCS-1923**	Sample Type: **LCS**	TestCode: **EPA Method 7471: Mercury**
Client ID: **LCSS**	Batch ID: **1923**	RunNo: **2750**
Prep Date: **5/14/2012**	Analysis Date: **5/14/2012**	Seq No: **76401** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	%RPD	RPD Limit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205505**

17-May-12

Client: Southwest Geoscience

Project: Chaco Ballard East

Sample ID: **MB-1903**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **1903**	RunNo: **2720**
Prep Date: **5/11/2012**	Analysis Date: **5/12/2012**	SeqNo: **75656** Units: **mg/L**

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

Sample ID: **LCS-1903**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **1903**	RunNo: **2720**
Prep Date: **5/11/2012**	Analysis Date: **5/12/2012**	SeqNo: **75657** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	28	2.5	25.00	0.6790	107	80	120			
Barium	26	0.10	25.00	0.03500	103	80	120			
Cadmium	28	0.10	25.00	0	110	80	120			
Chromium	26	0.30	25.00	0.07500	105	80	120			
Lead	26	0.25	25.00	0	106	80	120			
Silver	5.1	0.25	5.000	0	102	80	120			

Sample ID: **MB-1903**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **PBS**	Batch ID: **1903**	RunNo: **2728**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **75757** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	2.5								

Sample ID: **LCS-1903**	SampType: **LCS**	TestCode: **EPA Method 6010B: Soil Metals**
Client ID: **LCSS**	Batch ID: **1903**	RunNo: **2728**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **75758** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	21	2.5	25.00	0	85.1	80	120			

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Southwest Geoscience Aztec Work Order Number: 1205505

Received by/date: AT 05/11/12

Logged By: **Anne Thorne** 5/10/2012 3:05:00 PM

Completed By: **Anne Thorne** 5/11/2012

Reviewed By: AT 05/11/12

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			

CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location: Aztec
Project Manager: K. Summers

Laboratory: Hall
Address: ABQ
Contact: Andy F.
Phone:
PO/SO #:

Sampler's Name: Kyle Summers
Sampler's Signature:

Proj. No: 04100018
Project Name: Chaco Ballard East.

ANALYSIS REQUESTED: VOCs 8260 | PCRA-8 | TPH GRO/DRO 8015

Lab use only
Due Date:
Temp. of coolers when received (C°): 3.8
1 | 2 | 3 | 4 | 5
Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No/Type of Containers: VOA	A/G 1 Lt.	250 ml	P/O	Lab Sample ID (Lab Use Only)
S	5/10/12	0940		X	CS-17	3	4				2	1205505-001

NFS
KS

Turn around time: ☐ Normal ☐ 25% Rush ☐ 50% Rush ☒ 100% Rush

Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	5/10/12	12:10	Mistie Walden	5/10/12	1210
Mistie Walden	5/10/12	1505		5/10/12	1505
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

NOTES:

Matrix: WW - Wastewater; W - Water; S - Soil; SD - Solid; L - Liquid; A - Air Bag; C - Charcoal tube; SL - sludge; O - Oil
Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

Southwest GEOSCIENCE

Liner and Associated Infrastructure

Generator's Non-hazardous Waste Profile Sheet

Requested Disposal Facility: San Juan Profile Number: _____

☐ Renewal for Profile Number: _____ Waste Approval Expiration Date: _____

☐ Check here if there are multiple generating locations for this waste. Attach additional locations.

A. Waste Generator Facility Information (must reflect location of waste generation/origin)

1. Generator Name: Enterprise Products Partners / Chaco Gas Processing Plant
2. Site Address: 895 County Road 7100
3. City/ZIP: Bloomfield / 87413
4. State: NM
5. County: San Juan
6. Contact Name/Title: David Smith
7. Email Address: DRSmith@eprod.com
8. Phone: 713-381-2286 9. FAX: 713-381-4366
10. NAICS Code: _____
11. Generator USEPA ID #: NMD000761627-0191 / 110007974263
12. State ID# (if applicable): _____

B. Customer Information ☐ same as above

P. O. Number: _____

1. Customer Name: Enterprise Field Services, LLC
2. Billing Address: PO Box 4324
3. City, State and ZIP: Houston, TX 77210
4. Contact Name: David Smith
5. Contact Email: DRSmith@eprod.com
6. Phone: 713-381-2286 FAX: 713-381-4366
7. Transporter Name: _____
8. Transporter ID # (if appl.): _____
9. Transporter Address: _____
10. City, State and ZIP: _____

C. Waste Stream Information

1. DESCRIPTION

a. Common Waste Name: HDPE Pond Liners, PVC pipe, Nylon netting, felt liner, concrete, metal fence posts

State Waste Code(s): _____

b. Describe Process Generating Waste or Source of Contamination:

Decommissioning industrial pond at gas processing plant. materials will be cleaned prior to shipment.

c. Typical Color(s): NA

d. Strong Odor? ☐ Yes ☑ No Describe: _____

e. Physical State at 70°F: ☑ Solid ☐ Liquid ☐ Powder ☐ Semi-Solid or Sludge ☐ Other: _____

f. Layers? ☐ Single layer ☐ Multi- layer ☑ NA

g. Water Reactive? ☐ Yes ☑ No If Yes, Describe: _____

h. Free Liquid Range (%): _____ to _____ ☑ NA(solid)

i. pH Range: _____ to _____ ☑ NA(solid)

j. Liquid Flash Point: ☐ < 140°F ☐ 140°- 199°F ☐ ≥ 200°F ☑ NA(solid)

k. Flammable Solid: ☐ Yes ☑ No

l. Physical Constituents: List all constituents of waste stream - (e.g. Soil 0-80%, Wood 0-20%): ☐ (See Attached)

Constituents (Total Composition Must be ≥ 100%)	Lower Range	Unit of Measure	Upper Range	Unit of Measure
1. HDPE plastic	60	%	85	%
2. nylon	1	%	5	%
3. concrete anchors w/metal posts, footers	10	%	25	%
4. felt liner	5	%	20	%
5. pvc pipe	1	%	5	%
6.				

2. ESTIMATED QUANTITY OF WASTE AND SHIPPING INFORMATION

a. ☑ One Time Event ☐ Base ☐ Repeat Event

b. Estimated Annual Quantity: 75 ☐ Tons ☑ Cubic Yards ☐ Drums ☐ Gallons ☐ Other (specify): _____

c. Shipping Frequency: _____ Units per ☐ Month ☐ Quarter ☐ Year ☑ One Time ☐ Other

d. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If yes, answer e.) ☐ Yes ☑ No

e. USDOT Shipping Description (if applicable): _____

3. SAFETY REQUIREMENTS (Handling, PPE, etc.): _____

D. Regulatory Status (Please check appropriate responses)

1. Waste Identification:
   a. Does the waste meet the definition of a USEPA listed or characteristic hazardous waste as defined by 40 CFR Part 261? ☐ Yes ☑ No
      1. If yes, please complete a hazardous waste profile.
   b. Does the waste meet the definition of a state hazardous waste other than identified in D.1.a? ☐ Yes ☑ No
      1. If yes, please complete a hazardous waste profile.
2. Is this waste included in one or more of categories below (Check all that apply)? If yes, attach supporting documentation. ☐ Yes ☑ No
   ☐ Delisted Hazardous Waste ☐ Excluded Wastes Under 40CFR 261.4
   ☐ Treated Hazardous Waste Debris ☐ Treated Characteristic Hazardous Waste
3. Is the waste from a Federal (40 CFR 300, Appendix B) or state mandated clean-up? If yes, see instructions. ☐ Yes ☑ No
4. Does the waste represented by this waste profile sheet contain radioactive material? ☐ Yes ☑ No
   a. If yes, is disposal regulated by the Nuclear Regulatory Commission? ☐ Yes ☐ No
   b. If yes, is disposal regulated by a State Agency for radioactive waste/NORM? ☐ Yes ☐ No
5. Does the waste represented by this waste profile sheet contain Polychlorinated Biphenyls (PCBs)? ☐ Yes ☑ No
   (If yes, list in Chemical Composition - C.1.l)
   a. If yes, are the PCBs regulated by 40 CFR 761? ☐ Yes ☐ No
   b. If yes, is it remediation waste from a project being performed under the Self-Implementing option provided in 40 CFR 761.61(a)? ☐ Yes ☐ No
   c. If yes, were the PCBs imported into the US? ☐ Yes ☐ No
6. Does the waste contain untreated, regulated medical or infectious waste? ☐ Yes ☑ No
7. Does the waste contain asbestos? ☐ Yes ☑ No
   a. If Yes, ☐ Friable ☐ Non Friable
8. Is this profile for remediation waste from a facility that is a major source of Hazardous Air Pollutants (Site Remediation NESHAP, 40 CFR 63 subpart GGGGG)? ☐ Yes ☑ No
   a. If yes, does the waste contain <500 ppmw VOHAPs at the point of determination? ☐ Yes ☐ No

E. Generator Certifcation (Please read and certify by signature below)

By signing this Generator's Waste Profile Sheet, I hereby certify that all:

1. Information submitted in this profile and all attached documents contain true and accurate descriptions of the waste material;
2. Relevant information within the possession of the Generator regarding known or suspected hazards pertaining to this waste has been disclosed to WM/the Contractor;
3. Analytical data attached pertaining to the profiled waste was derived from testing a representative sample in accordance with 40 CFR 261.20(c) or equivalent rules; and
4. Changes that occur in the character of the waste (i.e. changes in the process or new analytical) will be identified by the Generator and disclosed to WM (and the Contractor if applicable) prior to providing the waste to WM (and the contractor if applicable).
5. Check all that apply:
   ☐ a. Attached analytical pertains to the waste. Identify laboratory & sample ID #'s and parameters tested: _____ # Pages: _____
   ☐ b. Only the analysis identified on the attachment pertain to the waste (identify by laboratory & sample ID #'s and parameters tested). Attachment #: _____
   ☐ c. Additional information necessary to characterize the profiled waste has been attached (other then analytical, such as MSDS). Indicate the number of attached pages: _____
   ☐ d. I am an agent signing on behalf of the Generator, and the delegation of authority to me from the Generator for this signature is available upon request.

Certification Signature: _____ Title: Senior Environmental Scientist

Company Name: Enterprise Field Services, LLC Name (Print): David Smith

Date: 1/10/12

Customer Summary Report
Criteria: 01/01/2011 12:00 AM to 08/15/2012 11:59 PM
Business Unit Name: WM of NM - San Juan County Landfill - S04843 (USA)
User: bpinkert
Date: Aug 15 2012, 9:39:05 AM - Central Standard Time
Operation Type: All
Customer Name: USA ENVIRONMENT LP (USA ENVIRONMENT LP)
Ticket Type: All
Customer Type: All
PMT Category: All
Profile: 100588NM

Ticket Date	Ticket ID	Cust Code	MAS Unique ID	Customer	Generator	Manifest	Profile	Truck	Material Description	Rate	Rate Unit	Yards	Tons
3/13/2012	1432497	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO		100588NM	412299	DELIVERY	$50.00	EA	0	0
3/14/2012	1432503	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO		100588NM	412299	DELIVERY	$50.00	EA	0	0
3/14/2012	1432505	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO		100588NM	412299	DELIVERY	$50.00	EA	0	0
4/18/2012	1441976	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO		100588NM	412369	DELIVERY	$50.00	EA	0	0
Material Total	4											0	0
3/14/2012	1428607	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17512	100588NM	412299	Special Waste Solid Other	$16.50	CYD	30	10.46
3/16/2012	1428958	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17514	100588NM	412369	Special Waste Solid Other	$16.50	CYD	60	10.75
3/20/2012	1429977	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17518	100588NM	407117	Special Waste Solid Other	$16.50	CYD	30	6.69
4/4/2012	1434612	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17541	100588NM	412299	Special Waste Solid Other	$16.50	CYD	30	4.94
4/18/2012	1438319	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17578	100588NM	412369	Special Waste Solid Other	$16.50	CYD	30	2.59
5/2/2012	1442419	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17590	100588NM	412369	Special Waste Solid Other	$16.50	CYD	30	5.62
5/7/2012	1443795	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17592	100588NM	409818	Special Waste Solid Other	$16.50	CYD	30	3.68
6/14/2012	1454525	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO	17632	100588NM	412299	Special Waste Solid Other	$17.25	CYD	30	11
Material Total	8											270	55.73
3/14/2012	1432508	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO		100588NM	412299	Transportation Fee	$279.00	LD	0	0
3/16/2012	1432511	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO		100588NM	412369	Transportation Fee	$279.00	LD	0	0
3/20/2012	1432512	0000331	86157853006	USA ENVIRONMENT LP	153-ENTERPRISEPRODUCTSCHACO		100588NM	407117	Transportation Fee	$279.00	LD	0	0
Material Total	3											0	0
Customer Total	15											270	55.73
Ticket Totals	15											270	55.73

Internal Customer External Customer	Loads Loads	Yards Yards	Tons Tons	Total Ticket Amount Total Ticket Amount
USA ENVIRONMENT LP	15	270	55.73	

WM of NM - San Juan County
78 County Road 3140
Aztec, NM, 87410
Ph: (505) 334-1121

Original
Ticket# 1454525

Customer Name USA ENVIRONMENT LP USA ENVIRO
Carrier WM WM FARMINGTON-RESIDENTIAL
Ticket Date 06/14/2012
Vehicle# 412299
Volume
Payment Type Credit Account
Container
Manual Ticket#
Driver
Hauling Ticket#
Check#
Route
Billing # 0000331
State Waste Code
Gen EPA ID
Manifest 17632
Destination
Grid
PO 3319RCH004
Profile 100588NM (Enterprise Products Partners/Chaco Gas Processing Plant)
Generator 153-ENTERPRISEPRODUCTSCHACO Enterprise Products_Chaco Plant

	Time	Scale	Operator	Inbound		
In	06/14/2012 10:00:36	Inbound 301	lhenry2		Gross	54300 lb*
Out	06/14/2012 10:01:38	Outbound 301	lhenry2		Tare	32300 lb*
			* Manual Weight		Net	22000 lb
					Tons	11.00

Comments USA ENVIRO

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Spwaste Solid Oth-	100	30.00	Yards				BLOM
2	FUEL-T-Fuel Surcha	100		%				BLOM
3	EVFt-P-Standard En	100		%				BLOM
4	TOL-Transportation	100	1	Load				BLOM

Total Tax
Total Ticket

Driver's Signature

403WM

WASTE MANAGEMENT

WM of NM - San Juan County
78 County Road 3140
Aztec, NM, 87410
Ph: (505) 334-1121

Original
Ticket# 1443795

Customer Name USA ENVIRONMENT LP USA ENVIRO
Ticket Date 05/07/2012
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest 17592
Destination
PO 3319RCH004
Profile 100588NM (Enterprise Products Partners/Chaco Gas Processing Plant)
Generator 153-ENTERPRISEPRODUCTSCHACO Enterprise Products_Chaco Plant

Carrier WM WM FARMINGTON-RESIDENTIAL
Vehicle# 409818
Container
Driver
Check#
Billing # 0000331
Gen EPA ID
Grid
Volume

	Time	Scale	Operator	Inbound		
In	05/07/2012 11:03:52	Inbound 301	vickyq		Gross	41660 lb
Out	05/07/2012 11:04:02	Outbound 301	vickyq		Tare	34300 lb*
			* Manual Weight		Net	7360 lb
					Tons	3.68

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Spwaste Solid Oth-	100	30.00	Yards				BLOM
2	FUEL-T-Fuel Surcha	100		%				BLOM
3	EVFt-P-Standard En	100		%				BLOM
4	TOL-Transportation	100	1	Load				BLOM

Total Tax
Total Ticket

Driver's Signature

403WM

WM OF NM - San Juan County
78 County Road 3140
Aztec, NM, 87410
Ph: (505) 334-1121

Original
Ticket# 1442419

Customer Name USA ENVIRONMENT LP USA ENVIRO
Carrier WM WM FARMINGTON-RESIDENTIAL
Ticket Date 05/02/2012
Vehicle# 412369
Volume
Payment Type Credit Account
Container
Manual Ticket#
Driver
Hauling Ticket#
Check#
Route
Billing # 0000331
State Waste Code
Gen EPA ID
Manifest 17590
Destination
Grid
PO 3319RCH004
Profile 100588NM (Enterprise Products Partners/Chaco Gas Processing Plant)
Generator 153-ENTERPRISEPRODUCTSCHACO Enterprise Products_Chaco Plant

	Time	Scale	Operator	Inbound		
In	05/02/2012 13:28:04	Inbound 301	lhenry2		Gross	57880 lb
Out	05/02/2012 13:28:26	Outbound 301	lhenry2		Tare	46640 lb*
			* Manual Weight		Net	11240 lb
					Tons	5.62

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Spwaste Solid Oth-	100	30.00	Yards				BLOM
2	FUEL-T-Fuel Surcha	100		%				BLOM
3	EVFt-P-Standard En	100		%				BLOM
4	TOL-Transportation	100	1	Load				BLOM

Total Tax
Total Ticket

Driver's Signature

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WM of NM - San Juan County
78 County Road 3140
Aztec, NM, 87410
Ph: (505) 334-1121

Original
Ticket# 1438319

Customer Name USA ENVIRONMENT LP USA ENVIRO
Carrier WM WM FARMINGTON-RESIDENTIAL
Ticket Date 04/18/2012
Vehicle# 412369
Volume
Payment Type Credit Account
Container
Manual Ticket#
Driver
Hauling Ticket#
Check#
Route
Billing # 0000331
State Waste Code
Gen EPA ID
Manifest 17578
Destination
Grid
PO 3319RCH004
Profile 100588NM (Enterprise Products Partners/Chaco Gas Processing Plant)
Generator 153-ENTERPRISEPRODUCTSCHACO Enterprise Products_Chaco Plant

	Time	Scale	Operator	Inbound		
In	04/18/2012 08:46:32	Inbound 301	vickyq		Gross	36820 lb*
Out	04/18/2012 08:47:05	Outbound 301	vickyq		Tare	31640 lb*
			* Manual Weight		Net	5180 lb
					Tons	2.59

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Spwaste Solid Oth-	100	30.00	Yards				BLOM
2	FUEL-T-Fuel Surcha	100		%				BLOM
3	EVFt-P-Standard En	100		%				BLOM
4	TOL-Transportation	100	1	Load				BLOM

Total Tax
Total Ticket

Driver's Signature

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WM of NM - San Juan County
78 County Road 3140
Aztec, NM, 87410
Ph: (505) 334-1121

Original
Ticket# 1434612

Customer Name USA ENVIRONMENT LP USA ENVIRO
Carrier WM WM FARMINGTON-RESIDENTIAL
Ticket Date 04/04/2012
Vehicle# 412299
Volume
Payment Type Credit Account
Container
Manual Ticket#
Driver
Hauling Ticket#
Check#
Route
Billing # 0000331
State Waste Code
Gen EPA ID
Manifest 17541
Destination
Grid
PO 3319RCH004
Profile 100588NM (Enterprise Products Partners/Chaco Gas Processing Plant)
Generator 153-ENTERPRISEPRODUCTSCHACO Enterprise Products_Chaco Plant

	Time	Scale	Operator	Inbound		
In	04/04/2012 11:22:43	Inbound 301	nbaca		Gross	42180 lb*
Out	04/04/2012 11:22:58	Outbound 301	nbaca		Tare	32300 lb*
			* Manual Weight		Net	9880 lb
					Tons	4.94

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Spwaste Solid Oth-	100	30.00	Yards				BLOM
2	FUEL-T-Fuel Surcha	100		%				BLOM
3	EVFt-P-Standard En	100		%				BLOM
4	TOL-Transportation	100	1	Load				BLOM

Total Tax
Total Ticket

Driver's Signature

403WM

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