

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

MAR 06 2009

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

**Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application**

- Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☒ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: CHI Operating, Inc. OGRID #: 004378
Address: 212 N. Main, Midland, TX 79702
Facility or well name: Pinon Federal Com Well No. 1
API Number: 30-015-36041 OCD Permit Number: _____
U/L or Qtr/Qtr SWSW Section 6 Township 17S Range 30E County: Eddy
Center of Proposed Design: Latitude N 32 858775' Longitude W 104 015933' NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: _____
Tank Construction material: _____
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness _____ mil ☐ HDPE ☐ PVC ☐ Other _____



5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC (*Applies to permanent pits, temporary pits, and below-grade tanks*)

- ☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☐ Alternate. Please specify _____

7.

Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

- ☐ Screen ☐ Netting ☐ Other _____
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

- ☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

- ☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: *The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.*

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

11.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.

Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

13.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.

Proposed Closure: 19.15.17.13 NMAC**Instructions:** Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System

☐ Alternative

Proposed Closure Method: ☐ Waste Excavation and Removal

☐ Waste Removal (Closed-loop systems only)

☐ On-site Closure Method (Only for temporary pits and closed-loop systems)

☐ In-place Burial ☐ On-site Trench Burial

☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)**Instructions:** Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ CRI _____ Disposal Facility Permit Number: _____ 6 _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?☐ Yes (If yes, please provide the information below) ☐ No*Required for impacted areas which will not be used for future service and operations:*☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No☐ NA

Ground water is between 50 and 100 feet below the bottom of the buried waste

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No☐ NA

Ground water is more than 100 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No☐ NA

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ Yes ☐ No

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

18.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20.

OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ Closure Completion Date: 3/2/09

22.

Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

- ☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- ☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☒ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☒ Re-vegetation Application Rates and Seeding Technique BLM 2
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

25.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): PAM CORBETT Title: REG CLERK

Signature:  Date: 3/4/09

e-mail address: pamc@chienergyinc.com Telephone: 432-625-5001

Accepted for record
 NMOCD

~~APR~~ 23 2009
 MARCH

Report Date: January 26, 2009
CHIOPE002SAM

Work Order: 9012110
Pinion Fed. Com. #1

Page Number: 1 of 1
Eddy Co., NM

Summary Report

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM 88240

Report Date: January 26, 2009

Work Order: 9012110



Project Location: Eddy Co., NM
Project Name: Pinion Fed. Com. #1
Project Number: CHIOPE002SAM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
185428	Floor Composite	soil	2009-01-20	13:30	2009-01-21

Sample: 185428 - Floor Composite

Param	Flag	Result	Units	RL
Chloride		12300	mg/Kg	4.00



6701 Aberdeen Avenue, Suite B Lubbock, Texas 79424 800•378•1295 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lap@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: January 26, 2009

Work Order: 9012110



Project Location: Eddy Co., NM
Project Name: Pinion Fed. Com. #1
Project Number: CHIOPE002SAM

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
185428	Floor Composite	soil	2009-01-20	13:30	2009-01-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Pinion Fed. Com. #1 were received by TraceAnalysis, Inc. on 2009-01-21 and assigned to work order 9012110. Samples for work order 9012110 were received intact at a temperature of 3.4 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
Chloride (Titration)	SM 4500-Cl B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9012110 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 185428 - Floor Composite

Laboratory: Midland
Analysis: Chloride (Titration) Analytical Method: SM 4500-Cl B Prep Method: N/A
QC Batch: 56232 Date Analyzed: 2009-01-22 Analyzed By: AR
Prep Batch: 48054 Sample Preparation: 2009-01-21 Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		12300	mg/Kg	50	4.00

Method Blank (1) QC Batch: 56232

QC Batch: 56232 Date Analyzed: 2009-01-22 Analyzed By: AR
Prep Batch: 48054 QC Preparation: 2009-01-21 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.01	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch: 56232 Date Analyzed: 2009-01-22 Analyzed By: AR
Prep Batch: 48054 QC Preparation: 2009-01-21 Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	99.5	mg/Kg	1	100	<2.01	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	101	mg/Kg	1	100	<2.01	101	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 185428

QC Batch: 56232 Date Analyzed: 2009-01-22 Analyzed By: AR
Prep Batch: 48054 QC Preparation: 2009-01-21 Prepared By: AR

Report Date: January 26, 2009
CHIOPE002SAM

Work Order: 9012110
Pinion Fed. Com. #1

Page Number: 5 of 5
Eddy Co., NM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	17200	mg/Kg	50	5000	12300	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	17400	mg/Kg	50	5000	12300	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 56232

Date Analyzed: 2009-01-22

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.9	100	85 - 115	2009-01-22

Standard (CCV-1)

QC Batch: 56232

Date Analyzed: 2009-01-22

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	100	100	85 - 115	2009-01-22

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1296
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: TAION Phone #: 432 238-6588
Address: (Street, City, Zip) 318 E TAYLOR HODGES NM 88240
Contact Person: ER TAYLOR Fax #:
E-mail:
Invoice to:
(If different from above)
Project #: CHIOPE 002 SAM Project Name: PINION FED COM #1
Project Location (including state): EDDY COUNTY NEW MEXICO Sampler Signature: [Signature]

ANALYSIS REQUEST
(Circle or Specify Method No.)

[illegible]

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
<i>Ed Taylor</i>	<i>Talon</i>	<i>11/21/08</i>	<i>8:22</i>	<i>[Signature]</i>	<i>Phu</i>	<i>11/21/08</i>	<i>8:22</i>	
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
<i>[Signature]</i>	<i>Talon</i>	<i>11/21/08</i>	<i>10:30A</i>	<i>[Signature]</i>	<i>Phu</i>	<i>11/21/08</i>	<i>10:30</i>	<i>3.4°C</i>
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:

LAB USE ONLY

Intac Y/N

Headspace Y/N NA

3.4

Log-in/Review

REMARKS:

All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # en 1

ORIGINAL COPY



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
TALON LPE
ATTN: EB TAYLOR
318 E. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 393-4658

Receiving Date: 01/26/09
Reporting Date: 01/26/09
Project Number: CHIOPE 002SAM (CHI OPERATING)
Project Name: PINION FEA COM #1
Project Location: EDDY COUNTY, NM

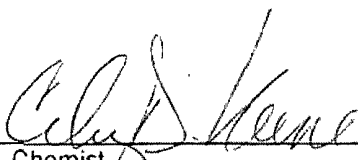
Analysis Date: 01/26/09
Sampling Date: 01/26/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: CK
Analyzed By: HM

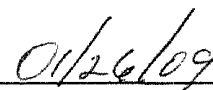
LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/kg)
H16760-1	FLOOR COMPOSITE	96
Quality Control		490
True Value QC		500
% Recovery		100
Relative Percent Difference		2.0

METHOD: Standard Methods

4500-Cl⁻B

Note: Analysis performed on a 1:4 w:v aqueous extract.


Chemist


Date

H16760 TALON

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 1 of 1

Company Name: <u>FELTON</u>				BILL TO				ANALYSIS REQUEST																			
Project Manager: <u>ES TAYLOR</u>				P.O. #:				<div style="writing-mode: vertical-rl; transform: rotate(180deg);">CHLORIDES 4 SOL</div>																			
Address: <u>318 E. TAYLOR</u>				Company:																							
City: <u>HOBBS</u> State: <u>NM</u> Zip: <u>88240</u>				Attn:																							
Phone #: <u>432 235-6388</u> Fax #:				Address:																							
Project #: <u>CHLORIDES 4 SOL</u> Project Owner: <u>CHLORIDES 4 SOL</u>				City:																							
Project Name: <u>PIVOT FEA COM #1</u>				State: Zip:																							
Project Location: <u>EDDY COUNTY NM</u>				Phone #:																							
Sampler Name: <u>ES TAYLOR</u>				Fax #:																							
FOR LAB USE ONLY		Lab I.D. <u>H16760</u>		Sample I.D. <u>1 Field Composite</u>		(GIRAB OR (C)OMP) # CONTAINERS <u>1</u>		MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:				PRESERV. ACID/BASE ICE / COOL OTHER:		SAMPLING DATE <u>1/21/09</u> TIME <u>8:45</u>													

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Sampler Relinquished:		Date: <u>1/21/09</u>	Received By:		Phone Result: <input type="checkbox"/> No	Add'l Phone #:
Relinquished By: <u>ES TAYLOR</u>		Time: <u>13:05</u>	Received By: <u>Cal Keene</u>		Fax Result: <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One)		Date:	Temp. Sample Condition		REMARKS: <u>RUSH</u>	
Sampler - UPS - Bus - Other:		Time:	Cool Intact			
			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: (Initials) <u>CDH</u>	

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Report Date: January 13, 2009
CHIOPE002SAM

Work Order: 9011215
Pinion Fed. Com. #1

Page Number: 1 of 1
Eddy Co., NM

Summary Report

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM 88240

Report Date: January 13, 2009

Work Order: 9011215



Project Location: Eddy Co., NM
Project Name: Pinion Fed. Com. #1
Project Number: CHIOPE002SAM

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
184439	Floor Composite	soil	2009-01-10	14:00	2009-01-12

Sample - Field Code	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
184439 - Floor Composite	<50.0	<1.00

Sample: 184439 - Floor Composite

Param	Flag	Result	Units	RL
Benzene		<0.0100	mg/Kg	0.0100
Toluene		0.0749	mg/Kg	0.0100
Ethylbenzene		<0.0100	mg/Kg	0.0100
Xylene		0.202	mg/Kg	0.0100
Total BTEX		0.277	mg/Kg	0.0600
Chloride		14300	mg/Kg	4.00



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite F El Paso, Texas 79922 806•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•701•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: January 14, 2009

Work Order: 9011215



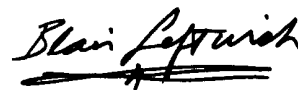
Project Location: Eddy Co., NM
Project Name: Pinion Fed. Com. #1
Project Number: CHIOPE002SAM

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
184439	Floor Composite	soil	2009-01-10	14:00	2009-01-12

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 13 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink, reading "Blair Leftwich". The signature is written in a cursive style with a horizontal line underneath.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Pinion Fed. Com. #1 were received by TraceAnalysis, Inc. on 2009-01-12 and assigned to work order 9011215. Samples for work order 9011215 were received intact at a temperature of 4.6 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
BTEX	S 8021B
Chloride (Titration)	SM 4500-Cl B
Total BTEX	S 8021B
TPH 418.1	E 418.1
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9011215 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 184439 - Floor Composite

Laboratory: Midland
Analysis: BTEX, Total BTEX
QC Batch: 55937
Prep Batch: 47810

Analytical Method: S 8021B
Date Analyzed: 2009-01-12
Sample Preparation: 2009-01-12

Prep Method: S 5035
Analyzed By: ME
Prepared By: ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		0.0749	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		0.202	mg/Kg	1	0.0100
Total BTEX		0.277	mg/Kg	1	0.0600

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.938	mg/Kg	1	1.00	94	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.956	mg/Kg	1	1.00	96	48.2 - 155

Sample: 184439 - Floor Composite

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 55915
Prep Batch: 47790

Analytical Method: SM 4500-Cl B
Date Analyzed: 2009-01-12
Sample Preparation: 2009-01-12

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		14300	mg/Kg	50	4.00

Sample: 184439 - Floor Composite

Laboratory: Lubbock
Analysis: TPH 418.1
QC Batch: 55969
Prep Batch: 47840

Analytical Method: E 418.1
Date Analyzed: 2009-01-14
Sample Preparation: 2009-01-14

Prep Method: N/A
Analyzed By: CM
Prepared By: CM

Parameter	Flag	RL Result	Units	Dilution	RL
TRPHC		44.5	mg/Kg	1	10.0

Report Date: January 14, 2009
CHIOPE002SAM

Work Order: 9011215
Pinion Fed. Com. #1

Page Number: 5 of 13
Eddy Co., NM

Sample: 184439 - Floor Composite

Laboratory: Midland
Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
QC Batch: 55932 Date Analyzed: 2009-01-12 Analyzed By: AG
Prep Batch: 47809 Sample Preparation: 2009-01-12 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		88.2	mg/Kg	1	100	88	10 - 250.4

Sample: 184439 - Floor Composite

Laboratory: Midland
Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
QC Batch: 55938 Date Analyzed: 2009-01-12 Analyzed By: ME
Prep Batch: 47810 Sample Preparation: 2009-01-12 Prepared By: ME

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.908	mg/Kg	1	1.00	91	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		0.891	mg/Kg	1	1.00	89	63.8 - 141

Method Blank (1) QC Batch: 55915

QC Batch: 55915 Date Analyzed: 2009-01-12 Analyzed By: AR
Prep Batch: 47790 QC Preparation: 2009-01-12 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.01	mg/Kg	4

Method Blank (1) QC Batch: 55932

QC Batch: 55932 Date Analyzed: 2009-01-12 Analyzed By: AG
Prep Batch: 47809 QC Preparation: 2009-01-12 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
DRO		<15.8	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		67.5	mg/Kg	1	100	68	30.9 - 146.4

Method Blank (1) QC Batch: 55937

QC Batch: 55937
Prep Batch: 47810

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: ME
Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00580	mg/Kg	0.01
Toluene		<0.00470	mg/Kg	0.01
Ethylbenzene		<0.00530	mg/Kg	0.01
Xylene		<0.0136	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.961	mg/Kg	1	1.00	96	48.3 - 132.5
4-Bromofluorobenzene (4-BFB)		0.914	mg/Kg	1	1.00	91	37.7 - 128.9

Method Blank (1) QC Batch: 55938

QC Batch: 55938
Prep Batch: 47810

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: ME
Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
GRO		<0.442	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.912	mg/Kg	1	1.00	91	39.2 - 135.2
4-Bromofluorobenzene (4-BFB)		0.832	mg/Kg	1	1.00	83	16.8 - 138.1

Method Blank (1) QC Batch: 55969

QC Batch: 55969
Prep Batch: 47840

Date Analyzed: 2009-01-14
QC Preparation: 2009-01-14

Analyzed By: CM
Prepared By: CM

Report Date: January 14, 2009
CHIOPE002SAM

Work Order: 9011215
Pinion Fed. Com. #1

Page Number: 7 of 13
Eddy Co., NM

Parameter	Flag	MDL Result	Units	RL
TRPHC		<5.28	mg/Kg	10

Laboratory Control Spike (LCS-1)

QC Batch: 55915
Prep Batch: 47790

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.2	mg/Kg	1	100	<2.01	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.01	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 55932
Prep Batch: 47809

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	259	mg/Kg	1	250	<15.8	104	27.8 - 152.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	258	mg/Kg	1	250	<15.8	103	27.8 - 152.1	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	89.4	91.2	mg/Kg	1	100	89	91	38 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 55937
Prep Batch: 47810

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: ME
Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.990	mg/Kg	1	1.00	<0.00580	99	73.3 - 116.6
Toluene	0.985	mg/Kg	1	1.00	<0.00470	98	78.6 - 115.1
Ethylbenzene	0.984	mg/Kg	1	1.00	<0.00530	98	77.4 - 114.9
Xylene	2.95	mg/Kg	1	3.00	<0.0136	98	78.2 - 114.7

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.02	mg/Kg	1	1.00	<0.00580	102	73.3 - 116.6	3	20
Toluene	1.02	mg/Kg	1	1.00	<0.00470	102	78.6 - 115.1	4	20
Ethylbenzene	1.03	mg/Kg	1	1.00	<0.00530	103	77.4 - 114.9	5	20
Xylene	3.08	mg/Kg	1	3.00	<0.0136	103	78.2 - 114.7	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.921	0.966	mg/Kg	1	1.00	92	97	45 - 124.2
4-Bromofluorobenzene (4-BFB)	0.931	0.937	mg/Kg	1	1.00	93	94	47.2 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 55938
Prep Batch: 47810

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: ME
Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.21	mg/Kg	1	10.0	<0.442	72	57.5 - 106.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.18	mg/Kg	1	10.0	<0.442	72	57.5 - 106.4	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.900	0.917	mg/Kg	1	1.00	90	92	63.8 - 134.3
4-Bromofluorobenzene (4-BFB)	0.851	0.868	mg/Kg	1	1.00	85	87	53.3 - 123.6

Laboratory Control Spike (LCS-1)

QC Batch: 55969
Prep Batch: 47840

Date Analyzed: 2009-01-14
QC Preparation: 2009-01-14

Analyzed By: CM
Prepared By: CM

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	273	mg/Kg	1	250	<5.28	109	75.5 - 136

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC	269	mg/Kg	1	250	<5.28	108	75.5 - 136	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 184439

QC Batch: 55915
Prep Batch: 47790

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	18900	mg/Kg	50	5000	14300	92	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	19400	mg/Kg	50	5000	14300	102	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 184415

QC Batch: 55932
Prep Batch: 47809

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	219	mg/Kg	1	250	<15.8	88	18 - 179.5

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	217	mg/Kg	1	250	<15.8	87	18 - 179.5	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	83.0	86.0	mg/Kg	1	100	83	86	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 184415

QC Batch: 55937
Prep Batch: 47810

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: ME
Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.00	mg/Kg	1	1.00	<0.00580	100	62.2 - 134.3
Toluene	1.02	mg/Kg	1	1.00	<0.00470	102	62.6 - 145.4
Ethylbenzene	1.04	mg/Kg	1	1.00	<0.00530	104	64.6 - 146.4
Xylene	3.14	mg/Kg	1	3.00	<0.0136	105	64.3 - 148.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.01	mg/Kg	1	1.00	<0.00580	101	62.2 - 134.3	1	20
Toluene	1.04	mg/Kg	1	1.00	<0.00470	104	62.6 - 145.4	2	20
Ethylbenzene	1.07	mg/Kg	1	1.00	<0.00530	107	64.6 - 146.4	3	20
Xylene	3.20	mg/Kg	1	3.00	<0.0136	107	64.3 - 148.8	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.952	0.920	mg/Kg	1	1	95	92	38.8 - 127.5
4-Bromofluorobenzene (4-BFB)	0.979	0.953	mg/Kg	1	1	98	95	49.3 - 142.4

Matrix Spike (MS-1) Spiked Sample: 184414

QC Batch: 55938
Prep Batch: 47810

Date Analyzed: 2009-01-12
QC Preparation: 2009-01-12

Analyzed By: ME
Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	7.59	mg/Kg	1	10.0	<0.442	76	10 - 139.3

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	7.78	mg/Kg	1	10.0	<0.442	78	10 - 139.3	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.921	0.902	mg/Kg	1	1	92	90	21.3 - 119
4-Bromofluorobenzene (4-BFB)	0.920	0.904	mg/Kg	1	1	92	90	52.5 - 154

Matrix Spike (MS-1) Spiked Sample: 184569

QC Batch: 55969
Prep Batch: 47840

Date Analyzed: 2009-01-14
QC Preparation: 2009-01-14

Analyzed By: CM
Prepared By: CM

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
TRPHC	402	mg/Kg	1	250	104	119	10 - 354

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
TRPHC	412	mg/Kg	1	250	104	123	10 - 354	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 55915

Date Analyzed: 2009-01-12

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2009-01-12

Standard (CCV-1)

QC Batch: 55915

Date Analyzed: 2009-01-12

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2009-01-12

Standard (ICV-1)

QC Batch: 55932

Date Analyzed: 2009-01-12

Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	258	103	85 - 115	2009-01-12

Standard (CCV-1)

QC Batch: 55932

Date Analyzed: 2009-01-12

Analyzed By: AG

Report Date: January 14, 2009
CHIOPE002SAM

Work Order: 9011215
Pinion Fed. Com. #1

Page Number: 12 of 13
Eddy Co., NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	238	95	85 - 115	2009-01-12

Standard (ICV-1)

QC Batch: 55937

Date Analyzed: 2009-01-12

Analyzed By: ME

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.108	108	85 - 115	2009-01-12
Toluene		mg/Kg	0.100	0.107	107	85 - 115	2009-01-12
Ethylbenzene		mg/Kg	0.100	0.108	108	85 - 115	2009-01-12
Xylene		mg/Kg	0.300	0.324	108	85 - 115	2009-01-12

Standard (CCV-1)

QC Batch: 55937

Date Analyzed: 2009-01-12

Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.105	105	85 - 115	2009-01-12
Toluene		mg/Kg	0.100	0.106	106	85 - 115	2009-01-12
Ethylbenzene		mg/Kg	0.100	0.106	106	85 - 115	2009-01-12
Xylene		mg/Kg	0.300	0.316	105	85 - 115	2009-01-12

Standard (ICV-1)

QC Batch: 55938

Date Analyzed: 2009-01-12

Analyzed By: ME

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.993	99	85 - 115	2009-01-12

Standard (CCV-1)

QC Batch: 55938

Date Analyzed: 2009-01-12

Analyzed By: ME

Report Date: January 14, 2009
CHIOPE002SAM

Work Order: 9011215
Pinion Fed. Com. #1

Page Number: 13 of 13
Eddy Co., NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.881	88	85 - 115	2009-01-12

Standard (ICV-1)

QC Batch: 55969

Date Analyzed: 2009-01-14

Analyzed By: CM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	95.5	96	80 - 120	2009-01-14

Standard (CCV-1)

QC Batch: 55969

Date Analyzed: 2009-01-14

Analyzed By: CM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
TRPHC		mg/Kg	100	98.8	99	80 - 120	2009-01-14

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: TAION LPE	Phone #: 432 258-6588
Address: (Street, City, Zip) 318 E. TAYLOR HOBBS NM	Fax #:
Contact Person: ER TAYLOR	E-mail:
Invoice to: (If different from above)	
Project #: CHIOPE 002 SAM	Project Name: PINION FEA. COM #1
Project Location (including state): ERRY COUNTY NM	Sampler Signature: [Signature]

ANALYSIS REQUEST
(Circle or Specify Method No.)

[illegible]

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp ^o C:
<i>Edna Lopez</i>	<i>TALON</i>	<i>11/12/08</i>	<i>10:40</i>	<i>Lindsey Wells</i>	<i>Traq</i>	<i>1-12-08</i>	<i>10:44</i>	<i>6</i>
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp ^o C:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp ^o C:

LAB USE ONLY

Intact Y / N

Headspace Y / N NA

4.6

Log-In/Review

REMARKS:

All tests Midland

☐ Dry Weight Basis Required

☐ TRRP Report Required

☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier #

Carry-in

ORIGINAL COPY