

Key Energy Services 6 Desta Drive Suite 4400 Midland, Texas 79705

s Louis Sanchez Telephone: 432.571.7382 Facsimile: 432.571.7173 Isanchez@keyenergy.com RECEIVED OCD

3

2010 OCT -1 A11: 29

September 30, 2010

Mr. Brad Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Mr. Jones:

Attached is Form C-144 page 3 and 5 for the permanent brine pit at the Truckers Brine Station #2 (Truckers 2) in Hobbs, NM located at 1502 West Broadway Place. The pages have been updated with the information you requested on September 30, 2010. If you need anything further please feel free to contact me.

Sincerely,

Louis Sanchez

Corporate Environmental Specialist II

Attached:

C-144 (Page 3 & 5)



Key Energy Services 6 Desta Drive Suite 4400 Midland, Texas 79705 Louis Sanchez Telephone: 432.571.7382 Facsimile: 432.571.7173 Isanchez@keyenergy.com

> С П

September 15, 2010

Mr. Brad Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Certified Mail # 7002 2410 0001 5903 2765

Mr. Jones:

Attached is Form C-144 for the permanent brine pit at the Truckers Brine Station #2 (Truckers 2) in Hobbs, NM located at 1502 West Broadway Place. The Closure Plan for the permanent lined brine pit is as follows:

Background

The permanent lined brine pit at the Truckers 2 is a 140' wide by 140' long and has a total depth of 10'. The pit was never filled over 8' deep to allow for 2' of freeboard. The operations at the facility ceased in April 2007 when the brine well (API# 30-025-07551) was plugged. The unused brine has remained in the pit and become solidified rock salt due to evaporation.

<u>Notice</u>

Key has provided the New Mexico State Land Office (NMSLO), property owner, written notice under certified letter. The letter and certification receipt are attached for review.

Protocols and Procedures

- Key will remove all liquids and solidified chlorides from the permanent pit prior to implementing a closure method and shall dispose of the liquids and solidified chlorides in a division-approved facility.
- Key will remove the pit liner system and dispose of it in a division-approved facility. All on-site equipment associated with permanent pit has already been removed other than a sump (below grade tank) used as secondary containment for the loading pad. The closure plan for this sump (below grade tank) will be outlined in a separate correspondence to the NMOCD Hobbs (Geoff Leking).

Mr. Brad Jones September 15, 2010 P a g e | 2

Confirmation Sampling Plan

- Key will test the soils beneath the permanent pit to determine whether a release has occurred. Key will collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 does not exceed 250 mg/kg, or the background concentration, whichever is greater.
- If Key determines that a release has occurred, then Key will comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.

Disposal Facility Name and Permit Number

Pit materials, liners and impacted soils:

Sundance Servics Parabo Facility 3 miles East of Eunice, NM of State Hwy 18 Permit# 010003

Fluids (water and unusable brine):

Mesquite SWD (Rice SWD Well F-29) Hobbs, NM Permit # R1574

Crazy Horse SWD Hobbs, NM Permit# SWD-1004

Soil Cover Designs:

- The soil cover for closures where Key has removed the pit contents or remediated the contaminated soil to the division's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
- Key shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

<u>Alternative Re-vegetation</u>: (The signed agreement for an alternative re-vegetation plan between Key and the NMSLO is attached)

- As this facility is located in the city limits of Hobbs, NM in an industrial area, after the soil cover design is in place, Key shall finish the former pit and below grade tank areas (southeast area of the facility) with packed caliche. As Key will still utilize this facility as a water station, with heavy truck traffic, it is not practicable to re-vegetate the area with native perennial cover. The concrete unloading pad will not be removed from this area.
- The northwest area of the facility (former brine well and pump house location), which will be undisturbed by the closure activities, is covered with packed caliche and will not be seeded for re-vegetation as plans are in place to use this area as a location for fresh water tanks utilizing the water well on location. Key has maintained the water rights for the well from the NMSLO since the well was used in the brine mining operations.
- The northeast area of the facility is undisturbed and already covered by native cover. This area will not be disturbed as part of the closure activities.
- The southwestern area of the facility is covered in packed caliche. A city water tap is located in this area. Due to the heavy truck traffic in this area it will not be re-vegetated with native perennial cover. This area will not be disturbed as part of the closure activities.

Closure Report

- Within 60 days of closure completion, Key will submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; a plot plan; and details on back-filling, capping and covering, where applicable.
- In the closure report, Key will certify that all information in the report and attachments is correct and that the operator has complied with all applicable closure requirements and conditions specified in the approved closure plan.

Mr. Brad Jones September 15, 2010 P a g e | 4

Sincerely,

Louis Sanchez

Corporate Environmental Specialist II

Attached:

C-144

New Mexico State Land Office Closure Notification

Alternative Re-vegetation Authorization

Certified Letter Receipt

C-141

Analytical Results

P:\ENVIRONMENTAL\NEW MEXICO\NEW MEXICO SWDS & BRINE STATIONS\NEW FILE NM-13036 - TRUCKERS #2 BRINE STATION - NM-7020\PIT CLOSURE\PIT CLOSURE PLAN.DOC

District I	State of New Mexico
1625 N. French Dr., Hobbs, NM 88240	Energy Minerals and Natural Resources
1301 W. Grand Avenue, Artesia, NM 88210	Department
District III	Oil Conservation Division
1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	1220 South St. Francis Dr.
	Santa Fe, NM 87505

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,			
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: <u>Key Energy Services, LLC</u> OGRID #: <u>19797</u>			
Address: <u>6 Desta Drive, Suite 4400, Midland, TX 79705</u>			
Facility or well name: <u>Truckers (Brine Station)</u>			
API Number: 30-025-07551 OCD Permit Number:			
U/L or Qtr/Qtr <u>K: 1980</u> Section <u>33</u> Township <u>18-S</u> Range <u>38-E</u> County: <u>Lea</u>			
Center of Proposed Design: Latitude <u>32 Deg 42' 04.69" N</u> Longitude <u>103 Deg 09' 19.42" W</u> 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 3. 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: Thicknessmil 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: Thicknessmil 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. 			

.

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

6

7.

8.

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)

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

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 acception material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	ptable source opriate district opproval. ing pads or
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	Yes 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 	Yes No
 Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks) Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	Yes No
 Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) 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 search; 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	
 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.	☐ Yes ☐ No

Within a 100-year floodplain.

FEMA map

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 19.15.17.10 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
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
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.
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 G 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 indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.	more than two
Disposal Facility Name: Disposal Facility Permit Number:	
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 <i>will not</i> be used for future ser Yes (If yes, please provide the information below) No	vice and operations?
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	с
17. <u>Siting Criteria (regarding on-site closure methods only)</u> : 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate dist considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	rce material are rict office or may be ifications and/or
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 pl 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 drving nad) - based upon the appropriate requirements of 19 	an.` Please indicate,

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

 Construction Decay, 1 and 2
 Protocols and Procedures - based upon the appropriate requirements of 19.15.17.15 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 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site
 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 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

19.	
Operator Application Certification: I hereby certify that the information submitted with this application is true, accur	ate and complete to the best of my knowledge and belief.
Name (Print): Louis Sanchez	Title: Corp. Environmentel Specialist II
Signature: Our anche	Date: 9/15/10
e-mail address: Sanchez @ Keyenergy . con	Telephone:
20. <u>OCD Approval</u> : Permit Application (including closure plan) Closure P	lan (only) OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date: 10 27/10
Title: Environmental Engineer	OCD Permit Number:
^{21.} Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior of The closure report is required to be submitted to the division within 60 days of t section of the form until an approved closure plan has been obtained and the cl	K of 19.15.17.13 NMAC to implementing any closure activities and submitting the closure report. the completion of the closure activities. Please do not complete this losure activities have been completed.
· · · · · · · · · · · · · · · · · · ·	Closure Completion Date:
 22. Closure Method: Waste Excavation and Removal On-Site Closure Method Alterna If different from approved plan, please explain. 	ative Closure Method 🔲 Waste Removal (Closed-loop systems only)
23. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems</u> <i>Instructions: Please indentify the facility or facilities for where the liquids, drift two facilities were utilized.</i>	That Utilize Above Ground Steel Tanks or Haul-off Bins Only: lling fluids and drill cuttings were disposed. Use attachment if more than
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 Yes (If yes, please demonstrate compliance to the items below)	in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and operation Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Revegetation Ambication Rates and Seeding Technique	ions:
24.	
Closure Report Attachment Checklist: Instructions: Each of the following it 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 Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	ems must be attached to the closure report. Please indicate, by a check
25. Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure requirements belief. I also certify that the closure complies with all applicable closure requirements at a second s	report is true, accurate and complete to the best of my knowledge and nents and conditions specified in the approved closure plan.
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:



Key Energy Services 6 Desta Drive Suite 4400 Midland, Texas 79705 L. ... Sanchez Telephone: 432.571.7382 Facsimile: 432.571.7173 Isanchez@keyenergy.com

August 11, 2010

Mr. Steven Ikeda Mew Mexico State Land Office P.O. Box 1148 Santa Fe, NM 87504

Certified Mail # 7007 2560 0003 3687 6938

Mr. Ikeda:

The letter is to notify the New Mexico State Land Office (NMSLO) of Key Energy Service, Inc.'s (Key) plan to close the brine pit and below grade tank (loading area sump) at our former brine station located at 1502 W Broadway Place, Hobbs, NM. Per 19.15.17.13 NMAC Key is required to notify the land owner of the closure of such facilities. Please consider this certified letter as notification of such closure plans. Thank you and please feel free to contact me with any questions.

Sincerely,

Louis Sanchez

Corporate Environmental Specialist II

cc:

BURNER BERR

Myra Harrison, NMSLO – Hobbs Office 2702-D N. Grimes Hobbs, NM 88240 Key Energy Services Truckers Brine Station #2 1502 W Broadway Place, Hobbs, NM

Alternative Re-vegetation Authorization

Soil cover designs:

- The soil cover for closures where Key has removed the pit contents or remediated the contaminated soil to the division's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
- Key shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

Alternative Re-vegetation:

- As this facility is located in the city limits of Hobbs, NM in an industrial area, after the soil cover design is in place, Key shall finish the former pit and below grade tank areas (southeast area of the facility) with packed caliche. As Key will still utilize this facility as a water station, with heavy truck traffic, it is not practicable to re-vegetate the area with native perennial cover. The concrete unloading pad will not be removed from this area.
- The northwest area of the facility (former brine well and pump house location), which will be undisturbed by the closure activities, is covered with packed caliche and will not be seeded for re-vegetation as plans are in place to use this area as a location for fresh water tanks utilizing the water well on location. Key has maintained the water rights for the well from the NMSLO since the well was used in the brine mining operations.
- The northeast area of the facility is undisturbed and already covered by native cover. This area will not be disturbed as part of the closure activities.
- The southwestern area of the facility is covered in packed caliche. A city water tap is located in this area. Due to the heavy truck traffic in this area it will not be re-vegetated with native perennial cover. This area will not be disturbed as part of the closure activities.

Date:

Please sign below to demonstrate agreement with this alternative re-vegetation plan:

Sign:

Print: Steven

Title: Environment pecialist New Mexico State Land Office Representative

. .

8/18/2010

Louis Sánchez Key Energy Services, Inc. Corporate Environmental Specialist II



State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

	OPERATOR	Initial Report	Final Report
Name of Company: Key Energy Services, LLC	Contact: Louis Sanchez		
Address: 6 Desta Dr, Suite 4400, Midland, TX 79705	Telephone No.: 432-571-7382		
Facility Name: Truckers Brine Station #2	Facility Type: Brine Station		

Surface Owner: NM State Land Office Mineral Owner: NM State Land Office Lease No.; BL-09880001

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
К	33	18-S	38-E	1980	South	1980	West	Lea

Latitude 32 Deg 42' 04.69" N Longitude 103 Deg 09' 19.42" W

NATURE OF RELEASE

Type of Release: Brine	Volume of Release: Unknown	Volume Recovered: None
Source of Release: Liner failure	Date and Hour of Occurrence: NA	Date and Hour of Disc.: July 13,2010
Was Immediate Notice Given?	If YES, To Whom?	······································
🗌 Yes 🔲 No 🖾 Not Required		
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES. Volume Impacting the Wat	ercourse.
🗌 Yes 🛛 No		
		· · · · · · · · · · · · · · · · · · ·
If a Watercourse was Impacted, Describe Fully.*		
		· · · ·
Describe Cause of Problem and Remedial Action Taken *	· · · · · · · · · · · · · · · · · · ·	
beenve chase of Problem and Kennedial Menon Paken.		
Impacted soil below a 30 mil brine pit liner discovered during the closure	of the brine pit. The base of the pit w	as 10' below ground surface (bgs) and the
pit is 140' long on each side sloping to the base that is 100' on each side.	Soil has been removed 2' below the l	iner (12' bgs). Chloride levels are still
above the 500 mg/kg cleanup standard at this level (PC-02) as well as the	4' level below the liner (PC-03). San	ples from just below the liner (PC-01)
indicated non-detectible levels of Benzene, BTEX, and TPH (8015M). A	n additional sample 2' below the liner	indicated TPH (418.1) levels below the
500 mg/kg cleanup standard (PC-02). This left chlorides as the only cons	tituent of concern. (Analytical attache	ed)
· · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Describe Area Affected and Cleanup Action Taken.*		
The five next composite complete fithe evenuation 2' below the base of the	liner (BC 02) is shows the 500 media	alaanun atandand fan aklanidaa and Kauja
The five part composite sample of the excavation 2 below the base of the	2' below grade. The remaining 2' way	cleanup standard for chlorides and key is
proposing to backing include a level a prevent proposing to backing to a level a new proposing of precipitation over the excavation and to prevent infiltration over the excavation and the prevent infiltra	tion thus preventing the transport of t	he elevated chloride levels from soil to
groundwater. Groundwater at the location is ~65 feet below ground surfa	ce (bgs). (Analytical attached)	ne elevated enforme levels nom son to
		•
I hereby certify that the information given above is true and complete to t	he best of my knowledge and understa	nd that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release n	otifications and perform corrective ac	tions for releases which may endanger
public health or the environment. The acceptance of a C-141 report by th	e NMOCD marked as "Final Report"	does not relieve the operator of liability
should their operations have failed to adequately investigate and remediat	e contamination that pose a threat to g	round water, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of respons	ibility for compliance with any other
federal, state, or local laws and/or regulations.	·	
	OIL CONSERV	ATION DIVISION
Simon arther		
Signature:		
Printed Name: Louis Sanchez		
Trined Faint, Lows Sanciez		
Title: Corporate Environmental Specialist II	Approval Date:	Expiration Date:
The corporate Environmental operation in		Expiration Date.
E-mail Address: Isanchez@kevenergy.com	Conditions of Approval:	
		Attached
Date: 7/14/10 Phone: (432) 571-7382		

Analytical Report 379445

for

Key Energy

Project Manager: Louis Sanchez

Trackers 2 Pit Closure

NM-13036

30-JUN-10





12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)





Project Manager: Louis Sanchez Key Energy 6 Desta Drive, Ste. 4400 Midland, TX 79705

Reference: XENCO Report No: 379445 Trackers 2 Pit Closure Project Address: Hobbs, NM

Louis Sanchez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 379445. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 379445 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron

Odessa Laboratory Director

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



Sample Cross Reference 379445



Key Energy, Midland, TX

Trackers 2 Pit Closure

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id	
PC-01	S	Jun-29-10 10:00		379445-001	

Page 3 of 14



Client Name: Key Energy Project Name: Trackers 2 Pit Closure



Project ID:NM-13036Work Order Number:379445

Report Date: 30-JUN-10 Date Received: 06/29/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-812661 BTEX by EPA 8021B SW8021BM Batch 812661, Benzene, Ethylbenzene, m,p-Xylenes , o-Xylene RPD is outside the QC limit.

This is most likely due to sample non-homogeneity. Samples affected are: 379445-001.

SW8021BM

Batch 812661, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 379205-001 D.

Batch: LBA-812775 Inorganic Anions by EPA 300 None

Batch: LBA-812778 Percent Moisture AD2216A

Batch 812778, Percent Moisture RPD is outside the QC limit. This is most likely due to sample non-homogeneity. Samples affected are: 379445-001.

Batch: LBA-812840 TPH By SW8015 Mod None

XENCO Laboratorics

Project Id: NM-13036

Project Location: Hobbs, NM

Contact: Louis Sanchez

Certificate of Analysis Summary 379445

Key Energy, Midland, TX



Project Name: Trackers 2 Pit Closure

	Draft	
--	-------	--

Date Received in Lab: Tue Jun-29-10 03:50 pm

Report Date: 30-JUN-10

Project Manager: Brent Barron, II

	Lab Id:	379445-001				
Analysis Dequested	Field Id:	PC-01				
Analysis Requested	Depth:	•				
	Matrix:	SOIL				
	Sampled:	Jun-29-10 10:00				
Anions by E300	Extracted:					
	Analyzed:	Jun-30-10 08:49		-		
	Units/RL:	mig/kg RL		•		,
Chloride		61600 4200				
BTEX by EPA 8021B	Extracted:	Jun-29-10 16:40				
	Analyzed:	Jun-29-10 23:45				
	Units/RL:	mg/kg RL			· ·	
Benzene		ND 0.0011			,	
Toluene		ND 0.0022				
Ethylbenzene		ND 0.0011				
m,p-Xylenes		ND 0.0022	 		· · · · · · · · · · · · · · · · · · ·	· .
o-Xylene		ND 0.0011	 			
Total Xylenes		ND 0.0011				
Total BTEX		ND 0.0011				
Percent Moisture	Extracted:					
	Analyzed:	Jun-30-10 11:47		· .		
	Units/RL:	% RL				
Percent Moisture		10.5 1.00	•			
TPH By SW8015 Mod	Extracted:	Jun-30-10 08:45	· · ·			
	Analyzed:	Jun-30-10 12:37				
	Units/RL:	mg/kg RL				
C6-C12 Gasoline Range Hydrocarbons		ND 28.1				
C12-C28 Diesel Range Hydrocarbons		ND 28.1				
C28-C35 Oil Range Hydrocarbons		ND 28.1				
Total TPH		ND 28.1				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Page 5 of 14

Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

4143 Greenbriar Dr, Stafford, Tx 77477 9701 Harry Hines Blvd, Dallas, TX 75220 5332 Blackberry Drive, San Antonio TX 78238 2505 North Falkenburg Rd, Tampa, FL 33619 5757 NW 158th St, Miami Lakes, FL 33014 12600 West I-20 East, Odessa, TX 79765 842 Cantwell Lane, Corpus Christi, TX 78408 Phone Fax (281) 240-4200 (281) 240-4280 (214) 351-9139 (214) 902 0300 (210) 509-3334 (210) 509-3335 (813) 620-2000 (813) 620-2033 (305) 823-8500 (305) 823-8555 (432) 563-1713 (432) 563-1800 (361) 884-0371 (361) 884-9116



Form 2 - Surrogate Recoveries

Project Name: Trackers 2 Pit Closure

ork Orders : 379445	,	VC Boto	Project II): NM-1303	6	
Lab Batcn #: 012001 Units: mg/kg	Sample: 300302-1-BKS7 B Date Analyzed: 06/29/10 12:00	S Batt	RROGATE RE	ECOVERY	STUDY	
BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			102		
1,4-Difluorobenzene	· · · · ·	0.0307	0.0300	102	80-120	
4-Bromoiluorobenzene		0.0293	0.0300	98	80-120	
Lab Batch #: 812661	Sample: 566962-1-BSD / B	SD Bate	h: 1 Matrix:	Solid		<u>.</u>
Units: mg/kg	Date Analyzed: 06/29/10 12:22	SU	RROGATE RE	COVERY	STUDY	
втех	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	0.0295	0.0300	98	80-120	
Lab Batch #: 812661	Sample: 566962-1-BLK / B	LK Bate	h: 1 Matrix:	: Solid	L	
Units: mg/kg	Date Analyzed: 06/29/10 13:29	SU	RROGATE RE	COVERY	STUDY	
втех	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0256	0.0300	85	80-120	
4-Bromofluorobenzene		0.0293	0.0300	98	80-120	
Lab Batch #: 812661	Sample: 379205-001 D / M	D Bate	h: 1 Matrix:	Sludge		
Units: mg/kg	Date Analyzed: 06/29/10 15:07	SU	RROGATE RE	COVERY	STUDY	
BTEX	<pre>< by EPA 8021B Analytes</pre>	Amount Found [A]	True Amount (B)	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0306	0.0300	102	80-120	
4-Bromofluorobenzene		0.0150	0.0300	50	80-120	**
Lab Batch #: 812661	Sample: 379445-001 / SMP	Bate	h: 1 Matrix:	: Soil	I	
Units: mg/kg	Date Analyzed: 06/29/10 23:45	SU	RROGATE RE	COVERY	STUDY	
ВТЕХ	X by EPA 8021B Analvtes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0259	0.0300	86	80-120	
4-Bromofluorobenzene		0.0306	0.0300	102	80-120	

* * Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: Trackers 2 Pit Closure

Vork Orders: 379445	,		Project II): NM-13036	5	
Lab Batch #: 812840	Sample: 567058-1-BKS / B	KS Batch	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 06/30/10 11:06	SU	RROGATE RE	COVERY S	STUDY	
ТРН І	3y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	-	110	99.9	110	70-135	
o-Terphenyl		51.9	50.0	104	70-135	
Lab Batch #: 812840	Sample: 567058-1-BSD / B	SD Batcl	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 06/30/10 11:36	SU	RROGATE RP	COVERY S	STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	· · · · ·	110	99.6	110	70-1:35	
o-Terphenyl		52.5	49.8	105	70-135	
Lab Batch #: 812840	Sample: 567058-1-BLK / B	LK Batel	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 06/30/10 12:05	SU	RROGATE RE	ECOVERY S	STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		98.0	99.8	98	70-135	
o-Terphenyl		56.9	49.9	114	70-135	
Lab Batch #: 812840	Sample: 379445-001 / SMP	' Batel	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 06/30/10 12:37	SU	RROGATE RE	ECOVERY S	STUDY	
ТРН І	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		107	101	· 106	70-135	
o-Terphenyl		62.8	50.3	125	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



Project Name: Trackers 2 Pit Closure

Work Order #: 379445	·			0			Pro	ject ID: 1	NM-13036		
Analyst: ASA	D	ate Prepar	ed: 06/29/201	0			Date A	nalyzed: (06/29/2010		
Lab Batch ID: 812661 Sample: 566962-1-	BKS	Bate	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUP	LICATE	RECOVI	ERY STUD	Y	
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Bik. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1064	. 106	0.1	0.1018	102	4	70-130	35	
Toluene	ND	0.1000	0.0981	98	0.1	0.0935	94	5	70-130	35	•
Ethylbenzene	ND	0.1000	0.1045	105	0.1	0.0984	98	6	71-129	35	
m,p-Xylenes	ND	0.2000	0.2124	106	0.2	0.2009	100	. 6.	70-135	35	
o-Xylene	ND	0.1000	0.1049	105	0.1	0.0993	99.	5	.71-133	35	
Analyst: LATCOR	Da	ate Prepar	ed: 06/30/201	0			Date A	nalyzed: (6/30/2010		
Lab Batch ID: 812775 Sample: 812775-1-	BKS	Bate	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K/BLANK S	SPIKE / E	BLANK S	PIKE DUPI	LICATE	RECOVI	ERY STUD	ŶY	
Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	· Flag
Chloride	ND	11.0	10.6	96	11	11.3	103	6	75-125	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100*(C)/[B]Blank Spike Duplicate Recovery [G] = 100*(F)/[E]All results are based on MDL and Validated for QC Purposes





Project Name: Trackers 2 Pit Closure

Work Order #: 379445 Analyst: BEV Lab Batch ID: 812840	Sample: 567058-1-BKS	Date Prepared: 06/30/2010 Project ID: NM-13036 SKS Batch #: 1 Matrix: Solid									
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	PIKE DUPI	JICATE I	RECOVI	ERY STUD	Ŷ	
TPH By SW8015 I	Mod Blank Sample Resu [A]	Spike t Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
C6-C12 Gasoline Range Hydrocarbon	ns ND	999	981	98	996	973	98	1	70-135	35	•
C12-C28 Diesel Range Hydrocarbons	S ND	999	782	78	996	831	83	6	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|Blank Spike Recovery [D] = 100*(C)/[B]Blank Spike Duplicate Recovery [G] = 100*(F)/[E]All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Trackers 2 Pit Closure

Work Order #: 379445	•					
Lab Batch #: 812775			Pro	oject ID:	NM-13036	
Date Analyzed: 06/30/2010 Date P	Prepared: 06/3	0/2010	А	nalyst: L	ATCOR	
QC- Sample ID: 379449-001 S	Batch #: 1		N	Matrix: S	oil ·	
Reporting Units: mg/kg	MATE	RIX / MA	FRIX SPIKE	RECO	VERY STU	DY
Inorganic Anions by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes	[A]	(B)				
Chloride	384	120	516	110	75-125	

Matrix Spike Percent Recovery $[D] = 100^{*}(C-A)/B$ Relative Percent Difference $[E] = 200^{*}(C-A)/(C+B)$ All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Sample Duplicate Recovery



Project Name: Trackers 2 Pit Closure

Work Order #: 379445						
Lab Batch #: 812775				Project I	D: NM-130	36
Date Analyzed: 06/30/2010	Date Prepar	ed: 06/30/2010) Ana	alyst: LATC	OR	
QC- Sample ID: 379449-001 D	Batch	h#: 1	Ma	trix: Soil		
Reporting Units: mg/kg		SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300 Analyte		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	· · · · · · · · · · · · · · · · · · ·	384	378	2	20	
Lab Batch #: 812661 Date Analyzed: 06/29/2010 QC- Sample ID: 379205-001 D	Date Prepar Batch	ed: 06/29/2010) Ana Ma	alyst: ASA .trix: Sludg	e	
Reporting Units: mg/kg		SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
BTEX by EPA 8021B		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Benzene	,	0.0010	0.0017	52	35	- T
Toluene		0.0104	0.0143	32	35	
Ethylbenzene		0.0067	0.0103	42	35	F
m,p-Xylenes		0.0222	0.0359	47	35	F
o-Xylene		0.0102	0.0161	45	35	F
a,a,a-Trifluorotoluene		0.030	0.030	0	35	·
Lab Batch #: 812778 Date Analyzed: 06/30/2010	Date Prepar Batek	ed: 06/30/2010) Ana Ma	alyst: JLG		
Reporting Units: %	Dater	SAMPLE		DIPLIC	ATE REC	OVERY
Percent Moisture Analyte	<u> </u>	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture		10.5	8.31	23	20	F

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes. BRL - Below Reporting Limit

DRE - Delow Reporting Emit

Xer The Env	ICO Labora	atories				•			12 01	2600 dess	We ia, 1	CH est I-: Texa	IAIN 20 Е в 79	OF ast 765	: CU	STO	DYI	REC	OR	D A	ND	AN.	AL Pho Fai	/S!! ne: k;	5 RI 432 432	EQ(}-56: }-56	JES 3-18 3-17	T 00 13	•.	•			
	Project Manager:	Fours Jo	<u>Incl</u>	22												-	P	rojec	rt Na	eme:	<u> </u>	-	ch	20	2	<u> </u>	<u>r;</u> ,	<u>- (</u>	<u>, 2</u>	240	۵۷		—
	Company Name	Key Energy	, 10	ervi				•							-			P	roje	¢t #:		NI	<u>y</u> .		13	0	36						
	Company Address:	6 Deste Dr.	hik	. 44	00.		-											Proj	ect	Loc		4	64	برە	M	<u>n</u>							
	City/State/Zip:	Midlet TX	79	1705		· · ·	-												P	0#													
	Telephone No:	492-571-7362	2	•		Fax No:		4	12	-5	ור		77.	3_		_	Repo	ort Fo	omu	at:	ľ	Sta	ndaı	rd			TRR	P	ſ	1	1PD	ES	
	Sampler Signature:	Jan Sacker	<			e-mail:		15	Ç A r	h	21	01	llan	pn,	1 16 L	. (19	4		90	-										-			
(ab the	and the second se		,			•			·				7		77			F	1000			CLP:	Ar	alyz	e Fo	<u>ж</u> .			ন	<u> </u>	4	E	-
OPRE	619									Pres	erval	tion &	e of C	ontai	ners		tatrix		10	Я	то	TAL:			F	F			8			4	
	FIEL	D CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	8	HNO3	HCI	H ₂ SO4	- NaOH	Na ₂ 5 ₂ 0 ₃	None Charle Scontest	DW=Drinking Witter SL=Sudge	GW = Groundwater B=Soil/Bolid	TPH: 418.1 (8015M 801	TPH: TX 1005 CTX 1005	Cations (Ca, Mg, Na, K)	Anions (Ci, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg S	Votatiles	Semivolatiles	BTEX 60218 030 or BTEX 826	RCI	N.O.R.M.	COLINIA EM			CRUSH TAT (Pro-Bachadule) (20	Standard TAT
01	PC-01		0	9	6/25//0	1000	┢	12	¥	4_	┡	+	-+	-+	+	╇	5	₽	₽ ₽	+	1-	┝─		┝╌┩		ρ	┢─┥	-	웍	-+	ł	4	\mathbf{H}
							┝	+	┢	┼			-+	-+	+	╋		╋	╉	┿╴	┝			┝┥	Η			\uparrow	-+	-†	-†	-†	
				 			┢	╀┈	T	┢				-+	1	╈		-		\top	\square												
		······							L	Ŀ				\square				T								L	Ш	⊢∔		_		_	
			ļ	<u> </u>		ļ	╞	_	╞	╞		\vdash		_	_	+		┢	+	+	-			\square	$\left - \right $	┝─	\vdash	\vdash	-				Η
				<u> </u>			+	+	┢	╉	╞	-		-+	╋	┿		╉	┿	╋	┢	$\left \right $		$\mid \mid$	┝─┥	┢╴	┝┥	ГÌ	┍╼╉	-	-	-+	Η
	2 2 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2		-	<u> </u>			†-	╋	t	┢	┢	1-1		-+	<u> </u>	\dagger		╉	╈	\uparrow	┢	┢			\vdash	\vdash	Η						
		- <u></u>						T	T		Ĺ					T		T		T							\Box	\Box					
Special	Instructions:																			100		-	dinit.	بالمحمد معمد المراجع ملطن والمراجع			1915) 1915						
Relincuis	thed buc	Date	T T	me	Received by:											Date		Tir	ne			AL-			ALC: NO								
P	Ange -	(125/1-	15	5.	}	·														eii 				-22.000	5		10)進						
Relinquis	shed by:	Date	T T	me	Received by:									Ţ		Date		Tir	ne				i tali							1 4 1 2			
Relinqui	shed by:	Date	TI.	me				e f													mp			519 507	Rec								

1

۰.

Page 13 of 14



XENCO Laboratories Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

client: Ke	Energy	
Date/Time:	6.29.10 15:50	
Lab ID # :	379445	
Initials:		

_____Contacted by:__

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	NA	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinguished / received?	Yes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yer	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No		
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	Yes	No	N/A	······
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No)	Cooler 5 No.	
Ibs 3.0 °C Ibs °C Ibs °	C ibs	°C	lbs -	°C

Nonconformance Documentation

Date/Time:

Regarding:

Contact:

Corrective Action Taken:

condition acceptable by NELAC 5.5.8.3.1.a.1.

Dinitial and Backup Temperature confirm out of temperature conditions Client understands and would like to proceed with analysis

.

Analytical Report 380451

for

Key Energy

Project Manager: Louis Sanchez

Truckers 2 Pit Closure

NM-13036

13-JUL-10





12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Final 1.001



13-JUL-10



Project Manager: Louis Sanchez Key Energy 6 Desta Drive, Ste. 4400 Midland, TX 79705

Reference: XENCO Report No: 380451 Truckers 2 Pit Closure Project Address: Hobbs, NM

Louis Sanchez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 380451. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 380451 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II Odessa Laboratory Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



Sample Cross Reference 380451



Key Energy, Midland, TX

Truckers 2 Pit Closure

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PC-02	S	Jul-07-10 11:12	12 - 12 ft	380451-001
PC-03	S	Jul-07-10 11:44	14 - 14 ft	380451-002

Page 3 of 11



CASE NARRATIVE

Client Name: Key Energy Project Name: Truckers 2 Pit Closure



Project ID: NM-13036 Work Order Number: 380451 Report Date: 13-JUL-10 Date Received: 07/07/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-813832 Percent Moisture None

Batch: LBA-813876 Inorganic Anions by EPA 300 None

Batch: LBA-814342 TPH by EPA 418.1 None

Final 1.001

Laboratories

Certificate of Analysis Summary 380451

Key Energy, Midland, TX

Project Name: Truckers 2 Pit Closure



Project Id: NM-13036 Contact: Louis Sanchez

Project Location: Hobbs, NM

Date Received in Lab: Wed Jul-07-10 04:35 pm

Report Date: 13-JUL-10

Project Manager: Brent Barron, II

	Lab Id:	380451-0	001	380451-0	02				
Analysis Paguastad	Field Id:	PC-02		. PC-03			· · ·		
Analysis Requested	Depth:	12-12	t	14-14 f	t			· .	
	Matrix:	SOIL		SQIL					
	Sampled:	Jul-07-10 1	1:12	Jul-07-10 1	1:44	1			
Anions by E300	Extracted:								
	Analyzed:	Jul-08-10 (9:25	Jul-08-10 0	9:25				· · ·
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		7410	199	13400	495	•			
Percent Moisture	Extracted:								•
· · ·	Analyzed:	Jul-08-10	12:01	Jul-08-10 1	2:01		-		
	Units/RL:	%	RL	%	RL				
Percent Moisture		15.7	1.00	15.2	1.00				
TPH by EPA 418.1	Extracted:			•					
	Analyzed:	Jul-13-10	11:50						
	Units/RL:	mg/kg	RL	•					
TPH, Total Petroleum Hydrocarbons		275	29.7						

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron, II

Odessa Laboratory Manager

Flagging Criteria

- XENCO Laboratories
- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- **E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- **F** RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

4143 Greenbriar Dr, Stafford, Tx 77477 9701 Harry Hines Blvd, Dallas, TX 75220 5332 Blackberry Drive, San Antonio TX 78238 2505 North Falkenburg Rd, Tampa, FL 33619 5757 NW 158th St, Miami Lakes, FL 33014 12600 West I-20 East, Odessa, TX 79765 842 Cantwell Lane, Corpus Christi, TX 78408 Phone Fax (281) 240-4200 (281) 240-4280 (214) 902 0300 (214) 351-9139 (210) 509-3335 (210) 509-3334 (813) 620-2000 (813) 620-2033 (305) 823-8555 (305) 823-8500 (432) 563-1800 (432) 563-1713 (361) 884-9116 (361) 884-0371





Project Name: Truckers 2 Pit Closure

Work Order #: 380451							Pro	ject ID: N	NM-13036		
Analyst: LATCOR	Da	ate Prepar	ed: 07/08/201	0			Date A	nalyzed: (07/08/2010		•
Lab Batch ID: 813876 Sample: 813876-1-B	KS	Batel	h #: 1					Matrix: S	Solid		· ,
Units: mg/kg	,	BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUPI	LICATE	RECOVE	RY STUD	Y	
Anions by E300	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	ND	10.0	10.0	100	10	9.94	99	1	75-125	20	-
Analyst: ASA	Da	ate Prepar	ed: 07/13/201	0			Date A	nalyzed: ()7/13/2010		
Lab Batch ID: 814342 Sample: 814342-1-B	KS	Batcl	h #: 1					Matrix: S	solid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUPI	ICATE	RECOVE	RY STUD	Y	
TPH by EPA 418.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
TPH Total Petroleum Hydrocarbons	ND	2500	2600	108	2500	2600	104	3	65-135	35	·····

Relative Percent Difference RPD = 200*[(C-F)/(C+F)] Blank Spike Recovery [D] = 100*(C)/[B] Blank Spike Duplicate Recovery [G] = 100*(F)/[E] All results are based on MDL and Validated for QC Purposes

Final 1.001

XENCO
Laboratories

Form 3 - MS Recoveries



Project Name: Truckers 2 Pit Closure

Work Order #: 380451							
Lab Batch #: 813876				Pro	ject ID:	NM-13036	
Date Analyzed: 07/08/2010	Date P	repared: 07/08	8/2010	Α	nalyst: L	ATCOR	
QC- Sample ID: 380448-001 S		Batch #: 1		Ň	Aatrix: S	oil	
Reporting Units: mg/kg		MATE	RIX / MA	TRIX SPIKE	RECO	VERY STU	DY
Inorganic Anions by EPA 300		Parent Sample Result	Spike Added	Spiked Sample Result	%R	Control Limits %R	Flag
Analytes		[A]	[B]				
Chloride		9230	4790	13300	85	75-125	

Matrix Spike Percent Recovery [D] = $100^{\circ}(C-A)/B$ Relative Percent Difference [E] = $200^{\circ}(C-A)/(C+B)$ All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Final 1.001



Sample Duplicate Recovery



Project Name: Truckers 2 Pit Closure

Work Order #: 380451

Lab Batch #: 813876				Project I	D: NM-130	36
Date Analyzed: 07/08/2010	Date Prepare	ed: 07/08/2010) Ana	lyst: LATC	OR	
QC- Sample ID: 380448-001 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: mg/kg		SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300 Analyte		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride		· 9230	8810	5	20	
Lab Batch #: 813832						
Date Analyzed: 07/08/2010	Date Prepare	ed: 07/08/2010) Ana	lyst: JLG		
QC- Sample ID: 380448-001 D	Batch	#: 1	Ma	trix: Soil		
Reporting Units: %		SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte		Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture						
r creent infoisture		16.5	16.2	2	20	
Lab Batch #: 814342 Date Analyzed: 07/13/2010 QC- Sample ID: 380451-001 D	Date Prepare Batch	16.5 ed: 07/13/2010 #: 1	16.2 Ana Ma	2 Iyst: ASA trix: Soil	20	
Lab Batch #: 814342 Date Analyzed: 07/13/2010 QC- Sample ID: 380451-001 D Reporting Units: mg/kg	Date Prepare Batch	16.5 ed: 07/13/2010 #: 1 SAMPLE /	16.2 Ana Ma SAMPLE	2 Ilyst: ASA trix: Soil DUPLIC	20 ATE REC	OVERY
Lab Batch #: 814342 Date Analyzed: 07/13/2010 QC- Sample ID: 380451-001 D Reporting Units: mg/kg TPH by EPA 418.1 Analyte	Date Prepare Batch	16.5 ed: 07/13/2010 #: 1 SAMPLE / Parent Sample Result [A]	16.2 Ana Ma SAMPLE Sample Duplicate Result [B]	2 Iyst: ASA trix: Soil DUPLIC RPD	20 ATE REC Control Limits %RPD	OVERY Flag

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes. BRL - Below Reporting Limit

	ICO Labora ironmental Lab of Texa	atories							1260 Ode:	0 W 3sa,	CI /est I Texa	HAIN -20 E as 79'	<i>OF</i> ast 765	CUS	iTOI	DYR	EC	ORL) AN	ID /	INA Pi F	LYS nonc ax:	3/S / e: 41 41	REQ 32-5(32-5()UE: 63-1: 83-1:	ST 800 713	i i	10	7	
	Project Manager:	Louisdon	<u>nche</u>	2											_	Pr	ojec	t Na	me:	~	Tr	nch	45	5 .	2	Pi	<u>+ (</u>	<u>.[.</u>]	<u>~~</u>	
	Company Name	Key Ener	زمه	lervi	ice.	·									_		Pr	rojec	:t #: ˈ		<u>N</u>	h-	-1?	50	<u>36</u>	<u>}</u>				
	Company Address:	6 Dasire Dr.).11	<u>. 4</u>	140										_	1	Proje	ect L	.oc:		<u>H</u>	4.	f	VM	١		<u> </u>			
	City/State/Zip:	Midland Tx	<u>` </u>	100	5										-			PC	D #:											
	Telephone No:	432-571-	- ブ	382		Fax No:	: '	4	137	<u>2-5</u>	571		7(^	<u> </u>	F	Repor	t Fo	rmai	t	9	Stan	dard			TR	RP		.	IPDE	S
	Sampler Signature:	/ansferry				e-mail:	:	ls	- Rachi	u_	01	ku, e	<u>La cris</u>	<u>در</u> . (_														-
(ab use o	ənly)						-						- ,				E			тс	(P:	Anal	yze I	For:	1-	Γ	Π	Т	- 1	
ORDER	in 3804'	51						ſ	Pre	180rvi	ation 5	i≢ of C	ontain	ers	M	atrix	8				AL:	8	╋		-				48, 72	
Aleta Lancaly	FIEL	CODE	Jeginning Depth	inding Depth	Date Sampled	Time Sampled	ield Fittered	otal #. of Containers	Pro-	Cont.	H ₂ SO ₄	MaOH	Na ₂ S ₂ O ₃ Minna	Other (Specify)	0W≂Drinking Water SL≕Sludge	≧W = Groundwater S≖SoiVSdid IP=Non-Potable Specify Other	TPH: 418.1 8015M 80	TPH: TX 1005 TX 1008	Cations (Ca. Mg. Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metais: As Ag isa Co Ur Po ny Matatiae	Volaures Semivolatiles	BTEX 80218/5030 or BTEX 82	RCI	N.O.R.M.	EPA Jan Chlory		RUSH TAT (Pre-Schedule) &	Standard TAT
61	PC-02		121	12'	7/1/10	1012	Ē	打	X	t			1	+	Ľ	<u>ŝ</u>	Ē		Ť	Ì	Ť	Ť	1	Ē	Ē	Ē	X	I	⊅	
<u>o</u> z	PC-03		14	14'		1044	\square	П	Ш	\bot	\bot	\Box		\bot			L	\Box	П	\square	\square	_	\square		┦╼	L	Ш	┢╾╍╋	┶	H
<i>0</i> 3	PC-04		16'	16	↓	1132	┢╌╽	┛	┺┤	╇	+	┢╍┼	╇	+	┟╌	<u> </u>	╀─	\square	$\left - \right $	\rightarrow	+	+	+-	╀╴	╀─	╞	1	-+	╋	14
				\square	}_	<u>}</u>	╆╌┤	┥	+	╋	+	┢┼┤	╋	╈	┢─		╂─	┢┤	\vdash	+	╉	╉	╀	+	┢	┢──	$\left \cdot \right $	-+	+	+
							\square			1				\pm			Ē	\square			1	1	\pm	T	F	\Box	П		1	\Box
			ļ!	<u> '</u>	 	<u> </u>	\square	_	┝╍╋╸	╇	+-	╄╌╄	4	+	┡		╀	\square	\square	+	4	\downarrow	4	╞	┢	╞	\vdash	┍─╋		+
	·	<u></u>	 	 	┣────	<u> </u>	╆╋	┥		╋	╋	┢┼┥	╇	╉	┢─		┢	+	┝┤	╉	+	╋	╀	┢	┢	┝	\vdash	<u> </u>	+	+
				<u> </u>		<u> </u>	╊╋	-	-	╋	╋	╂╌╀	╋	+	┢╴		\mathbf{T}				+	╈	╋	╈	┢	┢		一	1	\top
Special In	nstructions:				•						_4											20ml		つ淵						
Hold Relinguish	PC-03 car P	Date		1 nc	Hed.									Di	ate	—	Tim	He .	V, 9	ЗÌ,					2			4	EC.	
a	DEALL	012/10	163	15-															9			810N			(19) (19)					
Heli nquish	ied by:	Date	Ta	me	Received by:									— Di	ate		Tim	Ð	San	tple 6y S	l-larx ampi	i Del enCl	liven Iant f	id tep	2			ð	Ň	
Relinquish	ied by:	Date	Tir	me	772	na Le	in							1 1	10	X		ŝ	Ten	ирел	lon	2 Pr	i An An Ru	ceip			1.			

Page 10 of 11

1

.....

Final 1.001



XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Mlami, Odessa, Philadelphia Phoenix, San Antonio, Tampa

Document Title:	Document Title: Sample Receipt Checklist							
Document No.: SYS-SRC								
Revision/Date:	Revision/Date: No. 01, 5/27/2010							
Effective Date:	6/1/2010	Page 1 of 1						

Prelogin / Nonconformance Report - Sample Log-In

Client: hly	Energy	
Date/Time:	7.7.10	16:35
Lab ID # :	3804	51
Initials:	A	·

Sample Receipt Checklist

1. Samples on Ice?		Blue	Water	No	
2. Shipping container in good condition?		Yes	No	None	·····
3. Custody seals intact on shipping container (cooler) and bottles?		Yes	No	NA	
4. Chain of Custody present?		Yes	No		
5. Sample instructions complete on chain of custody?		(Yes)	No		
6. Any missing / extra samples?		Yes	No		
7. Chain of custody signed when relinquished / received?		Yes	No		
8. Chain of custody agrees with sample label(s)?		Yes	No		
9. Container labels legible and intact?		Yee	No		
10. Sample matrix / properties agree with chain of custody?		Yes	No		
11. Samples in proper container / bottle?		Yes	No		
12. Samples property preserved?		Yes	No	N/A	
13. Sample container intact?		Yes	No		
14. Sufficient sample amount for indicated test(s)?		Yes	No		
15. All samples received within sufficient hold time?		Yes	No		
16. Subcontract of sample(s)?		Crea th	NO GLA	(NA)	
17. VOC sample have zero head space?		Yes	No	(NTA)	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.		Cooler 4 No) .	Cooler 5 No.	
lbs °C lbs °C lbs	°C	ibs	°C	lbs	°C

Nonconformance Documentation

Contact:	Contacted by:	Date/Time:	
Regarding:		·	
Corrective Action Tal	(en:		
	·		
Check all that apply:	□Cooling process has begun shortly after sa condition acceptable by NELAC 5.5.8 □Initia) and Backup Temperature confirm ou	ampling event and out of temperature I.3.1.a.1. It of temperature conditions	

□ Client understands and would like to proceed with analysis

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							
Ittached. 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 19.15.17.10 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							
Previously Approved Design (attach copy of design) API Number: or Permit Number:							
12. <u>Closed-loop Systems Permit Application Attachment Checklist</u> : 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 							
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)							
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.							
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. Fype: 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							
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 G of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC							

i

Operator Application Certification:	
I hereby certify that the information submitted with this application is true, a	accurate and complete to the best of my knowledge and belief.
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:
20. <u>OCD Approva</u> l: Permit Application (including closure plan) Close	ure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date:
Title:	OCD Permit Number:
^{21.} <u>Closure Report (required within 60 days of closure completion)</u> : Subsec Instructions: Operators are required to obtain an approved closure plan p The closure report is required to be submitted to the division within 60 day section of the form until an approved closure plan has been obtained and the	ction K of 19.15.17.13 NMAC prior to implementing any closure activities and submitting the closure report. as of the completion of the closure activities. Please do not complete this the closure activities have been completed.
	Closure Completion Date:
 22. Closure Method: Waste Excavation and Removal On-Site Closure Method A If different from approved plan, please explain. 	lternative Closure Method 🔲 Waste Removal (Closed-loop systems only)
23. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Sys</u> Instructions: Please indentify the facility or facilities for where the liquids two facilities were utilized.	stems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: s, drilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed Yes (If yes, please demonstrate compliance to the items below)	on or in areas that <i>will not</i> be used for future service and operations?
Required for impacted areas which will not be used for future service and op Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	perations:
24. Closure Report Attachment Checklist: Instructions: Each of the follows 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 close Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude	ing items must be attached to the closure report. Please indicate, by a check sure) congitude NAD: □1927 □ 1983
 25. Operator Closure Certification: I hereby certify that the information and attachments submitted with this clobelief. I also certify that the closure complies with all applicable closure required blows. 	sure report is true, accurate and complete to the best of my knowledge and juirements and conditions specified in the approved closure plan.
Signature:	Data: 9/11/2
e-mail address: / Janihon @ Kay encoy. un	Telephone: <u>432-571-7362</u>
· · · · · · · · · · · · · · · · · · ·	

.