

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

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

2670  
Revised  
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 Amended Report - BGT Closure

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

Operator	Koch Exploration Company, LLC	OGRID #	12807	RCVD DEC 12 '08					
Address	PO Box 489, Aztec, NM 87410			OIL CONS. DIV.					
Facility or well name	Dryden I (BGT Proposed Closure)								
API Number	30-045-24214	OCD Permit Number							
U/L or Qtr/Qtr	D	Section	28	Township	28N	Range	08W	County	San Juan
Center of Proposed Design: Latitude	36° 38' 15" N		Longitude	107° 41' 32" W		NAD	<input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983		
Surface Owner	<input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment								

<input type="checkbox"/> Pit: Subsection F or G of 19.15 17 11 NMAC	RCVD AUG 22 '12
Temporary <input type="checkbox"/> Drilling <input type="checkbox"/> Workover	OIL CONS. DIV.
<input type="checkbox"/> Permanent <input type="checkbox"/> Emergency <input type="checkbox"/> Cavitation <input type="checkbox"/> P&A	DIST. 3
<input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
<input type="checkbox"/> String-Reinforced	
Liner Seams <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____	Volume _____ bbl Dimensions L _____ x W _____ x D _____

<input type="checkbox"/> Closed-loop System: Subsection H of 19 15 17 11 NMAC
Type of Operation: <input type="checkbox"/> P&A <input type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
<input type="checkbox"/> Drying Pad <input type="checkbox"/> Above Ground Steel Tanks <input type="checkbox"/> Haul-off Bins <input type="checkbox"/> Other _____
<input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____
Liner Seams <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____

<input checked="" type="checkbox"/> Below-grade tank: Subsection I of 19 15 17 11 NMAC
Volume 60 bbl Type of fluid produced water
Tank Construction material Steel
<input type="checkbox"/> Secondary containment with leak detection <input type="checkbox"/> Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
<input type="checkbox"/> Visible sidewalls and liner <input type="checkbox"/> Visible sidewalls only <input checked="" type="checkbox"/> Other Now Above Ground
Liner type Thickness 20 mil <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____

<input type="checkbox"/> 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 \_\_\_\_\_

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**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)

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**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 H<sub>2</sub>S, 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

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**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)

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**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

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**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 more than two facilities are required.

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 *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

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**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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<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 - Visual inspection (certification) of the proposed site, Aerial photo, Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<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

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**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

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**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) John ClarkTitle District SuperintendentSignature John ClarkDate 12-10-08e-mail address clark23j@kochind.comTelephone (505) 334-9111

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**OCD Approval:** ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)OCD Representative Signature: Jonathan D. KellyApproval Date: 10/05/2011Title: Compliance Officer

OCD Permit Number: \_\_\_\_\_

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**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: 07/26/2012

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**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 \_\_\_\_\_

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

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**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
- 
- ☐
- Site Reclamation (Photo Documentation)

On-site Closure Location Latitude \_\_\_\_\_

Longitude \_\_\_\_\_

NAD ☐ 1927 ☐ 1983

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**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): Donald JohnsonTitle Operations ManagerSignature: Donald JohnsonDate 8/20/12e-mail address: johnso4d@kochind.comTelephone: 505-334-9111

District I  
1625 N French Dr, Hobbs, NM 88240  
District II  
811 S First St, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
accordance with 19 15 29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Koch Exploration Company, LLC	Contact	Don Johnson
Address	PO Box 489, Aztec, NM 87410	Telephone No	505-334-9111
Facility Name	Dryden 1	Facility Type	Gas Well
Surface Owner	BLM	Mineral Owner	BLM
		API No.	30-045-24214

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	28	28N	8W	800	North	840	West	San Juan

Latitude N36° 38' 15" Longitude W107° 41' 32"

#### NATURE OF RELEASE

Type of Release	NONE - N/A	Volume of Release	NA	Volume Recovered	N/A
Source of Release	N/A	Date and Hour of Occurrence	N/A	Date and Hour of Discovery	N/A
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A			
By Whom?	N/A	Date and Hour N/A			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A			
If a Watercourse was Impacted, Describe Fully *					
Describe Cause of Problem and Remedial Action Taken *					
At the request of the NMOCD, KEC is submitting this C-141 as part of a below grade tank Closure Report Upon removal of the below grade tank, a five point composite sample was taken and all parameters (Benzene, BTEX, TPH, Chlorides) were below detection limits. Consequently no release was observed and no remedial action was taken. Details of the below grade tank closure are contained in the Closure Report					
Describe Area Affected and Cleanup Action Taken *					
NMOCD approved sampling determined there was no release at this location.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations					
Signature 		OIL CONSERVATION DIVISION			
Printed Name Donald Johnson		Approved by Environmental Specialist			
Title Operations Manager		Approval Date		Expiration Date	
E-mail Address johnso4d@kochind.com		Conditions of Approval			Attached <input type="checkbox"/>
Date 8/20/12 Phone 505-334-9111					

\* Attach Additional Sheets If Necessary

**Koch Exploration Company, LLC  
San Juan County, NM  
Below-Grade Tank Closure Report  
August 15, 2012**

Well Name: Dryden 1 Well  
API Number: 30-045-24214  
S/T/R: S28, T38N, R8W Unit D

In accordance with Rule 19.15.17.13 NMAC, the following report describes the procedures followed to close a below-grade tank (BGT) on the above referenced Koch Exploration Company, LLC (KEC) location in San Juan County, New Mexico. This closure followed KEC's standard procedure for closing BGTs. This report is being submitted to the OCD within 60 days of the pit closure and includes a form C-144 and attachments required by form C-144.

**General Plan Requirements**

1 KEC shall close an existing below-grade tank that does not meet the design requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC. [19.15.17.13(A)(4)]

**Closure date is July 26, 2012**

2 All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks, temporary fractionation tank, etc.) The well will be temporarily shut-in until the rerouting is completed.

**Complete as stated.**

3 All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed of by injection at either Basin Disposal Inc. (Disposal #1 Well, API 30-045-26862, Permit NM-OO 1-0005) or Key Four Corners Inc. (Sunco Disposal # 1, API 30-045-28653, Permit NM-O 1-0009).

**There was no produced water in the BGT (it was dry).**

**Closure Method for Below-grade Tanks [19.15.17.13(E) NMAC]**

1 KEC shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.

**All liquids and sludge were removed from the tank prior to closure activities.**

2 KEC shall remove the below-grade tank and either recycle, reuse, reclaim, or dispose of it in a division-approved facility (i.e. San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426).

**KEC is reusing the below-grade as an above ground storage tank with 20 mil plastic below the tank.**

3 If there is any on-site equipment associated with a below-grade tank, then KEC shall remove the equipment, unless the equipment is required for some other purpose.

**KEC has removed on-site equipment associated with the below-grade tank that was no longer needed for continued production.**

4 KEC shall test the soils beneath the below-grade tank to determine whether a release has occurred. KEC shall 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 8021 B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. KEC shall notify the division of its results on form C-141. The division may require additional delineation upon review of the results.

**A five point composite sample was taken of the pit and all samples tested per Subsection B of 19.15.17.1(B)(1)(b). Sample results are summarized below and the laboratory report is attached.**

Table 1: Closure Criteria and Results for BGTs

Component	Test Method	Limit (mg/kg)	Result (mg/kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2	ND (<0.049)
BTEX	EPA SW-846 Method 8021B or 8260B	50	ND (<0.246)
TPH	EPA SW-846 Method 8015M (Full Range) or Method 418.1	100	ND (<4.9)
Chlorides	EPA SW-846 Method 300.1	Greater of 250 mg/kg or background	ND (<7.5)

5. If KEC or the division determines that a release has occurred, then KEC shall comply with 19.15.3.116 NMAC (report release to the OCD) and 19.15.1.19 NMAC (soils will be excavated and OCD District Office approval to haul to the Envirotech Landfarm near Bloomfield, NM, OCD Permit NM-O 1-00 11, will be obtained).

**There is no evidence of a release.**

6. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then KEC shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site. The division-prescribed soil cover, recontouring and re-vegetation requirements shall comply with Subsections G, H and I of 19.15.17.13 NMAC.

**The pit has been backfilled with compacted, non-waste containing earthen material. The former pit is on a producing well pad. Soil cover, re-contouring, and re-vegetation will be implemented when the well pad is abandoned and reclaimed.**

**Soil Cover [19.15.17.13(H)]**



Upon completion of the tank removal and any necessary soil remediation, the excavation will be backfilled with non-waste earthen material consisting of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The surface will be recontoured to match the sites existing grade and prevent ponding of water and erosion of the cover material.

**The pit has been backfilled with compacted, non-waste containing earthen material. The former pit is on a producing well pad. Soil cover, re-contouring, and re-vegetation will be implemented when the well pad is abandoned and reclaimed.**

#### **Revegetation [19.15.17.13(1)]**

For those portions of the former BGT area no longer required for production activities, KEC will seed the disturbed areas the first growing season after the BGT area is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire, or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintained that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

Repeat seeding or planting will be continued until successful vegetative growth occurs. Note: KEC assumes the seeding stipulations including mix and seeding methods specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) or Land owner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability.

For those portions of the former pit area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

**The pit has been backfilled with compacted, non-waste containing earthen material. The former pit is on a producing well pad. Soil cover, re-contouring, and re-vegetation will be implemented when the well pad is abandoned and reclaimed.**

#### **Closure Notice [19.15.17.13(J) NMAC]**

I. KEC shall notify the surface owner by certified mail, return receipt requested, that KEC plans to close a BOT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement.

**The surface owner(s) has been notified by certified mail, return receipt requested. A copy of the notification letter and return receipt is attached.**

2. KEC shall notify the appropriate division district office verbally or by other means at least 72 hours, but not more than one week, prior to any closure operation. The notice shall include KEC's name and the location to be closed by unit letter, section, township and range. If the closure is associated with a particular well, then the notice shall also include the well's name, number and API number.

**Appropriate and timely notifications were made to the division district office. Documentation is attached.**

**Closure Report [19.15.17.13(K) NMAC]**

Within 60 days of closure completion, KEC shall 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, KEC shall certify that all information in the report and attachments is correct and that KEC has complied with all applicable closure requirements and conditions specified in the approved closure plan.

**This document and attachments serve as the Closure Report.**

**Johnson, Don**

---

**From:** Johnson, Don  
**Sent:** Friday, July 20, 2012 11:01 AM  
**To:** OCD - Brandon Powell (brandon.powell@state.nm.us); OCD - Jonathan Kelly  
**Cc:** Tadlock, Darlene; Radin, Jordan  
**Subject:** BGT Scheduled for Closure

**Importance:** High

Brandon and Jonathan,

Koch Exploration Company, LLC plans to close the BGTs as listed below and as specified in the C-144 approved on 10/5/2011. We plan on covering the earthen pits once samples have been received from the Lab. Solder Miller will have a representative on site to complete the sampling once the existing tanks and blocks have been removed. We plan on completing the sampling next Thursday, July 26<sup>th</sup>, 2012. This e-mail will serve as notice as required in Closure Notice section of the plan. BLM, the surface owner was notified via Certified Mail, return requested as well.

WELL NAME	NO.	SEC	Town	RNG	LET	1/4-1/4	LSE.#	Latitude	Longitude	Footages
DRYDEN	1	28	28N	8W	.D	NW/NW	NM-013861	N36° 38' 15"	W107° 41' 32"	800 FNL & 840 F
DRYDEN	2	22	28N	8W	L	NW/SW	NM-013861	N36° 38' 40"	W107° 40' 26"	1800 FSL & 1100 FWL

Please let me know if you have any questions or comments.

Thank you

**Don Johnson**  
*Koch Exploration Company, LLC*  
*P.O. Box 489 Aztec, NM 87410*  
*Office: 505-334-9111*  
*Mobile: 505-320-0819*



KOCH EXPLORATION COMPANY LLC

July 20, 2012

CERTIFIED MAIL, RETURN RECEIPT

BLM  
6251 College BLVD, Suite A  
Farmington, NM 87402

To Whom it May Concern:

This letter serves as notice according to NMAC 19 15.17.13(J) of Koch Exploration Company, LLC's (KEC) intent to close the below grade tanks at Dryden 1 (API #30-045-24214, S28, T28N, R8W, NW/NW), and Dryden 2 (API #30-045-24232, S22, T28N, R8W, NW/SW).

KEC intends to close the below grade tanks according to the guidelines of NMAC 19 15 17 13.

Should you have questions or need additional information, please give me a call at (505) 334-9111

Sincerely,

A handwritten signature in black ink, appearing to read 'Donald Johnson'.

Donald Johnson  
Operations Manager

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 5a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

I also wish to receive the following services (for an extra fee).

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee

3 Article Addressed to

BLM  
6251 College BLVD,  
Suite A  
Farmington, NM 87402

4a Article Number

7000 0520 0020 4944 9792

4b Service Type

- ☐ Registered ☒ Certified  
☐ Express Mail ☐ Insured  
☐ Return Receipt for Merchandise ☐ COD

7 Date of Delivery

7-23-2012

5 Received By (Print Name)

Shannon Fackan

6 Signature (Addressee or Agent)

X Shannon Fackan

8 Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.



July 26, 2012

Koch Exploration Company, LLC Dryden #1 and #2

Below Grade Tank Clearance Sampling

Denny Foust of SMA met Don Johnson of Koch Exploration Company, LLC (KEC) in Bloomfield, New Mexico at 8:00. They traveled to the Dryden #2 location L-28T28N-R08W, API# 30-045-24232. Don Johnson reviewed KEC's safety policy with Mr. Foust. After the safety briefing at 9:00 a five point composite sample was collected from the Below Grade Tank (BGT) pit. No staining was obvious. The samples were collected in a five point pattern one foot below the existing surface of the BGT pit which was 4 feet deep and 20'X20'. The sample pattern is basically towards each corner and one spot near the center. The BGT pit is south of the separator. There was no staining in the pit.

A Total Chloride background sample was collected 1 foot below the surface outside the location berms. The sample location was south of the above ground production tank.

Traveled to the KEC Dryden #1, D-22-T28N-R08W, API# 24214 arrived at 10:10, proceeded to sample the BGT pit which was 4 feet deep and 20'X30' in dimensions. A five point composite sample was taken from approximately one foot below the bottom of the BGT pit in a pattern with points toward each corner and one point located near the pit center. The BGT pit is east of the separator. No staining was obvious in the pit. There was rain in the area July 25, 2012, the night before sampling.

A Total Chloride background sample was collected 1 foot below the surface off the location site. The sample location is north of the access road and east of the location.

SAMPLE RESULTS:

Dryden #1			Dryden #2		
8015B	GRO	ND		GRO	ND
	DRO	ND		DRO	ND
8021B	Benzene	ND		Benzene	ND
	Toluene	ND		Toluene	ND
	Ethylbenzene	ND		Ethylbenzene	ND
	Total Xylenes	ND		Total Xylenes	ND
418.1	TPH	ND		TPH	ND
300.0	Chloride	ND		Chloride	ND
	Background			Background	
	Chloride	ND		Chloride	ND

Please feel free to call with any questions at 505-325-7535.

Denny Foust  
Senior Geologist

Attachments (3): Dryden #1 Plat, Dryden #2 Plat and Analytical



*Hall Environmental Analysis Laboratory*  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL 505-345-3975 FAX 505-345-4107  
Website [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 03, 2012

Denny Foust

Souder, Miller and Associates

2101 San Juan Boulevard

Farmington, NM 87401

TEL: (505) 325-5667

FAX (505) 327-1496

RE: KOCH Dryden #1 & Dryden #2 BGT

OrderNo.: 1207C45

Dear Denny Foust:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/27/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order 1207C45

Date Reported 8/3/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: Dryden #2 BGT

Project: KOCH Dryden #1 &amp; Dryden #2 BGT

Collection Date: 7/26/2012 9 00:00 AM

Lab ID: 1207C45-001

Matrix: SOIL

Received Date: 7/27/2012 10 03 00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst JMB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/31/2012 9 05 38 AM
Surr DNOP	103	77.6-140		%REC	1	7/31/2012 9 05 38 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/31/2012 4 02 05 PM
Surr BFB	99.1	84-116		%REC	1	7/31/2012 4 02 05 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst NSB
Benzene	ND	0.049		mg/Kg	1	7/31/2012 4 02 05 PM
Toluene	ND	0.049		mg/Kg	1	7/31/2012 4 02 05 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/31/2012 4 02 05 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/31/2012 4 02 05 PM
Surr 4-Bromofluorobenzene	105	80-120		%REC	1	7/31/2012 4 02 05 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst SRM
Chloride	ND	7.5		mg/Kg	5	8/1/2012 12 14 49 PM
<b>EPA METHOD 418.1: TPH</b>						Analyst JMB
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	7/31/2012

Qualifiers: \*/X Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit  
U Samples with CalcVal < MDL



**Analytical Report**

Lab Order 1207C45

Date Reported 8/3/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller and Associates**Client Sample ID:** Dryden #2 Chloride Background**Project:** KOCH Dryden #1 & Dryden #2 BGT**Collection Date:** 7/26/2012 9:45:00 AM**Lab ID:** 1207C45-002**Matrix:** SOIL**Received Date:** 7/27/2012 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>SRM</b>
Chloride	ND	7.5		mg/Kg	5	8/1/2012 12:39:39 PM

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

**Analytical Report**Lab Order **1207C45**Date Reported **8/3/2012****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller and Associates**Client Sample ID:** Dryden #1 BGT**Project:** KOCH Dryden #1 & Dryden #2 BGT**Collection Date:** 7/26/2012 10 15:00 AM**Lab ID:** 1207C45-003**Matrix:** SOIL**Received Date:** 7/27/2012 10:03:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst. <b>JMP</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/31/2012 9 27 32 AM
Surr DNOP	104	77 6-140		%REC	1	7/31/2012 9 27 32 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4 9		mg/Kg	1	7/31/2012 5 57 12 PM
Surr BFB	98 3	84-116		%REC	1	7/31/2012 5 57 12 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst <b>NSB</b>
Benzene	ND	0 049		mg/Kg	1	7/31/2012 5 57 12 PM
Toluene	ND	0 049		mg/Kg	1	7/31/2012 5 57 12 PM
Ethylbenzene	ND	0 049		mg/Kg	1	7/31/2012 5 57 12 PM
Xylenes, Total	ND	0 099		mg/Kg	1	7/31/2012 5 57 12 PM
Surr 4-Bromofluorobenzene	105	80-120		%REC	1	7/31/2012 5 57 12 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst. <b>SRM</b>
Chloride	ND	7 5		mg/Kg	5	8/1/2012 1 04 29 PM
<b>EPA METHOD 418.1: TPH</b>						Analyst <b>JMP</b>
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	7/31/2012

**Qualifiers:**   \*/X   Value exceeds Maximum Contaminant Level  
                  E    Value above quantitation range  
                  J    Analyte detected below quantitation limits  
                  R    RPD outside accepted recovery limits  
                  S    Spike Recovery outside accepted recovery limits

B   Analyte detected in the associated Method Blank  
H   Holding times for preparation or analysis exceeded  
ND   Not Detected at the Reporting Limit  
RL   Reporting Detection Limit  
U   Samples with CalcVal < MDL

**Analytical Report**

Lab Order 1207C45

Date Reported 8/3/2012

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller and Associates**Client Sample ID:** Dryden #1 Chloride Background**Project:** KOCH Dryden #1 & Dryden #2 BGT**Collection Date:** 7/26/2012 11:00:00 AM**Lab ID:** 1207C45-004**Matrix:** SOIL**Received Date:** 7/27/2012 10:03:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst <b>SRM</b>
Chloride	ND	7.5		mg/Kg	5	8/1/2012 1:29:18 PM

**Qualifiers:**

- \* /X Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO# 1207C45

06-Aug-12

**Client:** Souder, Miller and Associates  
**Project:** KOCH Dryden #1 & Dryden #2 BGT

Sample ID	MB-3128	SampType	MBLK	TestCode	EPA Method 300.0: Anions					
Client ID	PBS	Batch ID	3128	RunNo	4589					
Prep Date	8/1/2012	Analysis Date	8/1/2012	SeqNo	128726	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	15								

Sample ID	LCS-3128	SampType	LCS	TestCode	EPA Method 300.0: Anions					
Client ID	LCSS	Batch ID	3128	RunNo	4589					
Prep Date	8/1/2012	Analysis Date	8/1/2012	SeqNo	128727	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	15	15.00	0	98.1	90	110			

### Qualifiers:

\*X Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO# 1207C45

06-Aug-12

**Client:** Souder, Miller and Associates  
**Project:** KOCH Dryden #1 & Dryden #2 BGT

Sample ID	MB-3091	SampType	MBLK	TestCode	EPA Method 418.1: TPH					
Client ID	PBS	Batch ID	3091	RunNo	4530					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	126997	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-3091	SampType	LCS	TestCode	EPA Method 418.1: TPH					
Client ID	LCSS	Batch ID	3091	RunNo	4530					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	127012	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100 0	0	103	80	120			

Sample ID	LCSD-3091	SampType	LCSD	TestCode	EPA Method 418.1: TPH					
Client ID	LCSS02	Batch ID	3091	RunNo	4530					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	127016	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100 0	0	101	80	120	2 39	20	

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO# 1207C45

06-Aug-12

**Client:** Souder, Miller and Associates  
**Project:** KOCH Dryden #1 & Dryden #2 BGT

Sample ID	MB-3074	SampType	MBLK	TestCode	EPA Method 8015B: Diesel Range Organics					
Client ID	PBS	Batch ID	3074	RunNo	4495					
Prep Date	7/27/2012	Analysis Date	7/30/2012	SeqNo	126019	Units	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr DNOP	9 7		10 00		96 8	77 6	140			

Sample ID	LCS-3074	SampType	LCS	TestCode	EPA Method 8015B: Diesel Range Organics					
Client ID	LCSS	Batch ID	3074	RunNo	4495					
Prep Date	7/27/2012	Analysis Date	7/30/2012	SeqNo	126020	Units	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr DNOP	4 0		5 000		80 6	77 6	140			

Sample ID	MB-3088	SampType	MBLK	TestCode	EPA Method 8015B: Diesel Range Organics					
Client ID	PBS	Batch ID	3088	RunNo	4495					
Prep Date	7/30/2012	Analysis Date	7/30/2012	SeqNo	126084	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr DNOP	9 5		10 00		95 4	77 6	140			

Sample ID	LCS-3088	SampType	LCS	TestCode	EPA Method 8015B: Diesel Range Organics					
Client ID	LCSS	Batch ID	3088	RunNo	4495					
Prep Date	7/30/2012	Analysis Date	7/30/2012	SeqNo	126126	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	10	50 00	0	69 1	52 6	130			
Surr DNOP	4 0		5 000		79 8	77 6	140			

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO# 1207C45

06-Aug-12

Client: Souder, Miller and Associates  
Project: KOCH Dryden #1 & Dryden #2 BGT

Sample ID	MB-3090	SampType	MBLK	TestCode	EPA Method 8015B: Gasoline Range					
Client ID	PBS	Batch ID	3090	RunNo	4573					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	128314	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr. BFB	980		1000		97.8	84	116			

Sample ID	LCS-3090	SampType	LCS	TestCode	EPA Method 8015B: Gasoline Range					
Client ID	LCSS	Batch ID	3090	RunNo	4573					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	128315	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.2	85	115			
Surr. BFB	1000		1000		103	84	116			

## Qualifiers:

\*/X Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO# 1207C45

06-Aug-12

Client: Souder, Miller and Associates

Project: KOCH Dryden #1 &amp; Dryden #2 BGT

Sample ID	1207C45-001AMS	SampType	MS	TestCode	EPA Method 8021B: Volatiles					
Client ID	Dryden #2 BGT	Batch ID	3090	RunNo	4573					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	128355	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.049	0.9775	0	99.3	67.2	113			
Toluene	0.99	0.049	0.9775	0	101	62.1	116			
Ethylbenzene	1.0	0.049	0.9775	0	104	67.9	127			
Xylenes, Total	3.1	0.098	2.933	0	105	60.6	134			
Surr 4-Bromofluorobenzene	1.1		0.9775		110	80	120			

Sample ID	1207C45-001AMSD	SampType	MSD	TestCode	EPA Method 8021B: Volatiles					
Client ID	Dryden #2 BGT	Batch ID	3090	RunNo	4573					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	128356	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.048	0.9506	0	103	67.2	113	1.09	14.3	
Toluene	1.0	0.048	0.9506	0	106	62.1	116	2.29	15.9	
Ethylbenzene	1.0	0.048	0.9506	0	109	67.9	127	2.08	14.4	
Xylenes, Total	3.1	0.095	2.852	0	110	60.6	134	1.83	12.6	
Surr 4-Bromofluorobenzene	1.1		0.9506		112	80	120	0	0	

Sample ID	MB-3090	SampType	MBLK	TestCode	EPA Method 8021B: Volatiles					
Client ID	PBS	Batch ID	3090	RunNo	4573					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	128369	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	LCS-3090	SampType	LCS	TestCode	EPA Method 8021B: Volatiles					
Client ID	LCSS	Batch ID	3090	RunNo	4573					
Prep Date	7/30/2012	Analysis Date	7/31/2012	SeqNo	128370	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.050	1.000	0	92.2	76.3	117			
Toluene	0.95	0.050	1.000	0	94.6	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.8	77	116			
Xylenes, Total	2.9	0.10	3.000	0	97.7	76.7	117			
Surr 4-Bromofluorobenzene	1.1		1.000		109	80	120			

### Qualifiers:

\* / X Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit



## Sample Log-In Check List

Client Name: SMA-FARM Work Order Number 1207C45

Received by/date: AT 07/27/12

Logged By Anne Thorne 7/27/2012 10:03:00 AM

Completed By: Anne Thorne 7/27/2012

Reviewed By TO 07/27/12

### Chain of Custody

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

### Log In

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

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

### Special Handling (if applicable)

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

Person Notified:	_____	Date	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions	_____		

18. Additional remarks.

### 19. Cooler Information

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

# Chain-of-Custody Record

Client: Souder Miller and Associates

Mailing Address: 2101 San Juan Blvd

Farmington, NM 87401-2247

Phone #: 505-325-7535

email or Fax#: denny.foust@soudermiller.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: Koch Dryden #1 and Dryden #2 BGT

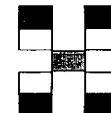
Project #: 5121914

Project Manager: Denny Foust  
Cindy Gray

Sampler: Denny Foust

On Ice: ☒ Yes ☐ No

Sample Temperature: 21



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

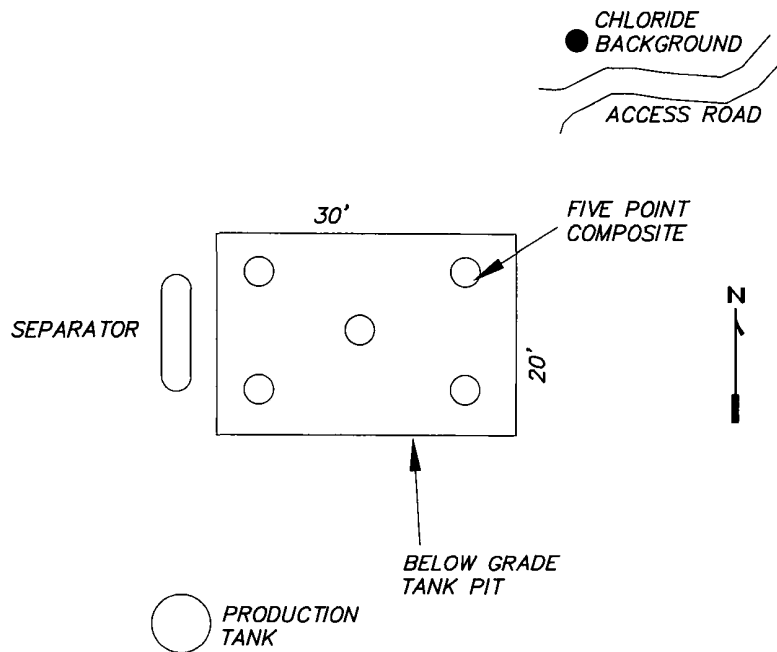
## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	BEAL No.	BTEX + MTBE	BTEX + MTBE	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.1 Chloride	Air Bubbles (Y or N)	
7/26/12	9:00	soil	Dryden #2 BGT	40Z #1	None	1207C45 -001	X													
				40Z #2		-001			X											
				40Z #3		-001												X		
				40Z #4		-001				X										
7/26/12	9:45	soil	Dryden #2 Chloride Background	40Z	None	-002												X		
7/26/12	10:15	soil	Dryden #1 BGT	40Z #1	None	-003	X													
				40Z #2		-003			X											
				40Z #3		-003												X		
				40Z #4		-003				X										
7/26/12	11:00	soil	Dryden #1 Chloride Background	40Z	None	-004												X		

Date: 7/26/12	Time: 1609	Relinquished by: <u>Denny Foust</u>	Received by: <u>Christine Wallen</u>	Date: 7/26/12	Time: 1609
Date: 7/26/12	Time: 1751	Relinquished by: <u>Christine Wallen</u>	Received by: <u>Chris</u>	Date: 7/27/12	Time: 1605

Remarks:

**KOCH EXPLORATION COMPANY, LLC**  
**DRYDEN #1**  
**D-28-T28N-R08W**  
**API #30-045-24214**



# MOCH EXPLORATION COMPANY

DRYDEN 1

SZB T28M RBM "D"

300' FILL & 340' EXPL

LSE #N11013261

TD 6658' ELEV. 615759'

API #30-045-24214

San Juan Co., N.M. N.M.P.M.

MOCH EXPLORATION COMPANY, CO. 1111 1111 1111

