Form C-144 July 21, 2008

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

Final Closure 12/16/08

State of New Mexico **Energy Minerals and Natural Resources** Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

MAY 27 2009

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

provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application
Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of <u>liability</u> 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: LIME ROCK RESOURCES A, L.P. OGRID #: 255333
Address: c/o Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401
Facility or well name: WELCH RL STATE #4
API Number: <u>30-015-36031</u> OCD Permit Number:
U/L or Qtr/Qtr D Section 28 Township 17-N Range 28-E County: Eddy
Center of Proposed Design: Latitude Longitude NAD: 1927 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment
Pit: Subsection F or G of 19.15.17.11 NMAC
Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume:
5. Alternative Method:

required. Excentions must be submitted to the Santa Fe Environmental Rureau office for consideration of annoval

Spud bons 5/12/08

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 consideration of approval.	office for
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
10. Siting Critoria (recording normitting), 10.15.17.10 NMAC	
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 account must demonstrate compliance for each siting criteria below in the application.	
material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approfice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of	
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.	
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	☐ Yes ☐ No
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	
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).	Yes No
- Topographic map; Visual inspection (certification) of the proposed site	
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No☐ NA
(Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	L IVA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No ☐ NA
(Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	L IVA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock	☐ Yes ☐ No
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	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	
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.	☐ Yes ☐ No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	
Society; Topographic map Within a 100-year floodplain.	
- FEMA map	☐ Yes ☐ 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:
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)
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 Haźardous Odors, including H ₂ 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
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)
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

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.I Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if 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 set 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	С
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 sor provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate disconsidered 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.	trict office or may be
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
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure p 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 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 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	15.17.11 NMAC

19. Operator Application Certification:	
I hereby certify that the information submitted with this application is true, acc	arate and complete to the best of my knowledge and belief.
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:
OCD Approval: Permit Application (including closure plan) Closure	Plan (only) OCD Conditions (see attachment)
OCD Representative Signature:	Approval Date:
Title:	OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection Instructions: Operators are required to obtain an approved closure plan prior The closure report is required to be submitted to the division within 60 days of section of the form until an approved closure plan has been obtained and the	r to implementing any closure activities and submitting the closure report. f the completion of the closure activities. Please do not complete this
22.	
Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alte ☐ If different from approved plan, please explain.	native Closure Method Waste Removal (Closed-loop systems only)
23. Closure Report Regarding Waste Removal Closure For Closed-loop System Instructions: Please indentify the facility or facilities for where the liquids, d two facilities were utilized.	rilling 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 Yes (If yes, please demonstrate compliance to the items below) No	or 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 oper Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ations:
Closure Report Attachment Checklist: Instructions: Each of the following 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 N32.81062 Longit	
On-site Closure Location: Latitude N32.81062 Longit	14D. [1727] 1703
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure belief. I also certify that the closure complies with all applicable closure requires.	
Name (Print): Mike Pippin	Title: Petroleum Engineer
Signature: Meho Tippin	Date: <u>May 26, 2009</u>
e-mail address: <u>mike@pippinllc.com</u>	Telephone: <u>505-327-4573</u>

Accepted for record NMOCD

POWER OF ATTORNEY

DESIGNATION OF AGENT

LIME ROCK RESOURCES A, L.P. hereby names the following person as its agent:

Name of Agent: Mike Pippin. Pippin LLC

Agent's Address: 3104 N. Sullivan, Farmington, NM 87401-2017

Agent's Telephone Number: (505) 327-4573

GRANT OF SPECIAL AUTHORITY

LIME ROCK RESOURCES A, L.P. grants its agent the authority to act for it with respect to the following only:

- 1. Executing forms required to be filed with the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department.
- 2. Executive forms required to be filed with the Bureau of Land management of the Department of Interior of the United States of America.

EFFECTIVE DATE

This power of attorney is effective immediately.

RELIANCE ON THIS POWER OF ATTORNEY

HIddi I wow

Any person, including the agent, may rely upon the validity of this power of attorney or a copy of it unless that person knows it has terminated or is invalid.

SIGNATURE AND ACKNOWLEDGMENT

LIME ROCK RESOURCES A, L.P.

Name: Charles Adcock

Title: Managing Director

Date: February 9, 2009

Address: 1111 Bagby Street, Suite 4600, Houston, TX 77002

Telephone Number: (713) 292-9512

State of TEXAS
County of HARRIS

This instrument was acknowledged before me on the of from 2009 by Charles Adcock, Managing Director of LIME ROCK RESOURCES. A. L.P. acting on behalf of said limited partnership.

Signature of Notarial Officer: Will Sold My commission expires: Will St 5 2012

TERRIE POOL Notary Public, State of Texas My Commission Expires August 05, 2012

LIME ROCK RESOURCES A, L.P. PIT CLOSURE

Block #24, Box #4

The attached analytical data was taken & analyzed by Cardinal Laboratories and passed all the State criteria. The first chloride test failed. More dirt was hauled away. The 2nd chloride test passed.

Block #24, Box #6

Liquid was hauled to Ray Westhall Operating, Inc. State CG SWD #1 permit #R-3221. Solids were hauled to Controlled Recovery Inc., permit #R-9166.

Block #24, Box #7

The pit was filled with clean excavated dirt and covered with 3 feet of top soil.

Block #24, Box #8

This well will not be reseeded until 7/1/09 due to the current drought conditions and the seasonal rain expected in July. The seed mixture we plan to use consists of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through tow successive growing seasons.



September 18, 2008

New Mexico State Land Office Oil, Gas, and Minerals Division 310 Old Santa Fe Trail Santa Fe, New Mexico 87501

Re:

Notice of Pit Closure Welch RL State #4

T17S-R28E, Sec. 28: NWNW

Eddy County, NM

U.S. Postal Sarvice in Gentil Field MAIL RECEIPT (Pomestic Mail Control Not instrumental coverage Provided).

Forcellive vibriomation visitour website at www.usps.coms

OFFICIAL SE

Postage \$

Certified Fee

Return Receipt Fee (Endorsement Required)

Restricted Delivery Fee (Endorsement Required)

Total Postage & Fees \$

Sent. New Mexico State Land Office

Since Oil, Gas, and Minerals Division

ar PO 310 Old Santa Fe Trail

Santa Fe, NM 87501

Pursuant to New Mexico Oil Conservation Division Rule 19.15.17.13 concerning closure of reserve pits, Lime Rock Resources is giving you, as surface owner, notice that Lime Rock will be closing the pit on the location of the Welch RL State #4 well.

Should you have any questions please contact me at 713-292-9536.

Regards.

Nelvorn. Sandefer

Debra D. Sandefer

(575) 746-6124 Office (575) 365-6414 Cellular (575) 748-8761 Fax



Post Office Box 1122 1908 South First Street Artesia, New Mexico 88211-1122

DATE

INVOICE #

12/17/2008

18335

BILL TO

LIME ROCK RESOURCES A L.P PO Box 1302 Artesia, NM 88211-1302

AUTHORI	IZATION	TERMS		LOCATION	
JERRY SI	MITH	Net 30	V	i	
QUANTITY		DESCRIPTION		RATE	AMOUNT

12-16-08

RECLAIMED DRILLING PIT; HAULED CUTTINGS TO C.R.I.; SEEDED DRILLING PIT WITH APPROVED BLM SEED.

16,660.00

16,660.00T

SUBTOTAL

Sales Tax

7.0625%

16,660.00 1,176.61

\$17,836.61

ARDINAL LABORATORIES, INC. 2111 Beechwood, Abliene, TX 79803 101 East Marland, Hobbs, NM 88240 (915) 873-7001 Fax (915) 873-7020 (505) 393-2126 Fax (505) 393-2476 Company Name: ANALYSIS REQUEST Project Manager: PO# Address: Conspany: State: Um Zip: 882/ Atin: CHY: Project Owner: Lime Rock -State: Zip: Project Name: Kre Phone #: Project Location: Fax PORTAL USE OHLY MATRIX SAMPLING PRES. LAB I.D. Sample I.D. AN DATE TIME 411449-1 NE 2-02-08 × #SE Middle Backgronne 40 days past due at the mile of 24% per extent from the estigated date of transists. M to despt that Cordinates like for insidurati or coron and all coals at solisations, including sharmy's lose. as interruptions, has of use, of sees of profits traumed by clara, the calesidaying Phone Result D. Yes Fax Result: 2-Yes REMARKS: unpler Relinquished: O No Additional Fax #: D No ived By: (Lab Staff) CHROKED BY: ample Condition Cool Intact O Yes N Yes No O No

- 7

mipler - UPS - Bus - Other

[†] Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7620.



Receiving Date: 12/02/08

Reporting Date: 12/04/08

Project Owner: LIME ROCK (30-015-36031)
Project Name: WELCH RL STATE #4
Project Location: SEC. 28 - T17S - R28E

Analysis Date: 12/03/08 Sampling Date: 12/02/08

Sample Type: SOIL. Sample Condition: INTACT

Sample Condition: INTACT Sample Received By: AB

Analyzed By: AB

LAB NO.	SAMPLE ID	Cl (mg/kg)
H16449-1	#1 NE	416
H16449-2	#2 SE	1,950
H16449-3	#3 MIDDLE	912
H16449-4	#4 SW	1,300
H16449-5	#5 NW	1,200
H16449-6	#6 BACKGROUND	368
Quality Control		500
True Value QC		500
% Recovery		100

METHOD: Standard Methods 4500-CI'B

Note: Analyses performed on 1:4 w.v aqueous extracts.

Relative Percent Difference

Chemist

12-04-08 Date

H16449 MORGAN

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



Receiving Date: 12/02/08

Reporting Date: 12/04/08

Project Owner: LIME ROCK (30-015-36031)
Project Name: WELCH RL STATE #4

Project Location: SEC 28-T17S-R28E

Sampling Date: 12/02/08

Sample Type: SOIL

Sample Condition: INTACT Sample Received By: AB

Analyzed By: ZL

LAB NUMBER	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DA	TE	12/03/08	12/03/08	12/03/08	12/03/08
H16449-1	#1 NE	< 0.050	<0.050	<0.050	<0.300
H16449-2	#2 SE	<0.050	<0.050	< 0.050	0.302
H16449-3	#3 MIDDLE	<0.050	<0.050	< 0.050	0.357
H16449-4	#4 SW	<0.050	<0.050	<0.050	<0.300
H16449-5	#5 NVV	<0.050	<0.050	<0.050	<0.300
Quality Control	— 1- <u></u>	0.048	0,046	0.046	0.139
True Value QC		0.050	0.050	0.050	0.150
% Recovery		96.0	92.0	92.0	92.7
Relative Perce	nt Difference	<1.0	<1.0	1.1	<1.0

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Date



Receiving Date: 12/02/08

Reporting Date: 12/03/08

Project Owner: LIME ROCK (30-015-36031)
Project Name: WELCH RL STATE #4
Project Location: SEC 39 T175 P395

Project Location: SEC 28-T17S-R28E

Sampling Date: 12/02/08

Sample Type: SOIL

Sample Condition: INTACT Sample Received By: AB

Analyzed By: AB

			418,1
	GRO	DRO	TOTAL.
	(C ₆ -C ₁₀)	(>C ₁₀ -C ₂₈)	TPH
LAB NUMBER SAMPLE ID	(mg/kg)	(mg/kg)	(mg/kg)

ANALYSIS D	ATE	12/02/08	12/02/08	12/02/08
H16449-1	#1 NE	<10.0	<10.0	<100
H16449-2	#2 SE	<10.0	<10.0	<100
H16449-3	#3 MIDDLE	<10.0	<10.0	<100
H16449-4	#4 SW	<10.0	<10.0	<100
H16449-5	#5 NW	<10.0	<10.0	<100
Quality Conti	lo	556	480	301
True Value C	iC	500	500	300
% Recovery		111	96.0	100
Relative Pen	cent Difference	1.3	0.1	<0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; EPA 418.1

Chemist

12/04/08

H16449 TPH2 MT

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	PDINAL LABORA 2111 Beechwood, i (915) 673-7001 F	Wilene	TX 7	9803	101 E	ast h	iarian	d, Hobbs,	NM 882					-	. 3-2	. —			-,		QUE	
ompany Name:	(915) 673-7001 F	9	1018-	7020	(505)	393.; 7	2326 F	ax (505)	993-2476						-			Pa	De	_d		
roject Manager:	stant.								-					ANAI	YSIS	RE	QUES	T			************	
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Receiving Date: 12/10/08 Reporting Date: 12/11/08

Project Owner: LIME ROCK (30-015-36031)
Project Name: WELCH RL STATE #4
Project Location: SEC. 28 - T175 - R28E

Analysis Date: 12/11/08 Sampling Date: 12/10/08 Sample Type: SOIL

Sample Condition: INTACT Sample Received By: ML

Analyzed By: HM

LAB NO.	SAMPLE ID	ÇÎ (mg/kg)
H16498-1	#1 NE	32
H16498-2	#2 SE	32
H16498-3	#3 MIDDLE	32
H16498-4	#4 SW	32
H16498-5	#5 NW	32
Quality Control		500
	The transfer of the second state of the second state of the second secon	500
True Value QC		
% Recovery		100
Relative Percent	Difference	< 0.1

METHOD: Standard Methods 4500-CIB

Note: Analyses performed on 1:4 wiv aqueous extracts.

Chemist /

Date

H16498 MORGAN



