

**PIT REMEDIATION AND
CLOSURE REPORT**

**EAGLE ROCK ENERGY, LLC.
BERRY HOBBS UNIT 17 #1, API: 30-025-36657
LEA COUNTY, NEW MEXICO**

Prepared For:

**EAGLE ROCK ENERGY, LLC.
P.O. BOX 1311
MIDLAND, TEXAS 79702**

Prepared By:

**SOUTH ENVIRONMENTAL SERVICES, INC
2400 S. LOOP 250 WEST
MIDLAND, TEXAS 79703**

NOVEMBER 2009

A Report Prepared for:

EAGLE ROCK ENERGY, LLC.
P.O. BOX 1311
MIDLAND, TEXAS 79702

PIT REMEDIATION AND
CLOSURE REPORT

Prepared by:

Ronnie W. Nickell

A handwritten signature in black ink, appearing to read 'Ronnie W. Nickell', is written over a horizontal line. The signature is stylized with a large, sweeping loop at the beginning and a long, horizontal stroke extending to the right.

SOUTH ENVIRONMENTAL SERVICES, INC
2400 S. LOOP 250 WEST
MIDLAND, TEXAS 79703

NOVEMBER 2009

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1.0 INTRODUCTION

On behalf of Eagle Rock Energy, LLC. (EAGLE ROCK), South Environmental Services, Inc. (SES) is pleased to submit this Pit Remediation and Closure Report for the site known as Berry Hobbs unit 17 #1 Lease, API: 30-025-36657, Lea County, New Mexico (the site). The site is located approximately 2 miles southeast of the intersection of SR 18 and US 62/180 in Lovington, New Mexico. This report presents the results of the remedial actions performed at the above referenced site.

1.1 Purpose of Report

The purpose of this report is to present a summary of the completed field activities and results of remedial actions performed in order to facilitate regulatory closure of this site.

2.0 PROTOCOLS AND PROCEDURES

2.1 Pit Remediation and Closure Activities

As illustrated in the attached Figures, the Excavation and Backfill procedures followed all applicable protocols and rules outlined in 19.15.17.10 NMAC. All liquids were removed prior to excavation process and the in place soil was mixed at a 3 to 1 ratio. South Environmental Services, Inc. took special care to ensure all impacted soils were included in the excavation and disposal. As outlined an approved state disposal facility was utilized for waste disposal. Confirmation sampling took place to ensure no impacted soil had been left in place. All backfilled material was appropriate soil, clean and compacted. Re-Vegetation and Site Remediation procedures were followed.

3.0 CONFIRMATION SAMPLING

As illustrated in the attached figures, confirmation sampling took place after impacted material had been disposed of on-site. The confirmation samples were taken for each quadrant (North, South, East, and West) of the main reserve pit and as well as Bottom Hole sample from the center of the main reserve pit. Three samples were taken for the outer reserve pit. On September 31, 2009 a confirmation sampling event was conducted consisting of the collection of eight (8) samples from 6 to 12 inches in depth. The confirmation samples were analyzed for TPH using Method SW-846 8015M and BTEX, EPA method SW-846 8021, and Chlorides using EPA 4500-Cl-B to confirm remediation levels. Confirmation sampling locations are depicted in Attachment 2, Figure 2.

Three (3) of the eight (8) confirmation samples collected (SW#1, SE#2, and NE#3) demonstrated Chloride concentrations below OCD regulatory limits (<500ppm), ranging

SS#3. Also, BTEX and TPH concentrations in all samples were below OCD standards of <1,000 mg/kg TPH, and Benzene <50.0 mg/kg. Laboratory data is included in Attachment 1, Table 1 and Attachment 5, Laboratory Analysis.

On September 22, 2009 an additional confirmation sampling event was conducted consisting of the collection of five (5) samples (following additional remediation). The confirmation samples (NW#4, CENTER#5, SS#1, SS#2, and SS#3) were analyzed for Chlorides using EPA 4500-Cl-B. Confirmation sampling locations are depicted in Attachment 2, Figure 2.

On October 19, 2009 an additional confirmation sampling event was conducted consisting of the collection of three (3) samples (following additional remediation). The confirmation samples (SS#1, SS#2, and SS#3) were analyzed for Chlorides using EPA 4500-Cl-B. Confirmation sampling locations are depicted in Attachment 2, Figure 2.

The final confirmation sample (SS#2) was collected on November 2, 2009, following additional remediation. Sample SS#2 demonstrated a Chloride concentration of <16 mg/kg, respectively, well below OCD regulatory limits (<500 mg/kg). Laboratory data is included in Attachment 1, Table 1, and Attachment 5, Laboratory analysis reports.

4.0 DISPOSAL FACILITY NAME AND PERMIT NUMBER

Controlled Recover, Inc. Disposal, Permit #: NM R-9166

5.0 SOIL BACKFILL AND COVER DESIGN SPECIFICATIONS

Please see attached figures for design and specifications. As illustrated, the soil cover is an adequate backfill material, compacted and non-waste containing, from top to cap (<4' below surface ground) to >1' below ground surface and topsoil to surface grade.

6.0 RE-VEGETATION

The attached Figure 5 & 6 of Attachment 4 shows the re-vegetation plan. As illustrated, the re-vegetation took place with a minimum of 70% native perennial vegetative cover consisted of at least 3 native plant species, including at least one grass and no noxious weeds. Cover will be maintained through 2 successive growing seasons.

7.0 RECOMMENDATIONS

Based on the findings and results of the remedial actions described herewith, South Environmental request the OCD's concurrence that the site meets the conditions for final site closure, thus requiring no further corrective action by EAGLE ROCK. Upon OCD approval, the site will be restored as near as possible to the original site conditions as set out below.

- The former pit area will be backfilled with native soils to the original elevation and contours of the surrounding land.

8.0 QA/QC PROCEDURES

8.1 Soil Sampling

Samples of subsurface soils were obtained utilizing proper EPA protocols and/or standards. Representative soil samples were collected using clean, disposable gloves and clean sampling tools. The soil sample was then placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container was filled to capacity to limit the amount of head-space present. Each container was labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler will be sealed for shipment to the laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling and transportation process.

Soil samples were delivered to Cardinal Laboratories in Hobbs, NM for TPH, BTEX, and Chloride analyses using the methods described below. Soil samples were analyzed for BTEX, TPH, and Chloride within fourteen days following the collection date.

The soil samples were analyzed as follows:

1. BTEX concentrations in accordance with EPA Method SW-846 8021.
2. TPH concentrations in accordance with modified Method SW-846 8015 M.
3. Chloride concentrations in accordance with Method 4500-Cl-B.

8.2 Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures. These procedures will either be transmitted with the laboratory reports or on file at the laboratory.

9.0 LIMITATIONS

South Environmental Services, Inc. has prepared this Pit Remediation and Closure Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

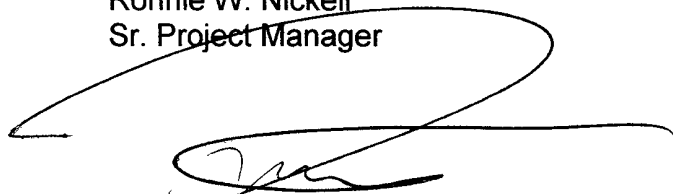
South Environmental Services, Inc. has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. South Environmental Services, Inc. has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. South Environmental Services, Inc. has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. South Environmental Services, Inc. also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of EAGLE ROCK Energy, LLC. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of South Environmental Services, Inc. and/or EAGLE ROCK Energy, LLC.

Thank you for the assistance in this matter. If you have any questions or require additional information, please contact me at 432-425-8454.

Sincerely,
SOUTH ENVIRONMENTAL SERVICES, INC.

Ronnie W. Nickell
Sr. Project Manager

A handwritten signature in black ink, appearing to read 'Ronnie W. Nickell', is written over the printed name and title. The signature is fluid and stylized, with a long horizontal stroke extending to the right.

Cc: Eagle Rock Energy, LLC, Midland, Texas

ATTACHMENTS

ATTACHMENT 1

LABORATORY ANALYSIS TABLE

Lea County, NM

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ATTACHMENT 2

SITE FIGURES

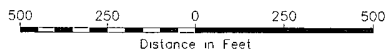
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1000' Radius

300' Radius

S 17th St

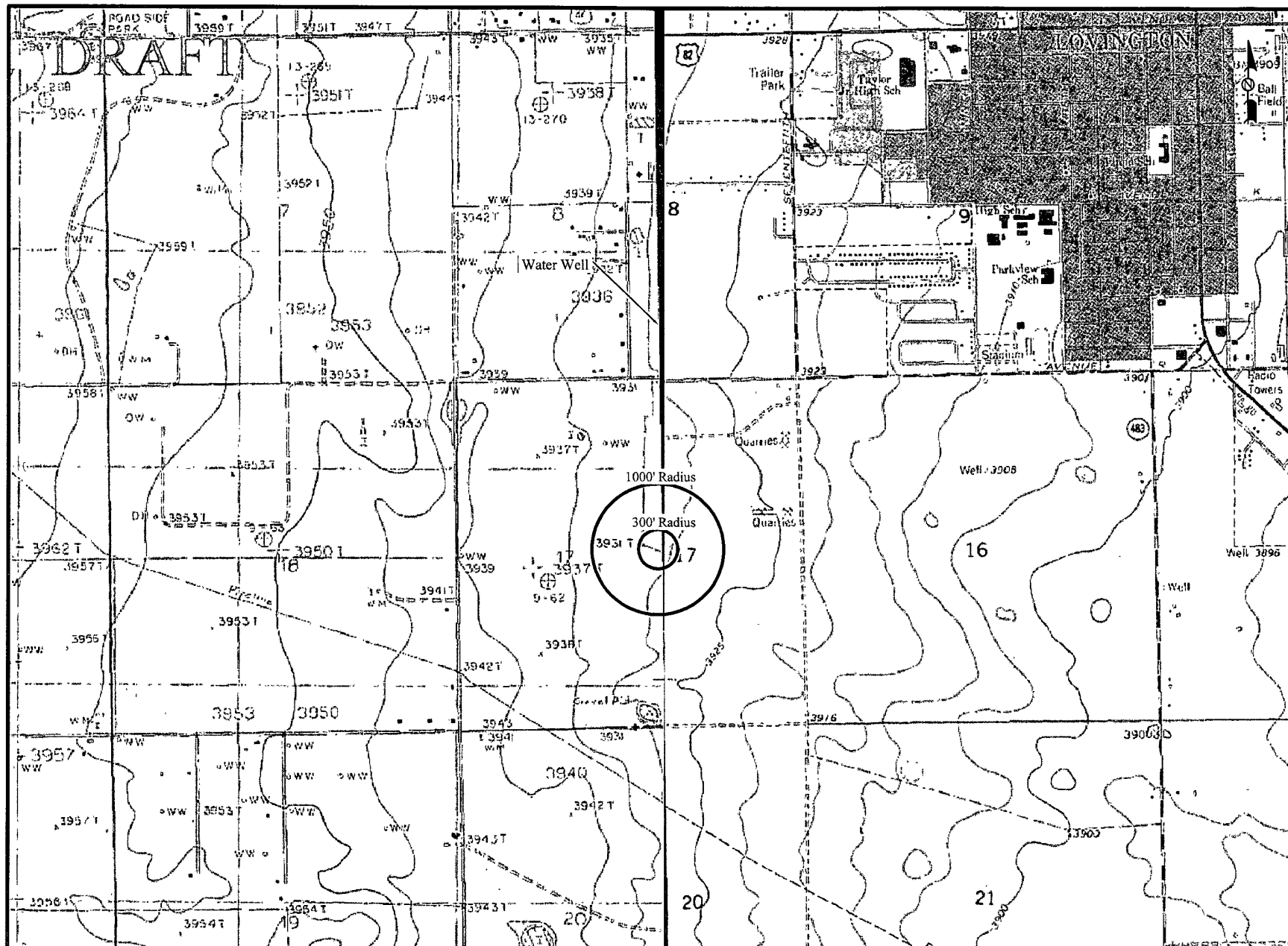


Berry Hobbs Unit 17 #1
Lat 32 92168885734° N
Long -103 374445001° W
Drawn By JDJ
August 3, 2009

API Well # 30-025-36657
Sec 17, T-16-S, R-36-E
Lea County, NM
Rev A-2
Scale 1" = 500'



Figure 1
Aerial Photograph
South Environmental Services, Inc.



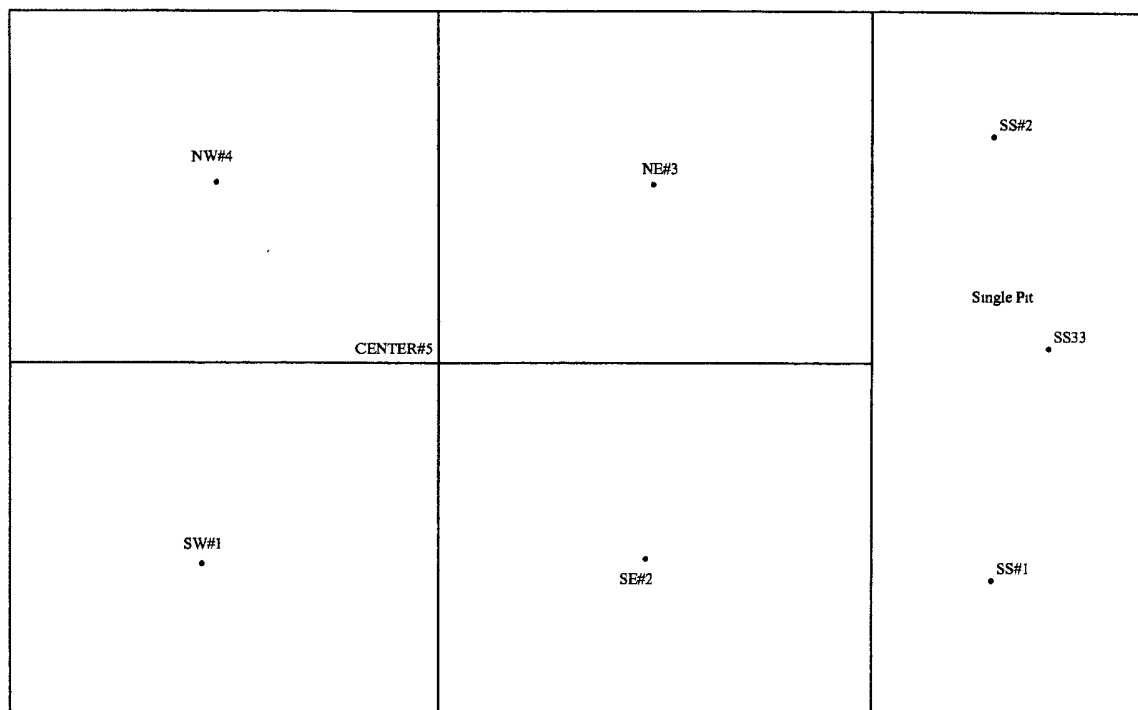
Berry Hobbs Unit 17 #1	API Well # 30-025-36657
Lat 32 92168885734° N	Sec 17, T-16-S, R-36-E
Long -103 374445001° W	Lea County, NM
Drawn By JDI	Rev. A-2
August 3, 2009	Scale 1" = 2000'

Figure 2
USGS Topographic Map



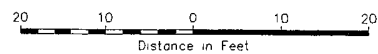
South Environmental Services, Inc.

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Legend.

- Composite Sample



Berry Hobbs Unit 17 Well #1

Ward County, TX

Drawn By JDJ

May 1, 2009

Eagle Rock Energy

Project Manager RN

Scale 1" = 20'

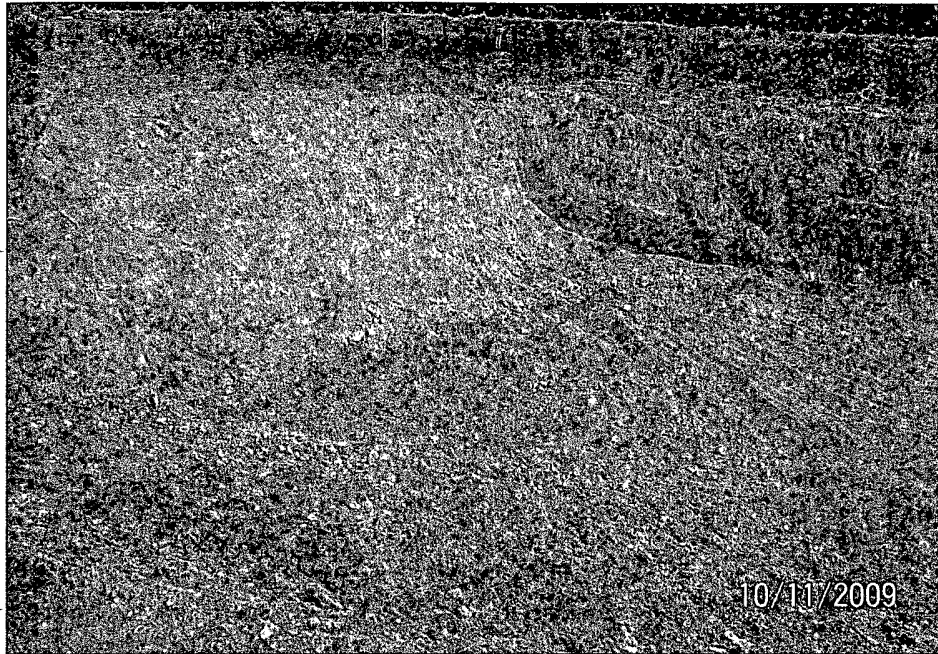
Site Map

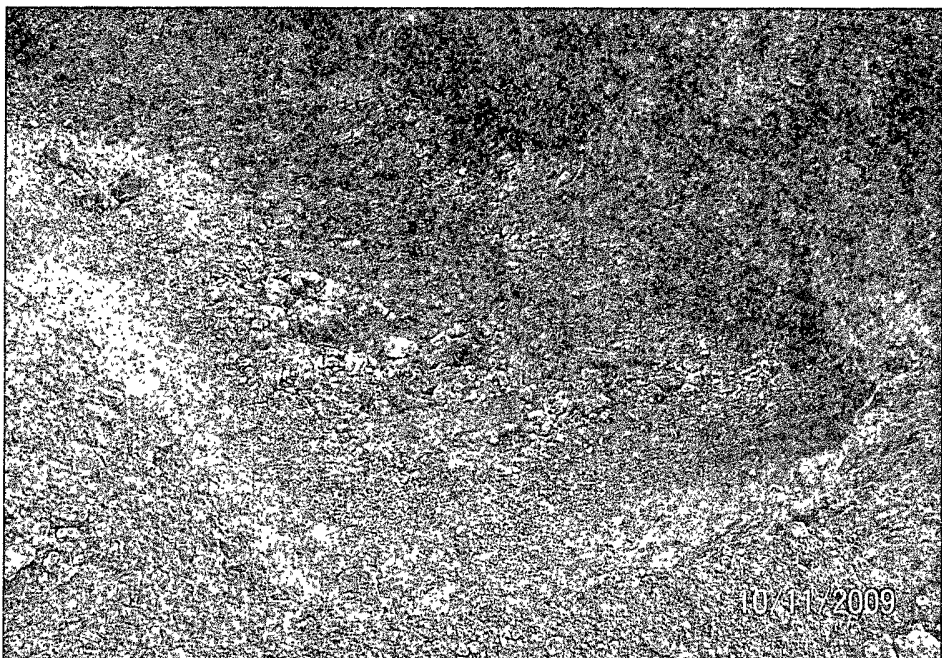
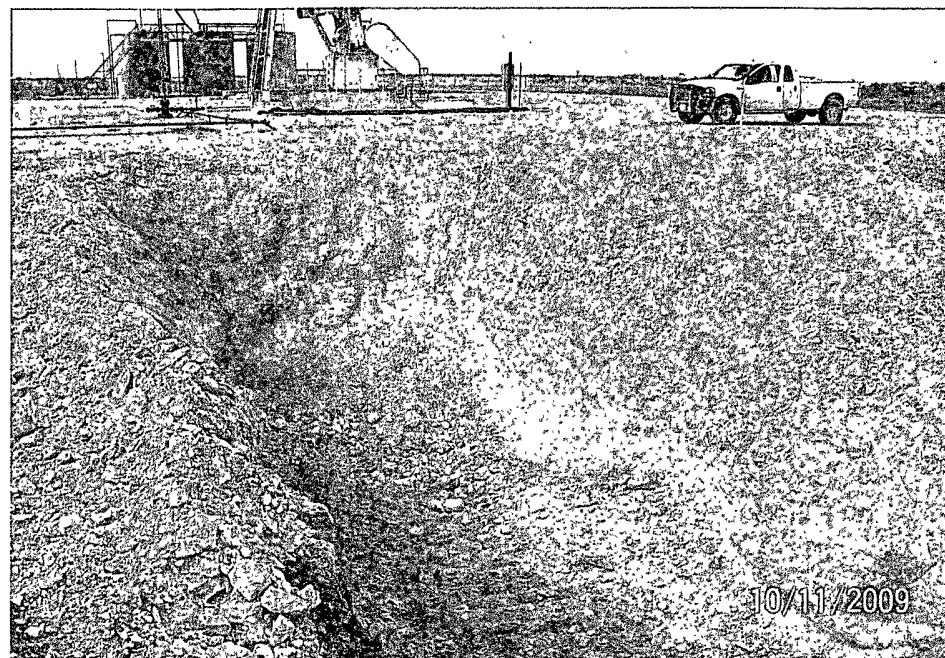
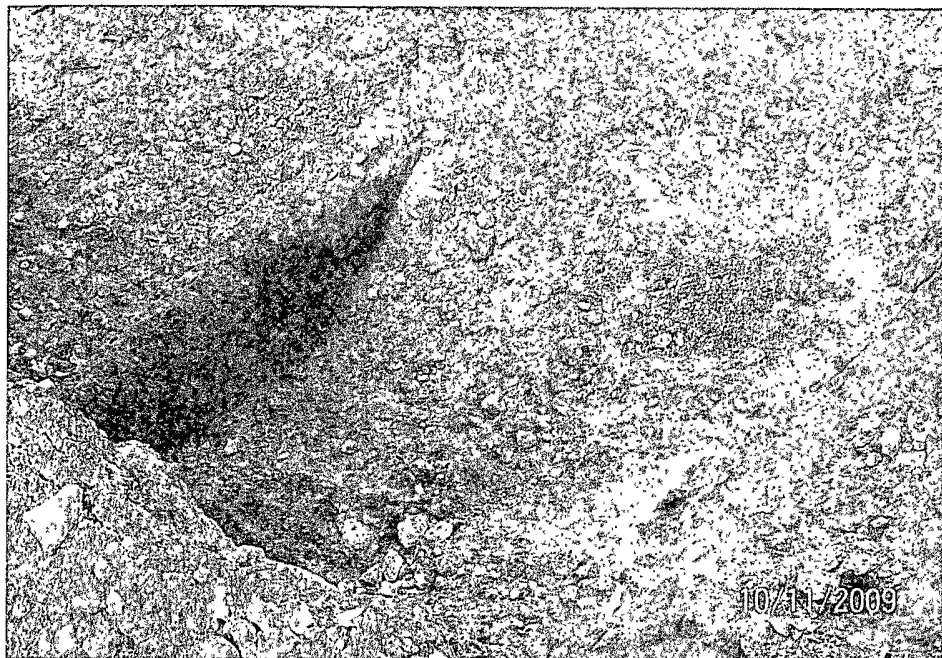


South Environmental Services, Inc.

ATTACHMENT 3

SITE PHOTOGRAPHS

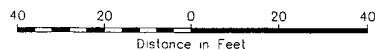
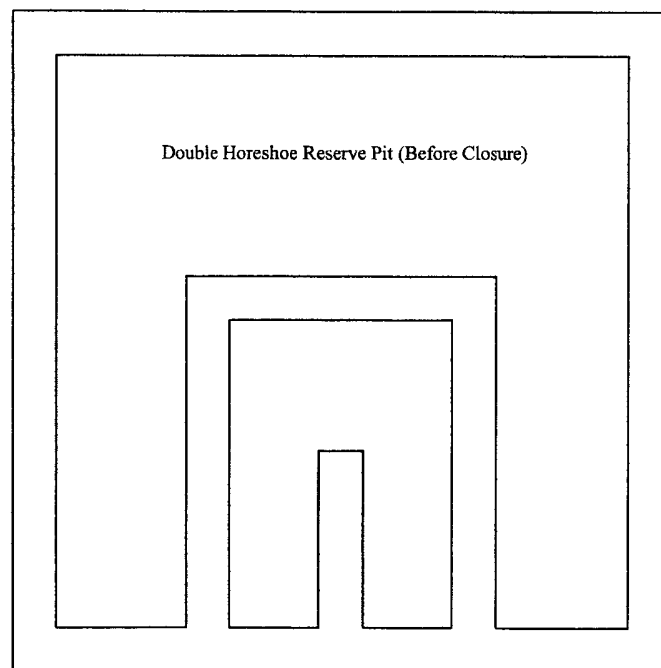




ATTACHMENT 4

SITE DRAFTS

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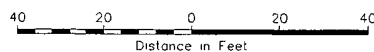
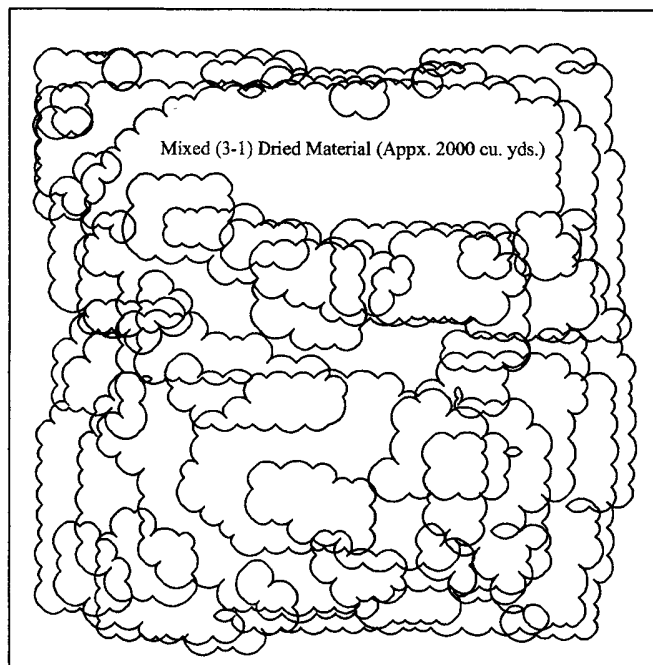
Berry Hobbs Unit 17 #1	API Well # 30-025-36657
Lat. 32 92168885734° N	Sec. 17, T-16-S, R-36-E
Long -103 374445001° W	Lea County, NM
Drawn By JDJ	Rev. A-2
August 3, 2009	Scale: 1" = 40'



South Environmental Services, Inc.

Figure 3
Previous Pit Design

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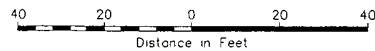
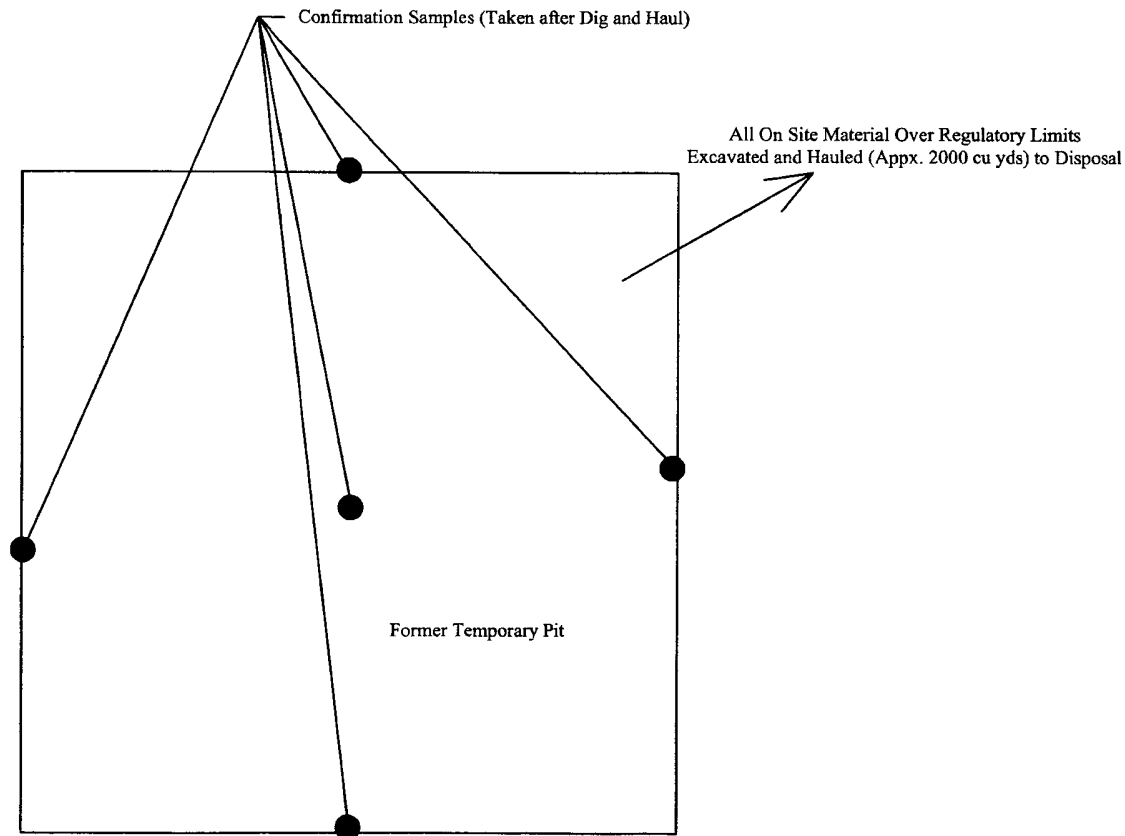


Berry Hobbs Unit 17 #1	API Well # 30-025-36657
Lat 32 92168885734° N	Sec 17, T-16-S, R-36-E
Long -103 374445001° W	Lea County, NM
Drawn By: JDJ	Rev A-2
August 3, 2009	Scale: 1" = 40'




Figure 4
Mixing and Drying Procedures
South Environmental Services, Inc.

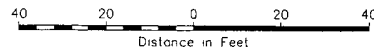
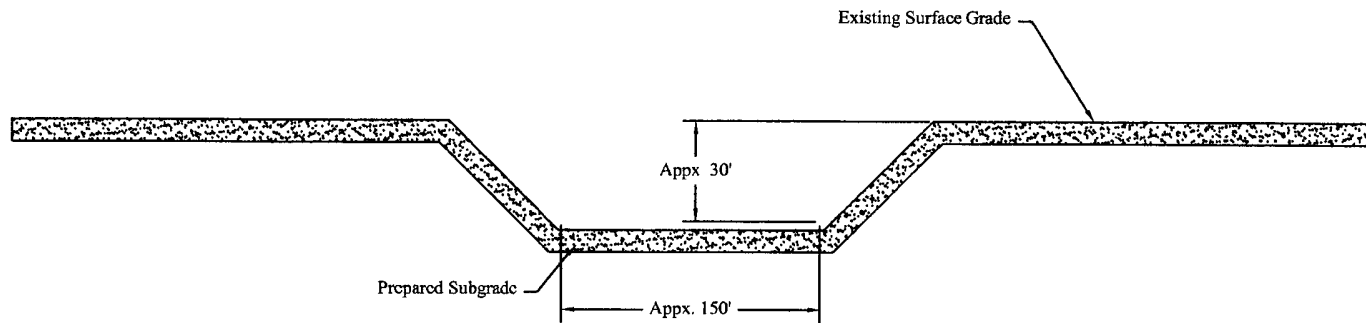
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Berry Hobbs Unit 17 #1	API Well # 30-025-36657
Lat 32 92168885734° N	Sec. 17, T-16-S, R-36-E
Long. -103 374445001° W	Lea County, NM
Drawn By JDJ	Rev A-2
August 3, 2009	Scale: 1" = 40'

Figure 5	
Sample Locations and Material Removal	
	South Environmental Services, Inc.

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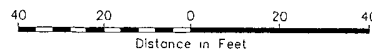
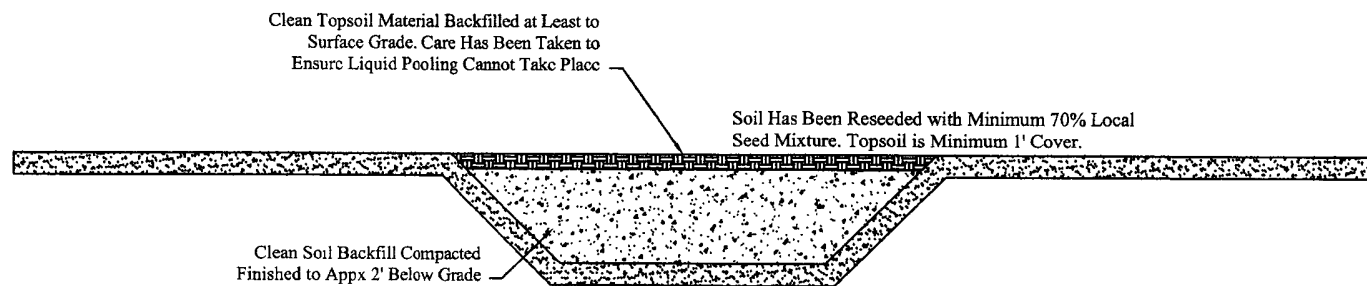


Berry Hobbs Unit 17 #1	API Well # 30-025-36657
Lat 32 92168885734° N	Sec 17, T-16-S, R-36-E
Long -103.374445001° W	Lea County, NM
Drawn By JDJ	Rev A-2
August 3, 2009	Scale: 1" = 40'




Figure 6 Cross Section
Backfill Procedures
South Environmental Services, Inc.

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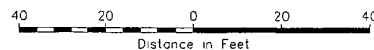
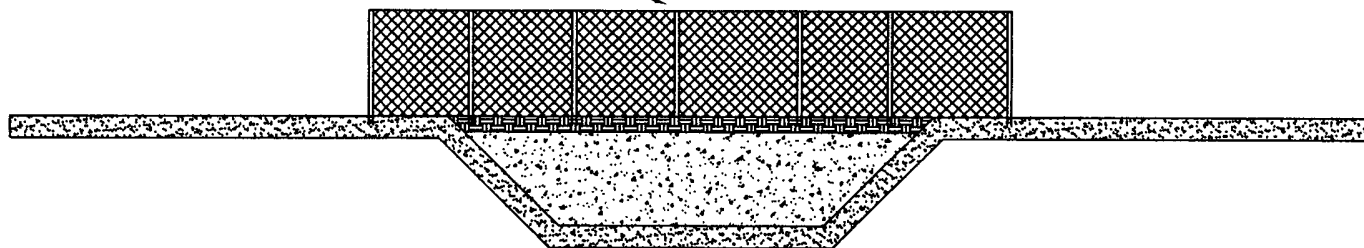
Berry Hobbs Unit 17 #1	API Well # 30-025-36657
Lat 32 92168885734° N	Sec 17, T-16-S, R-36-E
Long -103 374445001° W	Lea County, NM
Drawn By: JDJ	Rev: A-2
August 3, 2009	Scale 1" = 40'

Figure 7 Cross Section
Backfill and Re-Vegetation Procedures

 South Environmental Services, Inc.

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If Necessary, the Re-Vegetation will be protected from traffic, using appropriate measures, which may included fencing.



Berry Hobbs Unit 17 #1	API Well # 30-025-36657
Lat 32 92168885734° N	Sec. 17, T-16-S, R-36-E
Long -103.374445001° W	Lea County, NM
Drawn By: JDI	Rev. A-2
August 3, 2009	Scale: 1" = 40'

Figure 8 Cross Section
Site Re-Vegetation and Reclamation



South Environmental Services, Inc.

ATTACHMENT 5

WATER COLUMN/AVERAGE DEPTH OF WATER TABLE



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 07649	PRO	LE					17	16S	36E	651767	3643800*	0	140		
L 00209 B	IRR	LE		3	2	3	17	16S	36E	651460	3643506*	425	127		
L 04437	DOM	LE				3	17	16S	36E	651365	3643398*	568	120	95	25
L 04437 APPRO	DOM	LE				3	17	16S	36E	651365	3643398*	568	120	95	25
L 00209 C	IRR	LE			3	4	17	16S	36E	651972	3643212*	622	128		
L 07757	DOM	LE		1	1	2	17	16S	36E	651851	3644520*	724	72		
L 02056	PRO	LE			1	1	17	16S	36E	651144	3644406*	869	130	60	70
L 02056 APPRO	PRO	LE			1	1	17	16S	36E	651144	3644406*	869	130	60	70
L 01457 APPRO	DOM	LE		4	4	3	08	16S	36E	651641	3644715*	923	85	60	25
L 03298	DOM	LE		4	4	3	08	16S	36E	651641	3644715*	923	90	65	25
L 03298 APPRO	DOM	LE		4	4	3	08	16S	36E	651641	3644715*	923	90	65	25
L 03373	DOM	LE		4	4	3	08	16S	36E	651641	3644715*	923	97	72	25
L 03373 APPRO	DOM	LE		4	4	3	08	16S	36E	651641	3644715*	923	97	72	25
L 05380	DOM	LE		4	4	3	08	16S	36E	651641	3644715*	923	100	64	36
L 11796	DOM	LE		4	3	4	08	16S	36E	652045	3644723*	963	120	61	59
L 01070 APPRO	DOM	LE		3	4	3	08	16S	36E	651441	3644715*	971	75	55	20
L 08189	DOM	LE		3	4	3	08	16S	36E	651441	3644715*	971	120	70	50
L 11841	DOM	LE		1	1	1	17	16S	36E	651043	3644505*	1010	120		
L 11841 POD1	DOM	LE		1	1	1	17	16S	36E	651043	3644505*	1010	116	65	51
L 10572	OIL	LE		1	2	2	20	16S	36E	652282	3642915*	1023	150	70	80
L 10572	PRO	LE		1	2	2	20	16S	36E	652282	3642915*	1023	150	70	80
L 04598	DOM	LE			2	4	18	16S	36E	650755	3643593*	1032	136	75	61
L 04598 APPRO	DOM	LE			2	4	18	16S	36E	650755	3643593*	1032	136	75	61
L 06132	DOM	LE			2	4	18	16S	36E	650755	3643593*	1032	95	70	25
L 10712	PRO	LE			2	4	18	16S	36E	650755	3643593*	1032	165	60	105
L 07063	DOM	LE		2	4	4	18	16S	36E	650861	3643289*	1040	120	80	40
L 07845	DOM	LE			4	3	08	16S	36E	651542	3644816*	1040	110	73	37
L 00247 BA	IRR	LE		4	3	3	08	16S	36E	651236	3644708*	1051	123		
L 09307	DOM	LE		4	3	3	08	16S	36E	651236	3644708*	1051	135	60	75

*UTM location was derived from PLSS - see Help

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 06934	DOM	LE		1	2	4	18	16S	36E	650654	3643692*	1118	118	68	50
L 10880	DOM	LE		2	4	3	08	16S	36E	651641	3644915*	1122	150	70	80
L 06963	DOM	LE		4	4	4	18	16S	36E	650861	3643089*	1151	120	80	40
L 06982	DOM	LE		4	4	4	18	16S	36E	650861	3643089*	1151	120	72	48
L 01378 APPRO	DOM	LE		3	3	3	08	16S	36E	651036	3644708*	1165	76	51	25
L 01581 APPRO	DOM	LE		3	3	3	08	16S	36E	651036	3644708*	1165	89		
L 05218	DOM	LE		3	3	3	08	16S	36E	651036	3644708*	1165	120	90	30
L 01086	DOM	LE			2	2	18	16S	36E	650742	3644399*	1187	75		
L 01087 APPRO	DOM	LE			2	2	18	16S	36E	650742	3644399*	1187	75		
L 04939	DOM	LE			3	3	08	16S	36E	651137	3644809*	1189	100	75	25
L 09466	DOM	LE			3	3	08	16S	36E	651137	3644809*	1189	135	60	75
L 08898	PRO	LE		4	1	1	20	16S	36E	651269	3642693*	1213	147	70	77
L 09913	IRR	LE				3	08	16S	36E	651338	3645010*	1283	140	60	80
L 09913	STK	LE				3	08	16S	36E	651338	3645010*	1283	140	60	80
L 03236	DOM	LE		4	2	3	08	16S	36E	651634	3645118*	1324	96	55	41
L 03236 APPRO	DOM	LE		4	2	3	08	16S	36E	651634	3645118*	1324	96		
L 11253	DOM	LE		4	2	3	08	16S	36E	651634	3645118*	1324	140	86	54
L 12023 POD1	DOM	LE		4	1	4	08	16S	36E	652038	3645126*	1353	110	60	50
L 06937	DOM	LE		4	2	2	19	16S	36E	650867	3642686*	1432	110	69	41
L 01508	STK	LE			3	3	09	16S	36E	652754	3644838*	1432	95	55	40
L 03550	DOM	LE			2	3	08	16S	36E	651535	3645219*	1437	87	70	17
L 10103	DOM	LE			2	3	08	16S	36E	651535	3645219*	1437	123		
L 03596	DOM	LE		2	2	3	08	16S	36E	651634	3645318*	1523	88	70	18
L 03596 APPRO	DOM	LE		2	2	3	08	16S	36E	651634	3645318*	1523	88	70	18
L 07445	STK	LE		2	2	3	08	16S	36E	651634	3645318*	1523	100	68	32
L 11133	DOM	LE		2	2	3	08	16S	36E	651634	3645318*	1523	120		
L 06053	DOM	LE			2	4	08	16S	36E	652343	3645234*	1545	83	69	14
L 03727	DOM	LE					08	16S	36E	651740	3645412*	1612	100	60	40
L 03727 APPRO	DOM	LE					08	16S	36E	651740	3645412*	1612	100	60	40
L 03728	DOM	LE					08	16S	36E	651740	3645412*	1612	100	65	35
L 03728 APPRO	DOM	LE					08	16S	36E	651740	3645412*	1612	100	65	35
L 04651	DOM	LE					08	16S	36E	651740	3645412*	1612	97	85	12

*UTM location was derived from PLSS - see Help

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04651 APRO	DOM	LE					08	16S	36E	651740	3645412*	1612	97	85	12
L 07510	DOM	LE	3	3	2	08	16S	36E	651831	3645528*	1729	120	70		50
L 08113	DOM	LE	3	3	2	08	16S	36E	651831	3645528*	1729	104	61		43
L 08113 POD2	DOM	LE	3	3	2	08	16S	36E	651831	3645528*	1729	155			
L 08208	DOM	LE	3	3	2	08	16S	36E	651831	3645528*	1729				
L 00409	PRO	LE	1	3	2	16	16S	36E	653475	3644147*	1742	193			
L 05909	DOM	LE	4	3	2	08	16S	36E	652031	3645528*	1748	96	81		15
L 05910	DOM	LE	4	3	2	08	16S	36E	652031	3645528*	1748	93	70		23
L 05964	DOM	LE	4	3	2	08	16S	36E	652031	3645528*	1748	93	70		23
L 07587	DOM	LE	4	3	2	08	16S	36E	652031	3645528*	1748	110	72		38
L 10255	STK	LE	4	3	2	08	16S	36E	652031	3645528*	1748	150	70		80
L 00150	PRO	LE	1	1	2	19	16S	36E	650265	3642879*	1761	125			
L 05564	DOM	LE	3	4	2	08	16S	36E	652236	3645536*	1798	100	68		32
L 07663	DOM	LE	3	4	2	08	16S	36E	652236	3645536*	1798	110	72		38
L 08841	DOM	LE	3	4	2	08	16S	36E	652236	3645536*	1798	123	53		70
L 09733	DOM	LE		3	2	08	16S	36E	651932	3645629*	1836	120	78		42
L 06943	DOM	LE	4	4	2	08	16S	36E	652436	3645536*	1860	116	70		46
L 07719	DOM	LE	4	4	2	08	16S	36E	652436	3645536*	1860	120	70		50
L 07821	DOM	LE	4	4	2	08	16S	36E	652436	3645536*	1860	160	87		73
L 12004 POD1	DOM	LE	4	4	2	08	16S	36E	652436	3645536*	1860	120	63		57
L 00150 ENLGD.-S	PRO	LE	3	1	2	19	16S	36E	650265	3642679*	1874	80			
L 10924	DOM	LE		4	2	08	16S	36E	652337	3645637*	1923	150			
L 00196 D	IRR	LE	1	3	2	08	16S	36E	651831	3645728*	1929	120			
L 10209	DOM	LE	2	2	1	19	16S	36E	650063	3642872*	1940	128	94		34
L 07444 EXPL-1	EXP	LE	1	3	2	19	16S	36E	650271	3642476*	1997	130			
L 07444 EXPL-2	EXP	LE	1	3	2	19	16S	36E	650271	3642476*	1997	140			
L 07444 EXPL-3	EXP	LE	1	3	2	19	16S	36E	650271	3642476*	1997	178	120		58
L 01527 APPRO	DOM	LE		2	3	09	16S	36E	653152	3645250*	2005	85	60		25
L 07677	DOM	LE	1	2	3	09	16S	36E	653051	3645349*	2011	120	70		50
L 05856	STK	LE			4	20	16S	36E	652200	3641800*	2046	106	70		36
L 10606	PRO	LE	3	4	2	07	16S	36E	650620	3645506*	2055	160	55		105
L 04895	DOM	LE		2	1	19	16S	36E	649964	3642773*	2074	100			

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(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04176	DOM	LE		3	1	2	08	16S	36E	651824	3645931*	2131	105	82	23
L 04176 APPRO	DOM	LE		3	1	2	08	16S	36E	651824	3645931*	2131	105	82	23
L 02783	DOM	LE		2	4	1	19	16S	36E	650069	3642469*	2157	80	50	30
L 02783 APPRO	DOM	LE		2	4	1	19	16S	36E	650069	3642469*	2157	80	50	30
L 11489	DOM	LE		3	4	1	09	16S	36E	653044	3645552*	2168	130		
L 08296	DOM	LE			1	2	08	16S	36E	651925	3646032*	2237	150	70	80
L 09562	DOM	LE			2	1	08	16S	36E	651521	3646025*	2238	100	70	30
L 01244 REPAR	DOM	LE					09	16S	36E	653357	3645441*	2284	90		
L 11037	DOM	LE			2	2	08	16S	36E	652330	3646040*	2309	100	65	35
L 01423 APPRO	DOM	LE			1	1	08	16S	36E	651117	3646017*	2310	90	60	30
L 09784	DOM	LE			1	1	08	16S	36E	651117	3646017*	2310	100	65	35
L 01156	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	76	54	22
L 02336	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	100	63	37
L 02336 APPRO	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	100	62	38
L 03826	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	100	66	34
L 03826 APPRO	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	100	66	34
L 04572	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	100	66	34
L 04572 APPRO	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	100	66	34
L 05282	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	92	70	22
L 05944	DOM	LE		3	1	1	09	16S	36E	652633	3645946*	2314	100	68	32
L 03501	DOM	LE		1	4	1	09	16S	36E	653044	3645752*	2332	125	70	55
L 03501 APPRO	DOM	LE		1	4	1	09	16S	36E	653044	3645752*	2332	125	70	55
L 11480	STK	LE		2	1	2	08	16S	36E	652024	3646131*	2345	100		
L 01011 APPRO	DOM	LE		2	1	1	08	16S	36E	651216	3646116*	2380	75		
L 11488	DOM	LE		2	1	1	08	16S	36E	651216	3646116*	2380	150		
L 04487 APPRO	DOM	LE		2	2	2	16	16S	36E	654073	3644559*	2427	110	82	28
L 11436	DOM	LE		3	3	2	09	16S	36E	653449	3645560*	2434	160		
L 11437	DOM	LE		3	3	2	09	16S	36E	653449	3645560*	2434	160		
L 01124	DOM	LE		2	4	1	09	16S	36E	653244	3645752*	2447	85		
L 01124 APPRO	DOM	LE		2	4	1	09	16S	36E	653244	3645752*	2447	85		
L 02266	DOM	LE		2	4	1	09	16S	36E	653244	3645752*	2447	90	60	30
L 02266 APPRO	DOM	LE		2	4	1	09	16S	36E	653244	3645752*	2447	90	60	30

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(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 03549	DOM	LE		2	4	1	09	16S	36E	653244	3645752*	2447	123	70	53
L 03549 APPRO	DOM	LE		2	4	1	09	16S	36E	653244	3645752*	2447	123	70	53
L 02338	DOM	LE		4	4	4	09	16S	36E	654066	3644762*	2492	90	60	30
L 02338 APPRO	DOM	LE		4	4	4	09	16S	36E	654066	3644762*	2492	90	60	30
L 04154	DOM	LE		2	2	2	07	16S	36E	650813	3646109*	2498	102	65	37
L 04154 APPRO	DOM	LE		2	2	2	07	16S	36E	650813	3646109*	2498	102	65	37
L 03304	DOM	LE		3	2	4	09	16S	36E	653860	3645166*	2499	96	69	27
L 03304 APPRO	DOM	LE		3	2	4	09	16S	36E	653860	3645166*	2499	96	69	27
L 00968	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	78		
L 00968 APPRO	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500			
L 00982	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	85	55	30
L 00982 APPRO	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	85	55	30
L 01329 APPRO	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	71	55	16
L 03205	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	90	60	30
L 03205 APPRO	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	90	60	30
L 03448	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	85	65	20
L 03448 APPRO	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	85	65	20
L 06061	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	90	71	19
L 06119	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	180	68	112
L 07345	DOM	LE		1	1	1	09	16S	36E	652633	3646146*	2500	100	70	30
L 03110	DOM	LE		4	4	3	05	16S	36E	651613	3646327*	2531	100	65	35
L 03310 APPRO	DOM	LE		4	4	3	05	16S	36E	651613	3646327*	2531	100	65	35
L 07182	DOM	LE		4	4	3	05	16S	36E	651613	3646327*	2531	138	68	70
L 00245	IRR	LE		3	1	3	15	16S	36E	654290	3643560*	2534	95		
L 04659	DOM	LE		3	3	4	05	16S	36E	651818	3646334*	2534	110	85	25
L 04659 APPRO	DOM	LE		3	3	4	05	16S	36E	651818	3646334*	2534	110	85	25
L 04249 APPRO	DOM	LE		1	3	1	15	16S	36E	654284	3644164*	2543	96	74	22
L 08676	DOM	LE		4	3	4	05	16S	36E	652018	3646334*	2546	127	70	57
L 11204	DOM	LE		4	3	4	05	16S	36E	652018	3646334*	2546	100	62	38
L 03966 APPRO	DOM	LE		4	2	2	21	16S	36E	654099	3642745*	2559	95	60	35
L 05269	DOM	LE		4	2	2	21	16S	36E	654099	3642745*	2559	110	90	20
L 01380 APPRO	DOM	LE		2	1	1	09	16S	36E	652833	3646146*	2576	74	53	21

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(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q Q Q 64 16 4	Sec	Tws	Rng.	X	Y	Distance	Depth Well	Depth Water	Water Column
L 01527	DOM	LE		3 2 09	16S	36E		653550	3645661*	2577	85	60	25
L 02809	DOM	LE		4 3 3 05	16S	36E		651209	3646319*	2580	100	64	36
L 05835	DOM	LE		3 4 4 05	16S	36E		652222	3646342*	2582	96	72	24
L 02267	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	90	60	30
L 02267 APPRO	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	90	60	30
L 02392	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	100	62	38
L 02392 APPRO	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	100	62	38
L 02396	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	85	60	25
L 02396 APPRO	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	85	60	25
L 02543	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	115	62	53
L 02543 APPRO	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	115	62	53
L 02916	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	92	65	27
L 02916 APPRO	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	92	65	27
L 05496	DOM	LE		1 3 2 09	16S	36E		653449	3645760*	2582	139	79	60
L 01033 APPRO	DOM	LE		4 4 4 13	16S	35E		649286	3643062*	2588	70	50	20
L 01054 APPRO	DOM	LE		3 1 19	16S	36E		649601	3642364*	2598	76	45	31
L 02486	DOM	LE		1 2 4 09	16S	36E		653860	3645366*	2614	90	60	30
L 02486 APPRO	DOM	LE		1 2 4 09	16S	36E		653860	3645366*	2614		60	
L 03109	DOM	LE		4 4 4 05	16S	36E		652422	3646342*	2625	85	60	25
L 03109 APPRO	DOM	LE		4 4 4 05	16S	36E		652422	3646342*	2625	85	60	25
L 05140	DOM	LE		1 3 15	16S	36E		654391	3643661*	2627	110	90	20
L 00967	DOM	LE		3 3 3 05	16S	36E		651009	3646319*	2630	75		
L 01319 APPRO	DOM	LE		3 3 3 05	16S	36E		651009	3646319*	2630	103	65	38
L 02465 APPRO	DOM	LE		3 3 3 05	16S	36E		651009	3646319*	2630	100	65	35
L 02465 CLW	PRO	LE		3 3 3 05	16S	36E		651009	3646319*	2630	145	120	25
L 02910	DOM	LE		3 3 3 05	16S	36E		651009	3646319*	2630	120	63	57
L 02910 APPRO	DOM	LE		3 3 3 05	16S	36E		651009	3646319*	2630	76	68	8
L 06130	DOM	LE		3 1 15	16S	36E		654385	3644065*	2631	85	70	15
L 00984	DOM	LE		2 2 2 24	16S	35E		649292	3642860*	2647	60		
L 00985	DOM	LE		2 2 2 24	16S	35E		649292	3642860*	2647	60		
L 01007 APPRO	DOM	LE		3 3 3 10	16S	36E		654271	3644771*	2685	84	47	37
L 02179	DOM	LE		3 3 15	16S	36E		654398	3643257*	2686	85	57	28

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(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 02179 APPRO	DOM	LE		3	3	15	16S	36E		654398	3643257*	2686	85	57	28
L 04379	DOM	LE		3	3	15	16S	36E		654398	3643257*	2686	112	70	42
L 04379 APPRO	DOM	LE		3	3	15	16S	36E		654398	3643257*	2686	112	70	42
L 03184	DOM	LE		4	4	05	16S	36E		652323	3646443*	2700	100	58	42
L 03184 APPRO	DOM	LE		4	4	05	16S	36E		652323	3646443*	2700	100	58	42
L 02465	DOM	LE		3	3	05	16S	36E		651110	3646420*	2701	145	120	25
L 08852	DOM	LE		3	3	05	16S	36E		651110	3646420*	2701	110	70	40
L 00057 A	IRR	LE		2	4	3	05	16S	36E	651613	3646527*	2731	110		
L 02422 APPRO	DOM	LE		3	1	2	09	16S	36E	653442	3645964*	2736			
L 03966	DOM	LE		4	4	2	21	16S	36E	654106	3642342*	2756	95	60	35
L 01608 APPRO	PRO	LE		2	2	30	16S	36E		650795	3641175*	2799	145	80	65
L 03385	DOM	LE		1	3	3	05	16S	36E	651009	3646519*	2822	100	55	45
L 09346	DOM	LE		1	3	3	05	16S	36E	651009	3646519*	2822	126	70	56
L 00245 S2	IRR	LE			3	15	16S	36E		654599	3643458*	2852	137	65	72
L 11673	SAN	LE		3	4	3	04	16S	36E	653031	3646358*	2853	120	62	58
L 00971	DOM	LE			3	05	16S	36E		651311	3646621*	2857	70		
L 03700 APPRO	DOM	LE			3	05	16S	36E		651311	3646621*	2857	100		
L 10603	DOM	LE			3	05	16S	36E		651311	3646621*	2857	158	60	98
L 03911	DOM	LE			4	05	16S	36E		652120	3646636*	2857	85	65	20
L 03911 APPRO	DOM	LE			4	05	16S	36E		652120	3646636*	2857	85	65	20
L 04902	DOM	LE			4	05	16S	36E		652120	3646636*	2857	110	65	45
L 04903	DOM	LE			4	05	16S	36E		652120	3646636*	2857	100	80	20
L 05962	DOM	LE			4	05	16S	36E		652120	3646636*	2857	125	70	55
L 06590	DOM	LE			4	05	16S	36E		652120	3646636*	2857	100	65	35
L 06804	DOM	LE			4	05	16S	36E		652120	3646636*	2857	74	60	14
L 08218	DOM	LE			4	05	16S	36E		652120	3646636*	2857	120		
L 08274	DOM	LE			4	05	16S	36E		652120	3646636*	2857	120	68	52
L 08705	DOM	LE			4	05	16S	36E		652120	3646636*	2857	102	65	37
L 05706	DOM	LE		3	2	1	07	16S	36E	649808	3645894*	2867	74	60	14
L 01709	DOM	LE		4	3	3	10	16S	36E	654471	3644771*	2873	100	60	40
L 01709 APPRO	DOM	LE		4	3	3	10	16S	36E	654471	3644771*	2873	100	60	40
L 05561	DOM	LE		4	2	09	16S	36E		653954	3645670*	2877	100	75	25

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(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 05247 REPAR	DOM	LE		1	2	09	16S	36E		653543	3646065*	2878	109	77	32
L 01180 APPRO	DOM	LE		1	1	2	09	16S	36E	653442	3646164*	2897	78	60	18
L 00153 ENLGD-S	PRO	LE		2	2	4	12	16S	35E	649254	3645276*	2914	98		
L 00245 -S-	IRR	LE		1	2	3	15	16S	36E	654693	3643767*	2926	95		
L 01484 APPRO	DOM	LE		3	3	1	22	16S	36E	654310	3642350*	2927	88	55	33
L 07514	DOM	LE		4	2	3	05	16S	36E	651606	3646729*	2933	115	56	59
L 01401 APPRO	DOM	LE		3	1	4	05	16S	36E	651811	3646737*	2937	80		
L 04249	DOM	LE		1	4	1	15	16S	36E	654686	3644171*	2942	96	74	22
L 10244	DOM	LE		4	1	4	05	16S	36E	652011	3646737*	2947	120	67	53
L 10413	DOM	LE		4	1	4	05	16S	36E	652011	3646737*	2947	110	76	34
L 03212	DOM	LE		3	2	4	05	16S	36E	652216	3646744*	2978	95	65	30
L 03212 APPRO	DOM	LE		3	2	4	05	16S	36E	652216	3646744*	2978	95	65	30
L 03212 REPAR	DOM	LE		3	2	4	05	16S	36E	652216	3646744*	2978	85	65	20
L 10469	DOM	LE		3	2	4	05	16S	36E	652216	3646744*	2978	120	120	0

Average Depth to Water: **67 feet**

Minimum Depth: **45 feet**

Maximum Depth: **120 feet**

Record Count: 235

UTMNAD83 Radius Search (in meters):

Easting (X): 651767

Northing (Y): 3643800

Radius: 3000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data

9/2/09 8:38 AM

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WATER COLUMN/ AVERAGE
DEPTH TO WATER

ATTACHMENT 6

LABORATORY ANALYSIS REPORTS



ARDINAL LABORATORIES

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

September 1, 2009

Libby Einhorn
Eagle Rock Resources
P.O. Box 690
Monahans, TX 79756

Re: Berry Hobbs

Enclosed are the results of analyses for sample number H18133, received by the laboratory on 08/31/09 at 11:48 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.



ARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
EAGLE ROCK RESOURCES
ATTN: LIBBY EINHORN
P.O. BOX 690
MONAHANS, TX 79756
FAX TO: (432) 943-3827, (432) 682-4182 &
(575) 746-6534

Receiving Date: 08/31/09
Reporting Date: 09/01/09
Project Number: UNIT 17 WELL #1
Project Name: BERRY HOBBS
Project Location: LEA, NM; UNIT J SEC. 17 T16S R36E

Sampling Date: 08/31/09
Sample Type: SOIL
Sample Condition: INTACT** @ 24.5°C
Sample Received By: ML
Analyzed By: AB/HM

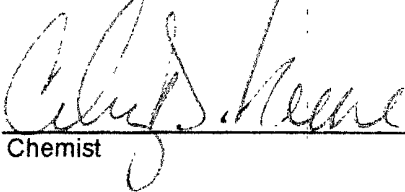
LAB NUMBER	SAMPLE ID	GRO	DRO	418.1 TOTAL	CI*
		(C ₆ -C ₁₀) (mg/kg)	(>C ₁₀ -C ₂₈) (mg/kg)	TPH (mg/kg)	
ANALYSIS DATE		08/31/09	08/31/09	08/31/09	09/01/09
H18133-1	SW#1	<10.0	<10.0	<100	80
H18133-2	SE#2	<10.0	<10.0	<100	208
H18133-3	NE#3	<10.0	75.0	245	480
H18133-4	NW#4	<10.0	<10.0	<100	688
H18133-5	CENTER#5	<10.0	<10.0	<100	912
H18133-6	SS#1	<10.0	<10.0	<100	688
H18133-7	SS#2	<10.0	<10.0	<100	1,500
H18133-8	SS#3	<10.0	<10.0	<100	3,600
Quality Control		556	506	337	500
True Value QC		500	500	300	500
% Recovery		111	101	112	100
Relative Percent Difference		4.8	5.9	3.2	2.0


METHODS: TPH GRO & DRO: EPA SW-846 8015 M; EPA 418.1; CI-: Std. Methods 4500-CI-B

*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

**H18133-5 was not INTACT.

Not accredited for GRO/DRO, TPH 418.1, and Chloride.


Chemist


Date

H18133 TPH2CL ERR

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



CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR EAGLE ROCK RESOURCES

ATTN: LIBBY EINHORN

P.O. BOX 690

MONAHANS, TX 79756

FAX TO: (432) 943-3827, (432) 682-4182, & (575) 746-6534

Receiving Date: 08/31/09

Reporting Date: 09/01/09

Project Number: UNIT 17 WELL #1

Project Name: BERRY HOBBS

Project Location: LEA, NM; UNIT J SEC. 17 T16S R36E

Sampling Date: 08/31/09

Sample Type: SOIL

Sample Condition: INTACT** @ 24.5°C

Sample Received By: ML

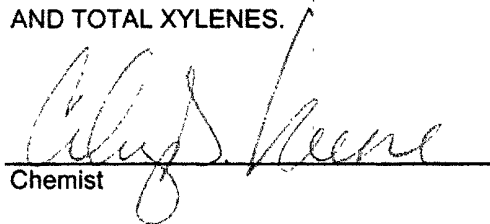
Analyzed By: ZL

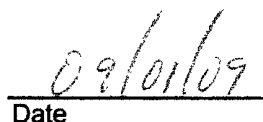
LAB NUMBER	SAMPLE ID	ETHYL TOTAL			
		BENZENE	TOLUENE	BENZENE	XYLENES
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
ANALYSIS DATE		08/31/09	08/31/09	08/31/09	08/31/09
H18133-1	SW#1	<0.050	0.054	<0.050	<0.300
H18133-2	SE#2	<0.050	<0.050	<0.050	<0.300
H18133-3	NE#3	<0.050	<0.050	<0.050	<0.300
H18133-4	NW#4	<0.050	<0.050	<0.050	<0.300
H18133-5	CENTER#5	<0.050	<0.050	<0.050	<0.300
H18133-6	SS#1	<0.050	<0.050	<0.050	<0.300
H18133-7	SS#2	<0.050	<0.050	<0.050	<0.300
H18133-8	SS#3	<0.050	<0.050	<0.050	<0.300
Quality Control		0.017	0.022	0.017	0.051
True Value QC		0.020	0.020	0.020	0.060
% Recovery		85.0	110	85.0	85.0
Relative Percent Difference		3.4	5.1	3.6	2.4

METHODS: EPA SW-846 8021

**H18133-5 was not INTACT.

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


Chemist


Date

H18133 BTEX ERR

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



ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page ____ of ____

Company Name: EAGLE ROCK		BILL TO		ANALYSIS REQUEST																		
Project Manager: LIBBY EMMERSON		P.O. #:		<div style="display: flex; flex-direction: column; align-items: center;"> <div>Chlorides</div> <div>Combined</div> <div>ERO - DRO</div> <div>TPH</div> <div>B - TEX</div> <div>Benzene</div> <div>GW - DePTH</div> <div>FT. BGS</div> </div>																		
Address: Unit 1 & 17 T16S E36E		Company: South Env. Serv.																				
City: State: Zip:		Attn: Environmental																				
Phone #: Fax #:		Address: Services																				
Project #: UNIT 17 # well # Project Owner: EAGLE ROCK		City:																				
Project Name: ERRY Hobbs		State: Zip:																				
Project Location: Iron Dam		Phone #:																				
Sampler Name: FEI - Merum		Fax #:																				
FOR LAB USE ONLY																						
Lab I.D.	Sample I.D.	GRAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE	ICE / COOL	OTHER:	DATE	TIME								
H18133-1	SW#1	X				X							8/31/09	11AM								
-2	SE#2	X				X							8/31/09	11:05								
-3	NE#3	X				X							8/31/09	11:10								
-4	NW#4	X				X							8/31/09	11:15								
-5	Center #5	X				X							8/31/09	11:20								
-6	SS#1	X				X							8/31/09	11:25								
-7	SS#2	X				X							8/31/09	11:30								
-8	SS#3	X				X							8/31/09	11:50								

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

Sampler Relinquished:		Date: 8/31/09	Received By: Yvonne DeBut	Phone Result: X	No	Add'l Phone #:
Time: 11:48		Date:	Received By:	Fax Result: X	No	Add'l Fax #:
Delivered By: (Circle One)		Temp. 24.5°C	Sample Condition	REMARKS:		
Sampler - UPS - Bus - Other:		Cool Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Call: B-11 Box - 575 910-9120) 432 (425-8454)		
		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	FAX - 575 746-6534		
				Fax - 432-682-4182		
				Email: Ronnie@SouthEnv.com		

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

#26

* plastic bags

#H18133-5 - Not intact
#B 8/31/09

RUSH 11



September 28, 2009

Libby Einhorn
Eagle Rock Resources
P.O. Box 690
Monahans, TX 79756

Re: Berry Hobbs

Enclosed are the results of analyses for sample number H18286, received by the laboratory on 09/22/09 at 10:40 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.



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

ANALYTICAL RESULTS FOR
EAGLE ROCK RESOURCES
ATTN: LIBBY EINHORN
P.O. BOX 690
MONAHANS, TX 79756
FAX TO: (575) 746-6534 & (432) 682-4182

Receiving Date: 09/22/09
Reporting Date: 09/24/09
Project Number: 17 #1
Project Name: BERRY HOBBS
Project Location: LEA CO., NM

Sampling Date: 09/22/09
Sample Type: SOIL
Sample Condition: COOL & INTACT @ 1.0°C
Sample Received By: CK
Analyzed By: AB/ZL/HM

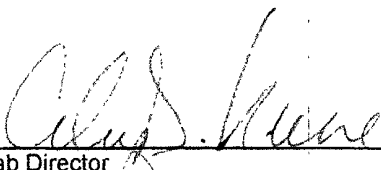
LAB NO.	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	CI* (mg/kg)
ANALYSIS DATE:		09/23/09	09/23/09	09/23/09	09/23/09	09/23/09	09/23/09	09/22/09
H18286-1 CENTER		<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	48
H18286-2 NORTH WEST		<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	16
H18286-3 NORTH EAST		<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	32
H18286-4 SS#1		<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	4,160
H18286-5 SS#2		<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	2,800
H18286-6 SS#3		<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	3,520
Quality Control		474	482	0.060	0.058	0.057	0.167	500
True Value QC		500	500	0.050	0.050	0.050	0.150	500
% Recovery		94.8	96.4	120	116	114	111	100
Relative Percent Difference		3.0	5.2	3.8	3.9	3.9	2.7	<0.1

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; CI-: Std. Methods 4500-CI-B

*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

Not accredited for Chloride and GRO/DRO.

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


Lab Director

09/28/09
Date

H18286 TBCL ERR

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



ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page ____ of ____

Company Name: Eagle Rock				BILL TO				ANALYSIS REQUEST											
Project Manager: Barry Einhorn				P.O. #:				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Clonidine</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Tpp</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Betex</div> </div>											
Address:				Company: Eagle Rock															
City: State: Zip:				Attn:															
Phone #: Fax #:				Address:															
Project #: 17#1 Project Owner: Eagle Rock				City:															
Project Name: Barry Hobbs				State: Zip:															
Project Location: Lee, NM				Phone #:															
Sampler Name: Barry Hobbs				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		IGRAB OR (COMP. #)		CONTAINERS		MATRIX		PRESERV.		SAMPLING							
								GROUNDWATER											
								WASTEWATER											
								SOIL											
								OIL											
								SLUDGE											
								OTHER:											
								ACID/BASE:											
								ICE / COOL											
								OTHER:											
										DATE		TIME							
H18286-1		Counter		X		X		X		X		X		X					
2		NORTH WEST		X		X		X		X		X		X					
3		NORTH EAST		X		X		X		X		X		X					
4		SS# 1		X		X		X		X		X		X					
5		SS# 2		X		X		X		X		X		X					
6		SS# 3		X		X		X		X		X		X					

PLEASE NOTE: Liability And Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis and testing. Notwithstanding to the extent that any cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In the event that Cardinal, be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, or affiliates, shall be limited to the amount paid by the client for the analysis and testing. Cardinal's liability shall be limited to the amount paid by the client for the analysis and testing.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice and all costs of collections, including attorney's fees.

Sampler Relinquished:		Date:		Received By:		Phone Result:		No		Add'l Phone #:	
		Time:				Fax Result:		No		Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS: Call Barry Bob 575 910 6120 FAX 575 746 6534 432 682 4152					
		Time:									
Delivered By: (Circle One)		Temp.		Sample Condition							
Sampler - UPS - Bus - Other:		10°C		Cool Intact		CHECKED BY: (Initials)					
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					

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

Email: **RONNIE@South ENV. com**



ARDINAL LABORATORIES

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

October 19, 2009

Libby Einhorn
Eagle Rock Resources
P.O. Box 690
Monahans, TX 79756

Re: Berry Hobbs

Enclosed are the results of analyses for sample number H18526, received by the laboratory on 10/19/09 at 10:17 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,

Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.



ANALYTICAL RESULTS FOR
EAGLE ROCK RESOURCES
ATTN: LIBBY EINHORN
P.O. BOX 690
MONAHANS, TX 79756
FAX TO: (575) 746-6534 & (432) 682-4182

Analysis Date: 10/19/09
Sampling Date: NOT GIVEN
Sample Type: SOIL
Sample Condition: INTACT @ 23.5°C
Sample Received By: ML
Analyzed By: HM

[illegible]

4500-CIB

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

Date

H18526 Eagle Rock

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



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page ____ of ____

Company Name: <u>Eagle Rock Resources</u>				BILL TO				ANALYSIS REQUEST																					
Project Manager: <u>Libby Einhorn</u>				P.O. #:				<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> <u>Chlorides</u> </div>																					
Address:				Company:																									
City: State: Zip:				Attn:																									
Phone #: Fax #:				Address:																									
Project #: <u>174</u> Project Owner: <u>Eagle Rock</u>				City:																									
Project Name: <u>Berry Hobbs</u>				State: Zip:																									
Project Location: <u>Log County NM</u>				Phone #:																									
Sampler Name: <u>B-11 Box</u>				Fax #:																									
FOR LAB USE ONLY				MATRIX																PRESERV.				SAMPLING					
Lab I.D.		Sample I.D.		IGRAB OR (C)OMP.		# CONTAINERS														GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE	
H18526-1		SS#1																											
-2		SS#2																											
-3		SS#3																											

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. No claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In the event of any claim, Cardinal, on behalf of its subsidiaries, shall be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, or its subsidiaries, but shall not be liable for the performance of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:		Date: <u>10-16-09</u>		Received By: <u>Misty LeBart</u>		Phone Result: <input type="checkbox"/> No		Add'l Phone #:	
Relinquished By: <u>[Signature]</u>		Time: <u>10:17a</u>		Received By: <u>[Signature]</u>		Fax Result: <input type="checkbox"/> No		Add'l Fax #:	
Delivered By: (Circle One)		Temp. <u>23.5°C</u>		Sample Condition		CHECKED BY: <u>MOAB</u>		REMARKS:	
Sampler - UPS - Bus - Other:		Cool <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<u>Call B-11 Box 575-910-6120</u> <u>Fax 575-746-6534</u> <u>432-682-4182</u> <u>Email - Ronnie@SouthEnv.com</u>	

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



November 3, 2009

Libby Einhorn
Eagle Rock Resources
P.O. Box 690
Monahans, TX 79756

Re: Berry Hobbs Unit

Enclosed are the results of analyses for sample number H18625, received by the laboratory on 11/02/09 at 2:59 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

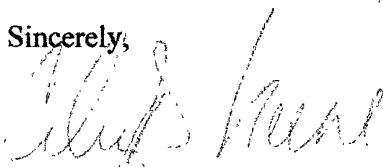
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,



Celey D. Keene
Laboratory Director

This report conforms with NELAP requirements.

ANALYTICAL RESULTS FOR
EAGLE ROCK RESOURCES
ATTN: LIBBY EINHORN
P.O. BOX 690
MONAHANS, TX 79756
FAX TO: (575) 746-6534 & (432) 682-4182


Receiving Date: 11/02/09
Reporting Date: 11/03/09
Project Number: UNIT 17 WELL #1
Project Name: BERRY HOBBS UNIT
Project Location: LEA COUNTY, NM

Sampling Date: NOT GIVEN
Sample Type: SOIL
Sample Condition: INTACT @ 24°C
Sample Received By: ML
Analyzed By: AB

LAB NUMBER SAMPLE ID	Cl ⁻ (mg/kg)
ANALYSIS DATE	11/03/09
H18625-1 # 1	<16
Quality Control	500
True Value QC	500
% Recovery	100
Relative Percent Difference	<0.1

METHODS: Cl⁻: Std. Methods 4500-Cl⁻B. Not accredited for Chloride.

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



Lab Director

11/03/09

Date

H18625 CL ERR

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



101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page ____ of ____

† Cardinal cannot accept verbal changes. Please fax written changes to 576.208.4471.

E

ATTACHMENT 7

PREVIOUS CLOSURE PLAN APPLICATION C-144

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.

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

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

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

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

1. Operator: Eagle Rock Operating Company, LLC OGRID #: 259978
Address: PO Box 1311 Midland, TX 79702
Facility or well name: Berry Hobbs unit 17 #1
API Number: 30-025-36657 OCD Permit Number: P1-81266
U/L or Qtr/Qtr J Section 17 Township 16S Range 36E County: Lea
Center of Proposed Design: Latitude 32.921688857 ° Longitude -103.92168886 ° NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☐ Welded ☒ Factory ☐ Other _____ Volume: 5000 bbl Dimensions: L 150 x W 150 x D 30

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

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

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

6.
Fencing: Subsection D of 19.15.17.11 NMAC (*Applies to permanent pits, temporary pits, and below-grade tanks*)

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

7.
Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)

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

8.
Signs: Subsection C of 19.15.17.11 NMAC

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

9.
Administrative Approvals and Exceptions:

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

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

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

10.
Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

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

11.

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

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

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

12.

Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

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

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

13.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

14.

Proposed Closure: 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

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

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.

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

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

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ 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

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

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

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

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

☐ Yes ☐ No
☐ NA

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

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

☐ Yes ☐ No
☐ NA

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

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

☐ Yes ☐ No
☐ NA

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 500 feet of a wetland.

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

☐ Yes ☐ No

Within the area overlying a subsurface mine.

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

☐ Yes ☐ No

Within an unstable area.

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

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

18.

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

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

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

Name (Print): Elizabeth Einnorn Title: Permian Production Manager

Signature: CR. Einnorn Date: 8/5/09

e-mail address: leinnorn@eaglerockenergy.com Telephone: 432 688 4299

20.

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

OCD Representative Signature: Gregory Lelking Approval Date: 08/06/09

Title: Environmental Engineer OCD Permit Number: P1-01266

21.

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

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

☒ Closure Completion Date: 10/31/08

22.

Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

23.

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

Instructions: Please 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

24.

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

☒ Proof of Closure Notice (surface owner and division)

☐ Proof of Deed Notice (required for on-site closure)

☐ Plot Plan (for on-site closures and temporary pits)

☒ Confirmation Sampling Analytical Results (if applicable)

☐ Waste Material Sampling Analytical Results (required for on-site closure)

☒ Disposal Facility Name and Permit Number

☒ Soil Backfilling and Cover Installation

☒ Re-vegetation Application Rates and Seeding Technique

☒ Site Reclamation (Photo Documentation)

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

25.

Operator Closure Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

ATTACHMENT 8

CLOSURE PLAN APPLICATION C-144

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.

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

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

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

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

1.
Operator: Eagle Rock Operating Company, LLC OGRID #: 259978
Address: PO Box 1311 Midland, TX 79702
Facility or well name: Berry Hobbs unit 17 #1
API Number: 30-025-36657 OCD Permit Number: P1-012666
U/L or Qtr/Qtr J Section 17 Township 16S Range 36E County: Lea
Center of Proposed Design: Latitude 32.921688857 ° Longitude -103.92168886° NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☐ Welded ☒ Factory ☐ Other _____ Volume: 5000 bbl Dimensions: L 150 x W 150 x D 30

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

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

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

6.

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

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

7.

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

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

8.

Signs: Subsection C of 19.15.17.11 NMAC

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

9.

Administrative Approvals and Exceptions:

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

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

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

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	<input type="checkbox"/> Yes <input type="checkbox"/> 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).	<input type="checkbox"/> Yes <input type="checkbox"/> 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. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>)	<input type="checkbox"/> Yes <input type="checkbox"/> No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<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>)	<input type="checkbox"/> Yes <input type="checkbox"/> No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<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.	<input type="checkbox"/> Yes <input type="checkbox"/> No
- 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 adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	<input type="checkbox"/> Yes <input type="checkbox"/> No
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	
Within 500 feet of a wetland.	<input type="checkbox"/> Yes <input type="checkbox"/> No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	
Within the area overlying a subsurface mine.	<input type="checkbox"/> Yes <input type="checkbox"/> No
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	
Within an unstable area.	<input type="checkbox"/> Yes <input type="checkbox"/> No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	
Within a 100-year floodplain.	<input type="checkbox"/> Yes <input type="checkbox"/> No
- FEMA map	

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

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

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

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

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

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

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

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

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

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

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ 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

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

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

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

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

☐ Yes ☐ No

☐ NA

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

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

☐ Yes ☐ No

☐ NA

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

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

☐ Yes ☐ No

☐ NA

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 500 feet of a wetland.

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

☐ Yes ☐ No

Within the area overlying a subsurface mine.

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

☐ Yes ☐ No

Within an unstable area.

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

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

18.

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

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

Operator Application Certification:

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

Name (Print): Hollie Lamb Title: Reservoir Engineer
 Signature: Hollie Lamb Date: 11/9/09
 e-mail address: h.lamb@EagleRockEnergy.com Telephone: 432-688-4286

20.

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

OCD Representative Signature: Jeffrey LeKing Approval Date: 11/12/09
 Title: ENVIRONMENTAL ENGINEER OCD Permit Number: PI-01266

21.

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

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

☒ Closure Completion Date: 11/9/09

22.

Closure Method:

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

23.

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

Instructions: Please 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

24.

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

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

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

25.

Operator Closure Certification:

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

Name (Print): Hollie Lamb Title: Reservoir Engineer
 Signature: Hollie Lamb Date: 11/09/09
 e-mail address: h.lamb@EagleRockEnergy.com Telephone: 432-688-4286