

District I
1625 N French Dr, Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St, Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr, Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

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

Form C-101
Revised August 1, 2011

Permit

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address LIME ROCK RESOURCES A, L. P. 111 BAGBY STREET, SUITE 4600, HOUSTON TX 77002		² OGRID Number 255333
³ Property Name ANTHONEY STATE		⁴ API Number 30-015-39638
⁵ Property Code 310037	⁶ Well No. 3	

7 Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	30	17	28		412	S	679	E	EDDY

8 Pool Information

RED LAKE; GLORIETA - YESO <i>NE</i>	RECEIVED NOV 15 2011
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Additional Well Information

⁹ Work Type N	¹⁰ Well Type O	¹¹ Cable/Rotary R	¹² Lease Type NMCSD ARTESIA	¹³ Ground Level Elevation 3645'
¹⁴ Multiple NO	¹⁵ Proposed Depth 5500	¹⁶ Formation GLORIETA YESO	¹⁷ Contractor UNITED	¹⁸ Spud Date
Depth to Ground water 300		Distance from nearest fresh water well 2 MILES		Distance to nearest surface water 6 MILES

19 Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
	20"	14"	84#	40	Cmt. ready mix	SURFACE
	12 1/4"	8 5/8"	24#	450	300	SURFACE
	7 7/8"	5 1/2"	17#	5500	875	SURFACE

Casing/Cement Program: Additional Comments

See attached Drilling & Directional plans

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
XLT 11"	5,000#	2,000#	NATIONAL BARCO

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒.

Printed name: BARRY W. HUNT

Title: PERMIT AGENT FOR LIME ROCK RESOURCES A, L.P.

E-mail Address: specialpermitting@gmail.com

Date: 11/11/11

Phone: (575) 361-4078

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date:

Expiration Date:

Conditions of Approval Attached

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-39638	Pool Code 96836	Pool Name RED LAKE; Glorieta-YESO NE
Property Code 310037	Property Name ANTHONEY STATE	Well Number 3
OGRIID No 255333	Operator Name LIMEROCK RESOURCES A, L.P.	Elevation 3645'

Surface Location

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	30	17-S	28-E		412	SOUTH	679	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	30	17-S	28-E		360	SOUTH	360	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 1	CORNER COORDINATES TABLE Ⓐ - Y=655259.7 N, X=536572.5 E Ⓑ - Y=655277.4 N, X=539161.5 E Ⓒ - Y=653936.6 N, X=536573.6 E Ⓓ - Y=653954.3 N, X=539152.7 E	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=654361.6 N X=538476.5 E LAT.=32.798867° N LONG.=104.208116° W	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Barry W. Hunt</i> 11/15/11 Signature Date Barry W. Hunt Printed Name E-mail Address _____
LOT 2		BOTTOM HOLE LOCATION Y=654311.8 N X=538795.2 E	
LOT 3			
LOT 4			

GRID AZ = 98°52'58"
HORZ. DIST. = 322.6'

SEPTEMBER 2, 2011

Date of Survey

Signature of State of Professional Surveyor

Ronald J. Eidson 11/14/11

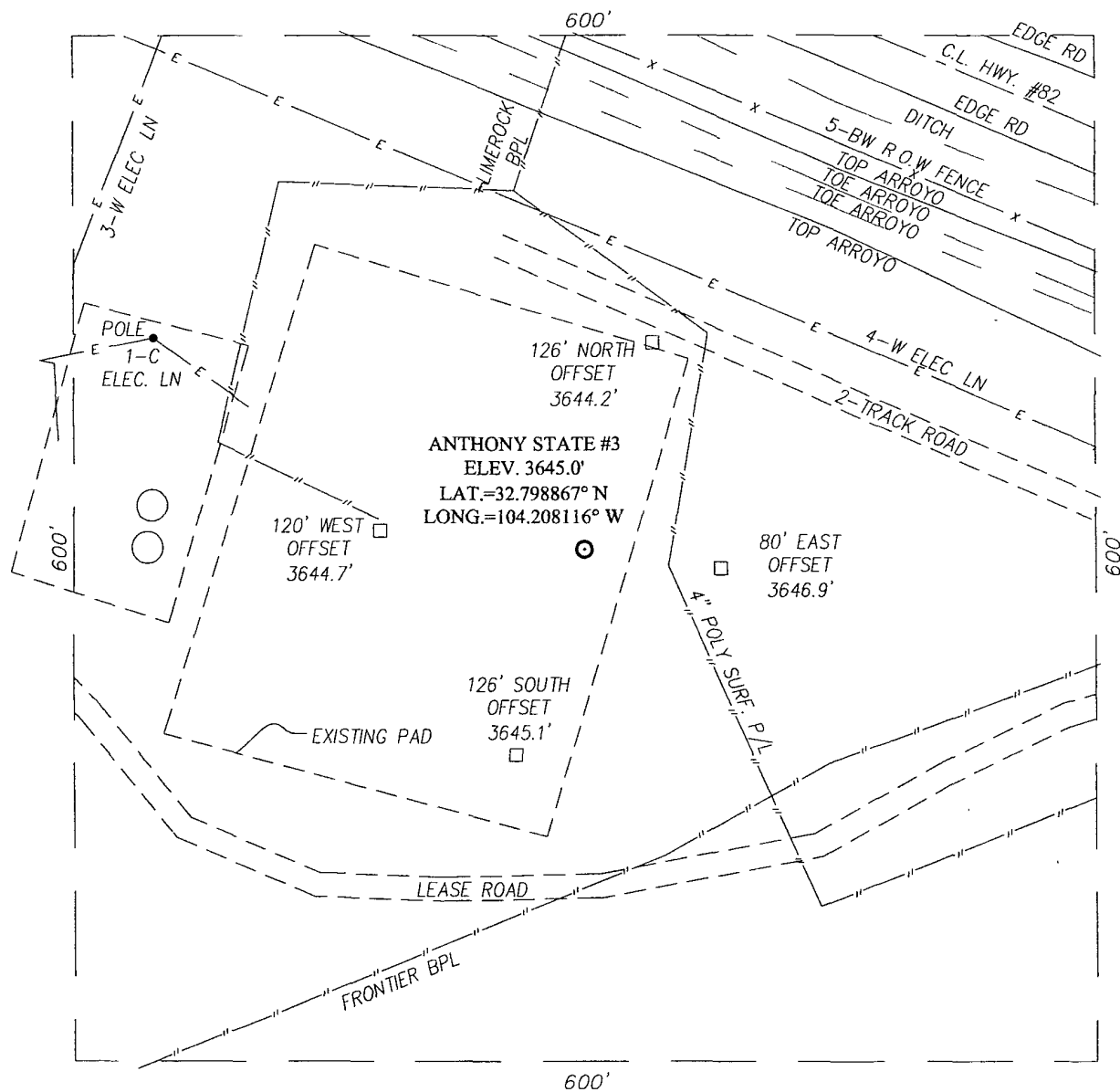
Certificate Number **12641**
Ronald J. Eidson 3239

DSS JWSC W.O. 11.13.2245

SECTION 30, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.

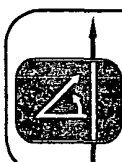
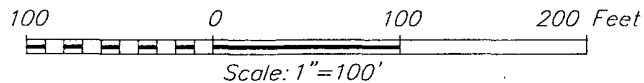
EDDY COUNTY

NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF US. HWY. #82 AND CO RD. #205 (TV TOWER ROAD) FOLLOW LEASE ROAD WEST APPROX 0.1 MILE TO THIS LOCATION STAKE.



PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

LIMEROCK RESOURCES A, L.P.

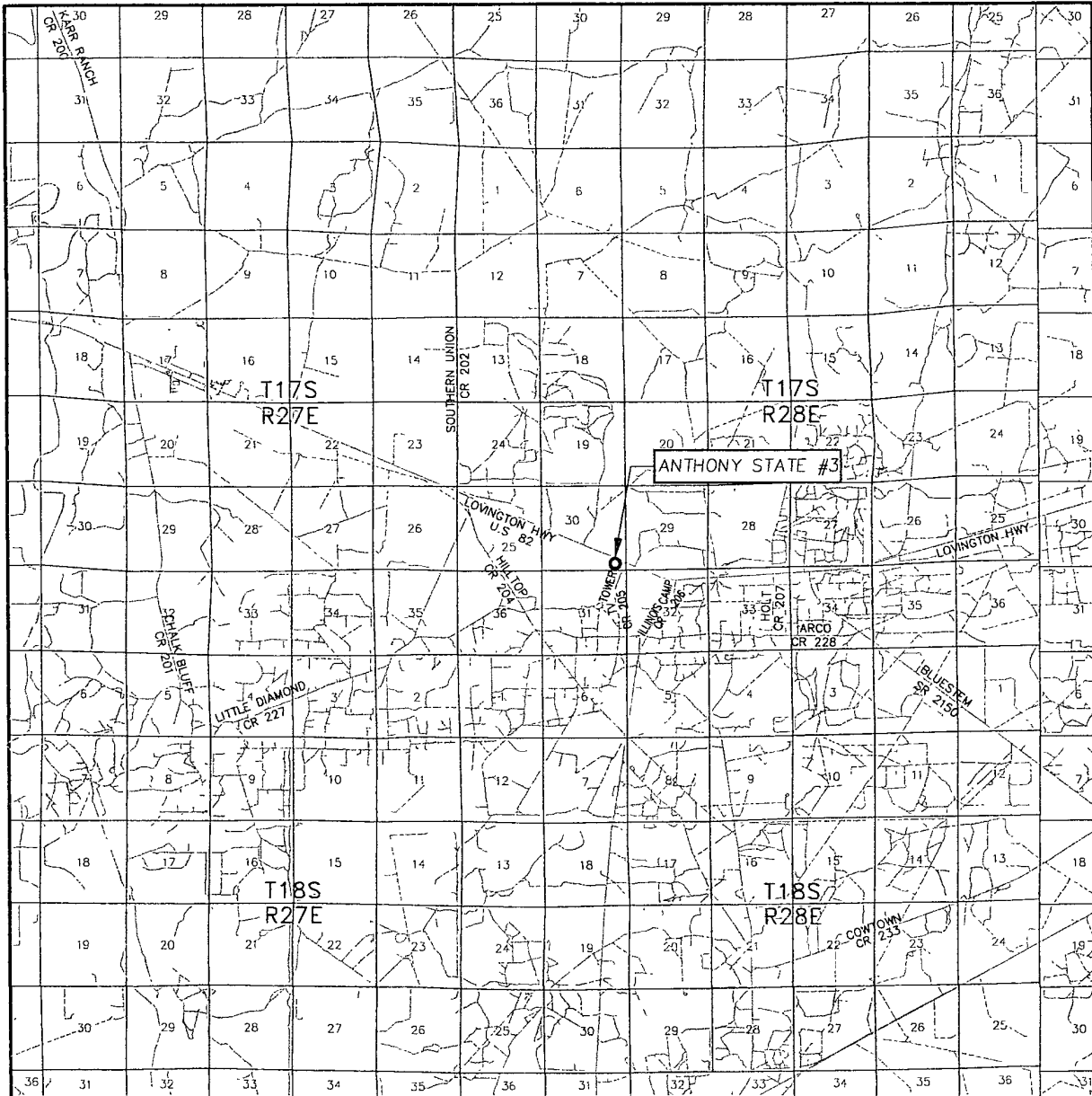
ANTHONY STATE #3
LOCATED 412 FEET FROM THE SOUTH LINE
AND 679 FEET FROM THE EAST LINE OF SECTION 30,
TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

Survey Date: 9/2/11 Sheet 1 of 1 Sheets

W.O. Number: 11.11.1830 Dr By LA Rev 1. N/A

Date: 9/17/11 1111830 Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 30 TWP. 17-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 412' FSL & 679' FEL

ELEVATION 3645'

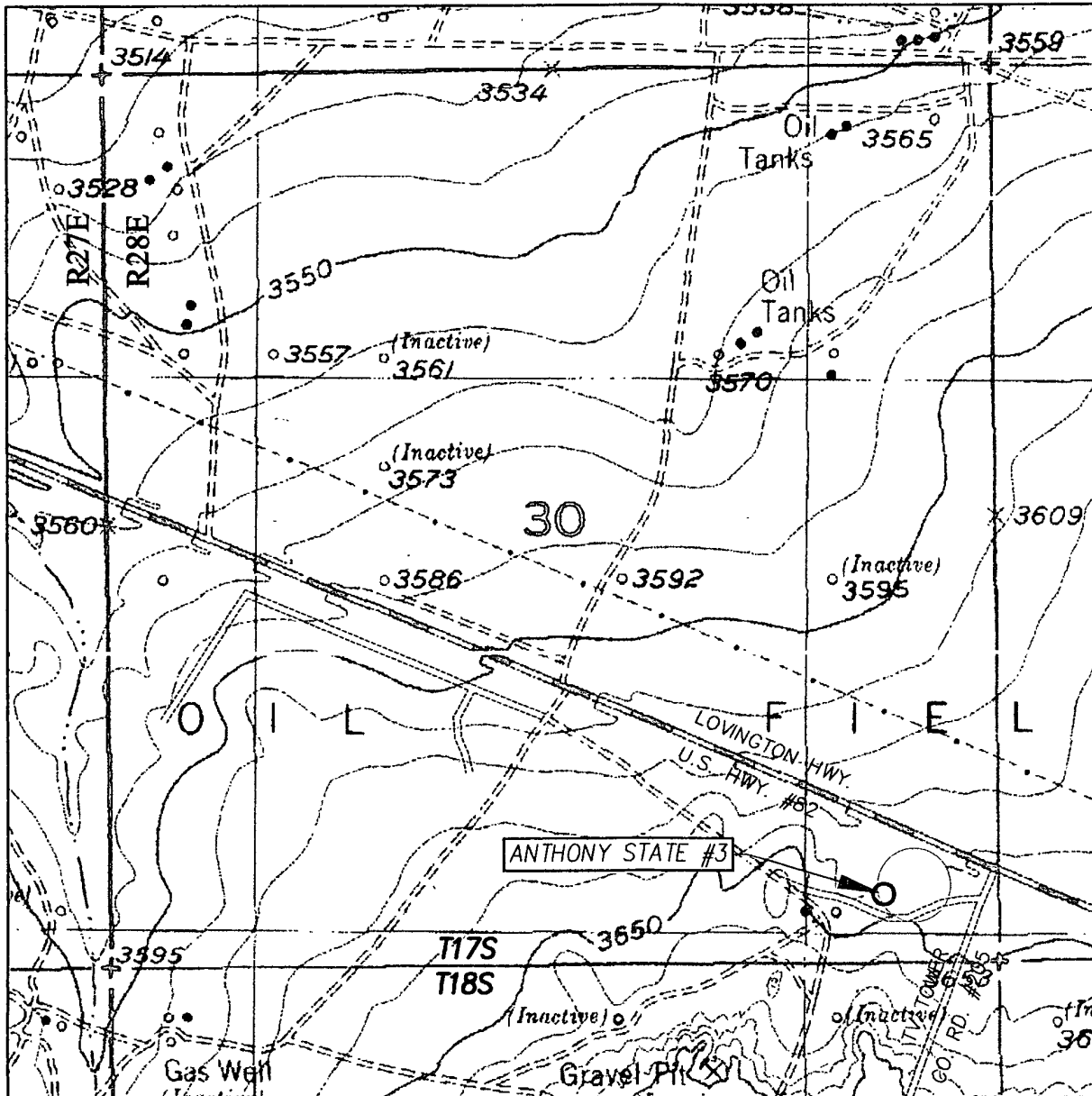
OPERATOR LIMEROCK RESOURCES A, L P.

LEASE ANTHONY STATE



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N DAL PASO
HOBBS, N M 88240
(575) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 1000'

CONTOUR INTERVAL:
RED LAKE, N.M. - 10'

SEC. 30 TWP. 17-S RGE. 28-E

SURVEY _____ N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 412' FSL & 679' FEL

ELEVATION 3645'

OPERATOR LIMEROCK RESOURCES A, L.P.

LEASE ANTHONY STATE

U.S.G.S. TOPOGRAPHIC MAP
RED LAKE, N.M.



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

Well Name	Anthony State #3		Surface Location:	412	Feet from the	South	679	Feet from the	East
S-T-R & Unit()	S30-T17S-R28E (P)		BH Location:	360	feet from the	South	360	Feet from the	East
Well Type	Directional Shallow S		Productive Targets:	Red Lake;Glorieta-Yeso			Frac:	3 stage x-linked get after perfs	

Geology									
	7 Rivers	Queen	Grayburg	Premier	Sand Andres	Glorieta	Yeso	Tubb	Total Depth
TVD	968	1537	1937	2160	2246	3634	3733	5159	5462
MD	974	1581	1989	2212	2298	3685	3785	5211	5500

Casing Program									
Type	Hole Size	Casing Size	Weight	Grade	Thread	Depth	Collapse	Burst	Tension
Conductor	20"	14"	84	B	Weld	40			
Surface	12-1/4"	8-5/8"	24	J-55	ST&C	450			
Intermediate									
Liner									
Production	7-7/8"	5-1/2"	17	J-55	ST&C	5500			

Cement Program						
Casing	Depth	Slurry Vol, sx	Sacks	Density	Yield	System or Slurry Components
8-5/8"	450	1 Slurry	300	14.8	1.35	Cl C Cmt w/ 2% CaCl2 + 1/4#/sk Cello Flake
5-1/2"	5500	Lead	315	12.8	1.95	35:65:6 Cl C/Poz/gel + 5% salt, 2% Cacl2, 1/4pps cello flake + LCM-1
		Tail	560	14.8	1.34	50/50 Cl C/Poz w/ 2% CaCl2 and 1/4 pps cello flake

Mud Program				
Depth		0-450	450-5000	5000-5500
Mud Type		Fresh Water	Brine	Brine w/ Gel & Starch
Properties				
	MW	8.5-9.2	9.9-10.2	9.9-10.2
	pH	10	10-11.5	10-11.5
	WL	NC	NC	15-10
	Vis	28-34	30-32	32-34
	MC	NC	NC	1
	Solids	NC	<1%	<1%
Pump Rate		300-350 gpm	350-450 gpm	450-500 GPM
Special		LCM as Req	Salt Gel & MF as Req'd Pmp HI Vis sweeps to control solids	Salt gel, Acid & MF as req. Pmp HI Vis sweeps to control solids

LIME ROCK RESOURCES

EDDY COUNTY, NM (FLAT EARTH)

SEC. 30 T. 17S RGE. 28E

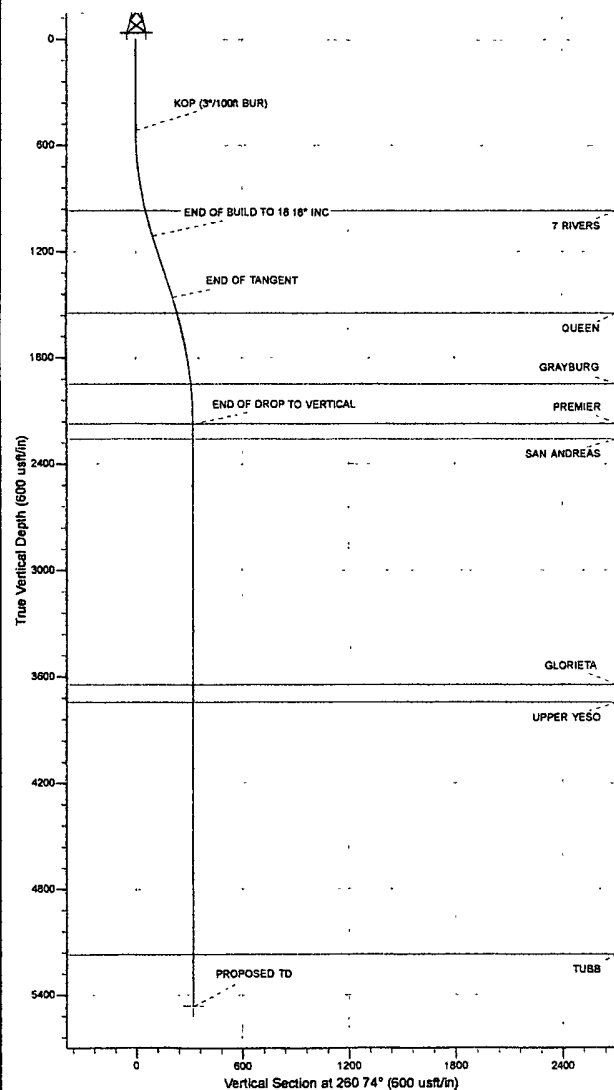
ANTHONEY ST #3

ORIGINAL WELLBORE

24 October, 2011

Plan: PROPOSAL #1

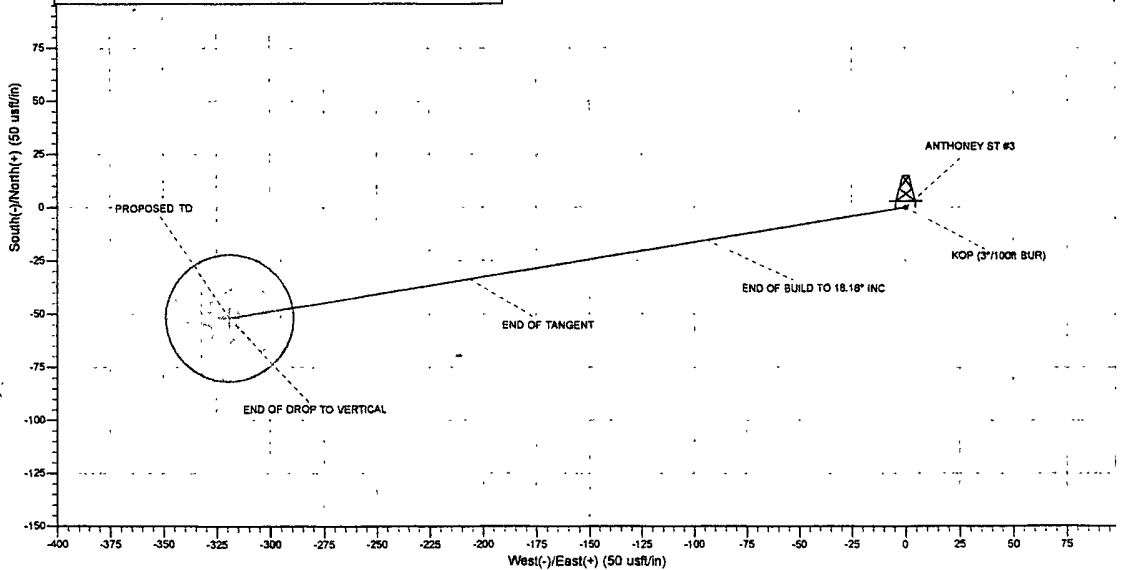




Project: EDDY COUNTY, NM (FLAT EARTH)
 Site: SEC. 30 T. 17S RGE. 28E
 Well: ANTHONY ST #3
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #1



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
969.5	973.9	7 RIVERS
1548.5	1581.0	QUEEN
1948.5	1988.8	GRAYBURG
2171.5	2211.9	PREMIER
2257.5	2297.9	SAN ANDREAS
3645.5	3685.9	GLORIETA
3744.5	3784.9	UPPER YESO
5170.5	5210.9	TUBB



Azimuths to True North Magnetic North: 0.00°		ANNOTATIONS				
TVD	MD	Inc	Azi	+N-S	+E-W	VSect
515.0	515.0	0.00	0.00	0.0	0.0	0.0
1110.8	1120.9	18.18	260.74	-15.3	-94.1	95.3
1456.5	1484.8	18.18	260.74	-33.6	-206.1	208.8
2171.5	2211.9	0.00	0.00	-52.0	-319.0	323.2
5481.5	5501.9	0.00	0.00	-52.0	-319.0	323.2

Model: USER DEFINED		ANNOTATIONS				
		Annotation				
		KOP (3 1/2 inch BUR)				
		END OF BUILD TO 18 1/2° INC				
		END OF TANGENT				
		END OF DROP TO VERTICAL				
		PROPOSED TD				

Planning Report



Database:	EDM_5000_1_7	Local Co-ordinate Reference:	Well ANTHONY ST #3
Company:	LIME ROCK RESOURCES	TVD Reference:	KB-EST @ 3711.7usft (Original Well Elev)
Project:	EDDY COUNTY, NM (FLAT EARTH)	MD Reference:	KB-EST @ 3711.7usft (Original Well Elev)
Site:	SEC. 30 T. 17S RGE. 28E	North Reference:	True
Well:	ANTHONEY ST #3	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project	EDDY COUNTY, NM (FLAT EARTH)		
Map System:	Flat Earth	System Datum:	Mean Sea Level
Geo Datum:	WGS 1984		
Map Zone:	No Conversions		Using geodetic scale factor

Site	SEC. 30 T. 17S RGE. 28E				
Site Position:		Northing:	0.00 usft	Latitude:	0° 0' 0.000 N
From:	None	Easting:	0.00 usft	Longitude:	0° 0' 0.000 E
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.00 °

Well	ANTHONEY ST #3					
Well Position	+N/-S	0.0 usft	Northing:	0.00 usft	Latitude:	30° 59' 24.512 N
	+E/-W	0.0 usft	Easting:	0.00 usft	Longitude:	105° 55' 44.137 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,700.2 usft

Wellbore ORIGINAL WELLBORE

Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	User Defined	24/10/2011	(°) 0.00	(°) 0.00	(nT) 0

Design PROPOSAL #1

Audit Notes:

Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
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Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	5,461.5	0.0	0.0	260.74

Plan Sections

MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	-3,711.7	0.0	0.0	0.00	0.00	0.00	0.00	
515.0	0.00	0.00	515.0	-3,196.7	0.0	0.0	0.00	0.00	0.00	0.00	
1,120.9	18.18	260.74	1,110.8	-2,800.9	-15.3	-94.1	3.00	3.00	0.00	260.74	
1,484.8	18.18	260.74	1,456.5	-2,255.2	-33.6	-206.1	0.00	0.00	0.00	0.00	
2,211.9	0.00	0.00	2,171.5	-1,540.2	-52.0	-319.0	2.50	-2.50	0.00	180.00	
5,501.9	0.00	0.00	5,461.5	1,749.8	-52.0	-319.0	0.00	0.00	0.00	0.00	PROPOSED TD

Planning Report



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Company:	LIME ROCK RESOURCES	TVD Reference:	KB-EST @ 3711.7usft (Original Well Elev)
Project:	EDDY COUNTY, NM (FLAT EARTH)	MD Reference:	KB-EST @ 3711.7usft (Original Well Elev)
Site:	SEC. 30 T. 17S RGE. 28E	North Reference:	True
Well:	ANTHONEY ST #3	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	3,711.70	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	3,611.70	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	3,511.70	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	3,411.70	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	3,311.70	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	3,211.70	0.0	0.0	0.0	0.00	0.00	0.00
KOP (3°/100ft BUR)										
515.0	0.00	0.00	515.0	3,196.70	0.0	0.0	0.0	0.00	0.00	0.00
600.0	2.55	260.74	600.0	3,111.73	-0.3	-1.9	1.9	3.00	3.00	0.00
700.0	5.55	260.74	699.7	3,011.99	-1.4	-8.8	9.0	3.00	3.00	0.00
800.0	8.55	260.74	798.9	2,912.76	-3.4	-20.9	21.2	3.00	3.00	0.00
900.0	11.55	260.74	897.4	2,814.30	-6.2	-38.2	38.7	3.00	3.00	0.00
7 RIVERS										
973.9	13.77	260.74	969.5	2,742.20	-8.8	-54.2	54.9	3.00	3.00	0.00
1,000.0	14.55	260.74	994.8	2,716.90	-9.9	-60.5	61.3	3.00	3.00	0.00
1,100.0	17.55	260.74	1,090.9	2,620.80	-14.3	-87.7	88.9	3.00	3.00	0.00
END OF BUILD TO 18.18° INC										
1,120.9	18.18	260.74	1,110.8	2,600.88	-15.3	-94.1	95.3	3.00	3.00	0.00
1,200.0	18.18	260.74	1,185.9	2,525.76	-19.3	-118.4	120.0	0.00	0.00	0.00
1,300.0	18.18	260.74	1,280.9	2,430.75	-24.3	-149.2	151.2	0.00	0.00	0.00
1,400.0	18.18	260.74	1,376.0	2,335.74	-29.3	-180.0	182.4	0.00	0.00	0.00
END OF TANGENT										
1,484.8	18.18	260.74	1,456.5	2,255.18	-33.6	-206.1	208.8	0.00	0.00	0.00
1,500.0	17.80	260.74	1,471.0	2,240.72	-34.4	-210.7	213.5	2.50	-2.50	0.00
QUEEN										
1,581.0	15.77	260.74	1,548.5	2,163.20	-38.1	-233.8	236.9	2.50	-2.50	0.00
1,600.0	15.30	260.74	1,566.8	2,144.87	-38.9	-238.9	242.0	2.50	-2.50	0.00
1,700.0	12.80	260.74	1,663.8	2,047.86	-42.8	-262.8	266.3	2.50	-2.50	0.00
1,800.0	10.30	260.74	1,761.8	1,949.90	-46.1	-282.6	286.3	2.50	-2.50	0.00
1,900.0	7.80	260.74	1,860.6	1,851.15	-48.6	-298.1	302.0	2.50	-2.50	0.00
GRAYBURG										
1,988.6	5.58	260.74	1,948.5	1,763.20	-50.3	-308.3	312.3	2.50	-2.50	0.00
2,000.0	5.30	260.74	1,959.9	1,751.81	-50.4	-309.3	313.4	2.50	-2.50	0.00
2,100.0	2.80	260.74	2,059.6	1,652.07	-51.6	-316.3	320.5	2.50	-2.50	0.00
2,200.0	0.30	260.74	2,159.6	1,552.11	-52.0	-319.0	323.2	2.50	-2.50	0.00
END OF DROP TO VERTICAL - PREMIER										
2,211.9	0.00	0.00	2,171.5	1,540.20	-52.0	-319.0	323.2	2.50	-2.50	0.00
SAN ANDREAS										
2,297.9	0.00	0.00	2,257.5	1,454.20	-52.0	-319.0	323.2	0.00	0.00	0.00
2,300.0	0.00	0.00	2,259.6	1,452.11	-52.0	-319.0	323.2	0.00	0.00	0.00
2,400.0	0.00	0.00	2,359.6	1,352.11	-52.0	-319.0	323.2	0.00	0.00	0.00
2,500.0	0.00	0.00	2,459.6	1,252.11	-52.0	-319.0	323.2	0.00	0.00	0.00
2,600.0	0.00	0.00	2,559.6	1,152.11	-52.0	-319.0	323.2	0.00	0.00	0.00
2,700.0	0.00	0.00	2,659.6	1,052.11	-52.0	-319.0	323.2	0.00	0.00	0.00
2,800.0	0.00	0.00	2,759.6	952.11	-52.0	-319.0	323.2	0.00	0.00	0.00
2,900.0	0.00	0.00	2,859.6	852.11	-52.0	-319.0	323.2	0.00	0.00	0.00
3,000.0	0.00	0.00	2,959.6	752.11	-52.0	-319.0	323.2	0.00	0.00	0.00
3,100.0	0.00	0.00	3,059.6	652.11	-52.0	-319.0	323.2	0.00	0.00	0.00
3,200.0	0.00	0.00	3,159.6	552.11	-52.0	-319.0	323.2	0.00	0.00	0.00
3,300.0	0.00	0.00	3,259.6	452.11	-52.0	-319.0	323.2	0.00	0.00	0.00
3,400.0	0.00	0.00	3,359.6	352.11	-52.0	-319.0	323.2	0.00	0.00	0.00
3,500.0	0.00	0.00	3,459.6	252.11	-52.0	-319.0	323.2	0.00	0.00	0.00
3,600.0	0.00	0.00	3,559.6	152.11	-52.0	-319.0	323.2	0.00	0.00	0.00

Planning Report



Database: EDM 5000_1_7
 Company: LIME ROCK RESOURCES
 Project: EDDY COUNTY, NM (FLAT EARTH)
 Site: SEC. 30 T. 17S RGE. 28E
 Well: ANTHONY ST #3
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #1

Local Co-ordinate Reference: Well ANTHONY ST #3
 TVD Reference: KB-EST @ 3711.7usft (Original Well Elev)
 MD Reference: KB-EST @ 3711.7usft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
GLORIETA										
3,685.9	0.00	0.00	3,645.5	66.20	-52.0	-319.0	323.2	0.00	0.00	0.00
3,700.0	0.00	0.00	3,659.6	52.11	-52.0	-319.0	323.2	0.00	0.00	0.00
UPPER YESO										
3,784.9	0.00	0.00	3,744.5	-32.80	-52.0	-319.0	323.2	0.00	0.00	0.00
3,800.0	0.00	0.00	3,759.6	-47.89	-52.0	-319.0	323.2	0.00	0.00	0.00
3,900.0	0.00	0.00	3,859.6	-147.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,000.0	0.00	0.00	3,959.6	-247.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,100.0	0.00	0.00	4,059.6	-347.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,200.0	0.00	0.00	4,159.6	-447.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,300.0	0.00	0.00	4,259.6	-547.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,400.0	0.00	0.00	4,359.6	-647.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,500.0	0.00	0.00	4,459.6	-747.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,600.0	0.00	0.00	4,559.6	-847.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,700.0	0.00	0.00	4,659.6	-947.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,800.0	0.00	0.00	4,759.6	-1,047.89	-52.0	-319.0	323.2	0.00	0.00	0.00
4,900.0	0.00	0.00	4,859.6	-1,147.89	-52.0	-319.0	323.2	0.00	0.00	0.00
5,000.0	0.00	0.00	4,959.6	-1,247.89	-52.0	-319.0	323.2	0.00	0.00	0.00
5,100.0	0.00	0.00	5,059.6	-1,347.89	-52.0	-319.0	323.2	0.00	0.00	0.00
5,200.0	0.00	0.00	5,159.6	-1,447.89	-52.0	-319.0	323.2	0.00	0.00	0.00
TUBB										
5,210.9	0.00	0.00	5,170.5	-1,458.80	-52.0	-319.0	323.2	0.00	0.00	0.00
5,300.0	0.00	0.00	5,259.6	-1,547.89	-52.0	-319.0	323.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,359.6	-1,647.89	-52.0	-319.0	323.2	0.00	0.00	0.00
5,500.0	0.00	0.00	5,459.6	-1,747.89	-52.0	-319.0	323.2	0.00	0.00	0.00
PROPOSED TD										
5,501.9	0.00	0.00	5,461.5	-1,749.80	-52.0	-319.0	323.2	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
973.9	969.5	7 RIVERS		0.00	
1,581.0	1,548.5	QUEEN		0.00	
1,988.6	1,948.5	GRAYBURG		0.00	
2,211.9	2,171.5	PREMIER		0.00	
2,297.9	2,257.5	SAN ANDREAS		0.00	
3,685.9	3,645.5	GLORIETA		0.00	
3,784.9	3,744.5	UPPER YESO		0.00	
5,210.9	5,170.5	TUBB		0.00	

Planning Report



Database:	EDM_5000_1_7	Local Co-ordinate Reference:	Well ANTHONY ST #3
Company:	LIME ROCK RESOURCES	TVD Reference:	KB-EST @ 3711.7usft (Original Well Elev)
Project:	EDDY COUNTY, NM (FLAT EARTH)	MD Reference:	KB-EST @ 3711.7usft (Original Well Elev)
Site:	SEC. 30 T. 17S RGE. 28E	North Reference:	True
Well:	ANTHONEY ST #3	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
515.0	515.0	0.0	0.0	KOP (3"/100ft BUR)
1,120.9	1,110.8	-15.3	-94.1	END OF BUILD TO 18.18° INC
1,484.8	1,456.5	-33.6	-206.1	END OF TANGENT
2,211.9	2,171.5	-52.0	-319.0	END OF DROP TO VERTICAL
5,501.9	5,461.5	-52.0	-319.0	PROPOSED TD

The diagram illustrates a wellhead assembly with the following components and connections:

- ROTATING HEAD (OPTIONAL)**: Located at the top center.
- 2" FILL-UP LINE**: A horizontal line on the left side, connected to the rotating head.
- FLOW LINE TO PITS**: A horizontal line on the right side, connected to the rotating head.
- BLIND RAMS**: A horizontal bar below the rotating head.
- PIPE RAMS**: A horizontal bar below the blind rams.
- DRILLING SPOOL**: A vertical component in the center, below the pipe rams.
- 2M MGVS (2nd Main Gate Valve)**: Two sets of MGVS are shown, one on each side of the drilling spool. Each set includes a **2M MGVS** and a **2ND MGVS** (optional).
- 2M ADJUSTABLE CHOKE**: Located at the bottom of each side, with a **(1)** indicating a specific configuration.
- NOM 2" LINE**: A line connecting the 2M MGVS to the 2M adjustable choke.
- NOM 4" LINE**: A line connecting the 2ND MGVS to the 2M adjustable choke.
- 2M MGVS W/ PRES GAUGE**: A gauge is shown on the 2M MGVS line, with a note **ON TOP OF BLOCK**.
- 2M ADJUSTABLE CHOKE (REMOTE OPERATED CHOKE OPTIONAL FOR ONE SIDE ONLY)**: A note at the bottom right.

- (1) Line to mud gas separator and/or pit
(2) Bleed line to pit

MGV - Manual Gate Valve
CKV - Check Valve
HCR - Hydraulically Controlled Remote Valve

HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Lime Rock Resources personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Lime Rock Resources response must be in coordination with the State of New México's "Hazardous Materials Emergency Response Plan" (HMER).

H₂S CONTINGENCY PLAN EMERGENCY CONTACTS

Company Office –Lime Rock Resources 713-292-9510
Answering Service (During Non-Office Hours) 713-292-9555

Key Personnel

<u>Name</u>	<u>Title</u>	<u>Phone Number</u>
Richard Ghiselin.	Production Engineer	713-345-2136 Cell: 218-507-0386
Mike Barrett	Production Supervisor	575-623-8424 Cell: 505-353-2644

Ambulance	911
State Police	575-746-2703
City Police	575-746-2703
Sheriff's Office	575-746-9888
Fire Department	575-746-2701
Local Emergency Planning Committee	575-746-2122
New Mexico Oil Conservation Division	575-748-1283

Carlsbad

Ambulance	911
State Police	575-8885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-887-3798
Local Emergency Planning Committee	575-887-6544
US Bureau of Land Management	575-887-6544

New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
24 Hour	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635
National Emergency Response Center (Washington, DC)	800-424-8802

Other

Boots & Coots IWC	800-256-9688 or 281-931-8884
Cudd PressureControl	915-699-0139 or 915-563-3356
Halliburton	575-746-2757
B. J. Services	575-746-3569
Flight For Life – 4000 24 th St. Lubbock, Texas	806-743-9911
Aerocare – R3, Box 49F, Lubbock, Texas	806-747-8923
Med Flight Air Amb – 2301 Yale Blvd SE #D3, Albuquerque, NM	505-842-4433
S B Air Med Service – 2505 Clark Carr Loop SE, Albuquerque, NM	505-842-4949

POWER OF ATTORNEY

DESIGNATION OF AGENT

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

Name of Agent: Barry W. Hunt d/b /a/ Special T Permitting

Agent's Address: 1403 Springs Farm Place, Carlsbad, NM 88220

Agent's Telephone Number: (575) 885-1417

GRANT OF SPECIAL AUTHORITY

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

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

EFFECTIVE DATE

This power of attorney is effective immediately.

RELIANCE ON THIS POWER OF ATTORNEY

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

SIGNATURE AND ACKNOWLEDGEMENT

LIME ROCK RESOURCES A, L.P.

By: [Signature]

Name: Charles Adcock

Title: Managing Director – Lime Rock Resources, G.P.

Date: 09/19/2011

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

Telephone Number: (713)292-9512

State of TEXAS
County of HARRIS

This instrument was acknowledged before me on September 19th, 2011 by Charles Adcock,
Managing Director of LIME ROCK RESOURCES A, L.P. acting on behalf of said limited partnership.

Signature of notarial officer: [Signature]

My commission expires: 07-26-2014

